



LISBON
SCHOOL OF
ECONOMICS &
MANAGEMENT

UNIVERSIDADE DE LISBOA

**MASTER IN
FINANCE**

MASTER'S FINAL WORK
PROJECT WORK

EQUITY RESEARCH SUMOL+COMPAL

SARA JULFICARALI

OCTOBER - 2015



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SUPERVISOR:
PROFESSOR INÊS PINTO

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ABSTRACT

Sumol+Compal is the leader of non-alcoholic beverages in Portugal and the single Portuguese beverages firm present on the NYSE Euronext Lisbon. Having a market share superior to 25%, the firm focuses on strategies based on innovation and diversification. As a result, the company managed to increase its sales and expand its business, strengthening their footprint internationally.

Through a detailed analysis of the firm and its results, its future goals and strategies, and its industry, this project aims to evaluate Sumol+Compal and determine a fair value of its shares. The valuation used was Free Cash Flow to the Firm (FCFF) method, once according to the literature review, fitted best the company.

From the results obtained in the valuation, it was possible to conclude that Sumol+Compal's shares are undervalued. The price quoted at 31 of August 2015 was 1,90€, which is lower than the target price reached of 2,06€.

From 31 of December 2014 to 31 of August 2015, the price rose almost 70%, from 1,13€ to 1,90€. Hence, the recommendation to future investors would be to buy the shares, once they may provide larger returns in the future.

Keywords: Equity Research, Sumol+Compal, Company Valuation, Free Cash Flow to the Firm, Discounted Cash Flows

RESUMO

A Sumol+Compal é a líder do setor das bebidas não-alcoólicas, e a única empresa portuguesa de bebidas cotada no índice NYSE Euronext Lisboa. Detendo uma quota de mercado superior a 25%, a empresa foca a inovação e a diversificação como parte da sua estratégia. Desta forma, conseguiu aumentar as suas vendas e expandir o seu negócio, fortalecendo o seu posicionamento internacionalmente.

Através de uma análise detalhada à empresa e aos seus resultados, aos objetivos e estratégias da empresa, e à indústria envolvente, este trabalho pretende avaliar a Sumol+Compal e determinar um preço às suas ações. O método utilizado para a avaliação foi o Free Cash Flow to the Firm (FCFF), uma vez que de acordo com a revisão de literatura, era o método mais adequado à empresa.

Através dos resultados da avaliação, foi possível concluir que as ações da Sumol+Compal estão subavaliadas. O preço a 31 de Agosto de 2015 foi de 1,90€, sendo menor que o preço da avaliação (2,06€).

De 31 de Dezembro de 2014 a 31 de Agosto 2015, o preço subiu quase 70%, de 1,13€ para 1,90€. Desta forma, a recomendação de compra seria dada aos investidores, na medida em que poderiam ter maiores retornos no futuro.

Palavras-chave: *Equity Research, Sumol+Compal, Avaliação da empresa, Free Cash Flow to the Firm, Discounted Cash Flows*

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ABREVIATIONS LIST

APT – Arbitrage Pricing Theory

APV – Adjusted Present Value

CAPEX – Capital Expenditures

CAPM – Capital Asset Pricing Model

D – Debt

DCF – Discounted Cash Flow

DDM – Dividend Discount Model

DPS – Dividend per share

E – Equity

EBIT – Earnings before Interest and Taxes

EBITDA – Earnings before Interest, Taxes, Depreciations and Amortizations

EPS – Earnings per share

ER – Equity Research

EV – Enterprise Value

EVA – Economic Value Added

FCFE – Free Cash Flow to Equity

FCFF – Free Cash Flow to Firm

GGM – Gordon Growth Model

g – Growth rate

IMF – International Monetary Fund

M&A – Mergers and Acquisitions

MRP - Market Risk Premium

NYSE – New York Stock Exchange

S+C – Sumol+Compal

SWOT – Strengths, Weaknesses, Opportunities and Threats

T – Tax rate

TV – Terminal Value

VTS – Value of Tax Shields

WACC – Weighted Average Cost of Capital

1. Introduction

1.1 Framework

In the past few years, due to the crisis the world is facing, the consumers' confidence levels and the private consumption decreased. Naturally, so did beverages market suffered from the crisis. Being Sumol+Compal the leader of non-alcoholic beverages in Portugal and the single Portuguese beverages firm present on the NYSE Euronext Lisbon, it became interesting and challenging to analyze how the industry and the company were operating in such environment.

The aim of this project is to evaluate Sumol+Compal and to determine a fair value of its shares. The valuation of a firm consists in a detailed analysis of the company, as well as its industry, future perspectives and strategies.

Sumol+Compal divides its business units in: i) carbonated soft drinks and ice teas; ii) juices, nectars and fruit still drinks; iii) waters; iv) beers; and v) others, which includes canned vegetables. It also commercializes its distribution brands, and is present in every continent, with a stronger footprint in Portugal and Africa.

1.2 Project Structure

The company's valuation will be divided into several parts. Firstly it will illustrate a literature review. Through academic publications and researches, there will be explained the different methods to evaluate a company, in order to sustain the model chosen to evaluate Sumol+Compal. Secondly, it will be performed an analysis to the company, namely to its business units, future goals and strategies, operational, financial and stock market performances. This will be followed by a macroeconomic study of the main countries where the firm operates, and an industry analysis for the company's business. Then, the valuation will be made, using some assumptions, where the Free Cash Flow to the Firm (FCFF) will be used. Finally, it will be presented the results, namely the target price, and the recommendations.

2. Literature Review

2.1 Valuation

The valuation of a company is the process used to find the true value of the firm. According to Damodaran (2006), valuation can even be seen as the heart of finance. For several years the financial community has been searching for ways to find methods that could result in a fair valuation of the firm (Carvalho das Neves, 2002). This is fundamental, once the different stakeholders may have separate notions of what the value should be. Therefore, this equilibrium is essential. However, finding the perfect method for the search of the fair value has not been as objective as expected.

Valuation applies to multiple areas of finance, namely mergers and acquisitions, corporate finance, or portfolio management. In mergers and acquisitions processes, both buyers and sellers have to perform a valuation of the company since its value can be different for both parties. In corporate finance, it has the purpose of analyzing how investments, financing decisions, dividend policies or strategies of the firm can affect the company's value (Damodaran, 2006). In portfolio management, the main objective is to look into companies that transact at a lower value in order to have some profits (Damodaran, 2006).

So, despite its relevance, a company's valuation is subjective, given it must take into account the firm's and managers' future prospects and different assumptions (Fernández & Bilan, 2007).

2.2 Valuation Methods

There are various methods to perform a company's valuation. This is due to the fact that they have different assumptions, despite the common features among them (Damodaran, 2012).

Different authors try to divide the methodologies into groups. This literature review, will follow Damodaran's perspective, where there are four approaches: Discounted Cash Flow, Relative Valuation, Contingent Claim Valuation and Asset Based Valuation.

2.2.1 Discounted Cash Flow (DCF)

DCF analysis is a powerful measure of the attractiveness of a business, being most applied for corporate valuations, investment appraisals, mergers and acquisitions and joint ventures (Arumugam, 2007). According to Damodaran (2002), discounted cash flow valuation is the foundation of the four methodologies, once they all depend on it. It is not only precise but flexible, which makes it one of the most popular approaches for valuing companies or projects (Goedhart, Koller, & Wessels, 2005).

DCF is a summary of cash flows that, adjusted, reveal the present value. This means that a DCF analysis identifies the value of an asset by the present value of the future expected cash flows, discounted at a risk adjusted rate (Arumugam, 2007; Damodaran, 2006), allowing the possibility to reach the intrinsic value.

There are several methodologies for DCF approach, thus, in this literature review, it will be given focus on the main models formed by Damodaran (2006): Firm Valuation Models, Equity Valuation Models, and Adjusted Present Value.

2.2.1.1 Firm Valuation Models

The firm or enterprise valuation models, as its name suggests, has the purpose to determine the total value of the firm. This is accomplished through an analysis to all the cash flows of the firm, discounted at an appropriate rate - the weighted average cost of capital (Damodaran, 2006; Steiger, 2010).

Firm valuation models comprise two major models: Free Cash Flow to the Firm (FCFF) and Economic Value Added (EVA), therefore, this review will expose both.

Free Cash Flow to the Firm (FCFF)

According to Goedhart, Koller, & Wessels (2010), free cash flows are the foundation of the firm valuation models. FCFF is the cash flow resulted by the firm's core business, before interest payments and after the deductions on investments, taxes, operating costs, capital expenditures, and working capital needs (Arumugam, 2007; Goedhart et al., 2010; Steiger, 2010). According to Damodaran (2006), FCFF is given by:

$$(1) \quad \text{Free Cash Flow to the Firm} = \text{After Tax Operating Income} - (\text{Capital Expenditures} - \text{Depreciations}) - \text{Change in non cash Working Capital}$$

Having this, it is clear that to perform the calculation of the future FCFF, a series of procedures must be taken into account. According to Goedhart et al. (2010), firstly, it is required a reorganization of the financial statements, so that it becomes possible a division of the financial structure, the operating and the nonoperating components. Secondly the historical performance analysis is essential in order to examine the firm's past performance, namely its growth, value, return on invested capital and even its behavior towards their competitors. Then, having all the information above mentioned, it is able to forecast the free cash flows in addition to the company's growth and return on invested capital.

In order to calculate the Firm Value through this approach, we also need to estimate the terminal value, on which it is assumed a perpetual growth for the company. Finally, it is also needed to determine the weighted average cost of capital (WACC), the rate that the FCFF will be discounted.

- **Continuing/Terminal Value**

The Terminal Value (TV) relies on the assumption of constant growth rates over the time horizon, namely a constant perpetual growth rate, which is given by g . Using as discount rate the WACC, the formula of TV is as follows:

$$(2) \quad TV = \frac{FCFF_{TV} \times (1 + g)}{WACC - g}$$

Naturally, the TV must be very precisely calculated, once it gives a perspective of the growth of a company in perpetuity terms. Small changes in the rate used could have a significant impact on the Firm Value, having thus, a serious effect on the DCF valuation (Steiger, 2010). In addition, the constant growth cannot be higher than the economy in which the company is present, since it would be unrealistic (Damodaran, 2002).

- **WACC**

The calculation of the Firm Value through the FCF approach, demands that the FCFs are discounted at an appropriate rate. This rate is given by the weighted average cost of capital (WACC). The WACC is the rate of return expected from investors as a result of the investments made on the firm (Goedhart et al., 2010). It is given by:

$$(3) \quad WACC = \frac{E}{E + D} \times k_e + \frac{D}{E + D} \times k_d \times (1 - T)$$

As it can be perceived by the formula above, WACC is computed with Equity (E) and Debt (D), k_e and k_d , representing cost of equity and cost of debt, and finally T, the tax rate. From the formula, it is also clear that the cost of debt is reduced by T.

- **Cost of Equity (k_e)**

The cost of equity (k_e) is the expected rate of return given to investors and it is considered one of the most difficult valuation component to estimate (Brealey, Myers, & Allen, 2011; Goedhart et al., 2010). According to Goedhart et al. (2010), there are three models that are frequently used to estimate k_e , which are the Three Factor Model (Fama & French, 1993, 1996, 2004), the Arbitrage Pricing Theory model (APT) (Ross, 1976), and lastly, and more common, the Capital Asset Pricing Model (CAPM) developed by Sharpe (1964). This model is the best known and more popular model of the relationship between risk and expected return models (Damodaran, 2002). It relies on the stocks' returns and reveals the prospects required by investors allaying the risk and expected return from a share to the market's (Arumugam, 2007; Steiger, 2010). It is calculated by:

$$(4) \quad E(R_i) = R_f + \beta_i [E(R_m) - R_f]$$

The market risk premium consists in the difference between the expected return of the market ($E(R_m)$) and the R_f , which will be the same for every company, once they depend on the market. Contrarily, the beta (β_i), represents the stock's sensitivity to the market, so, it depends on the company.

- Risk free rate (R_f)

According to Damodaran (2008, 2012), the risk free rate (R_f) is the risk that allows the expected returns to be equal to the actual returns. From the author perspective, the investments must fulfill certain requirements in order to be risk free, which consists in the mandatory's no default and no reinvestment risk components. Therefore, according to the author, the only securities that could match these requirements are the government securities.

- Beta (β_i)

Beta is the variable that measures the sensitivity of the investment to changes in the market as a whole (Damodaran, 2002). It assumes a strong importance once it gives a perspective not only to the relationship of the risk and return, but also to how it affects the capital structure of the firm (Brealey et al., 2011).

Beta has two major features that should be kept in consideration. On the one hand, it represents a risk measure to a diversified portfolio. This allows a more precise comprehension of the origin of the riskiness in the portfolio, whether individually or market related. On the other hand, beta has the feature of referring the relative risk of the asset (Damodaran, 1999b). The most usual regression used to calculate beta is:

$$(5) \quad R_i = \alpha + \beta R_m + \varepsilon$$

The estimation of beta is highly imprecise, hence there are various perspectives to compute it. Goedhart et al. (2010) states that beta should be estimated by its industry rather than comparing firms, given companies in the same business have operating risks comparable to each other. Since the operating risks do not comprise the financial risks, this beta is entitled as beta unlevered (β_u). The major aspect to have in consideration is leverage, once some companies may have more debt, which could be translated into more risk. For this reason this beta is labeled as beta levered (β_l). The beta levered needs to be calculated, and it can done through the beta unlevered.

- **Cost of Debt (k_d)**

The cost of debt, can be estimated through the risk free rate, by adding it to a default spread (Damodaran, 2008).

Naturally, this spread will take into account the firm's credit risk, in order to the analysis to be more accurate.

Another method consists in analyzing a yield to maturity of a long term bond, having in consideration a time horizon that fits the company in question.

- **Risk Premium and Market Risk Premium**

The risk premium is a key element for firms to evaluate themselves in multiple areas such as corporate finance, valuation or portfolio management (Damodaran, 2012). It constitutes the extra return the investors expect to gain, besides the risk free rate, therefore, it is calculated by the difference between the expected return of the market and the risk free rate (Damodaran, 1999a).

For there to be a positive variation, the stocks have to surpass the performance of bonds, and that implies effects in several areas (Damodaran, 2013; Goedhart et al., 2010). According to Goedhart et al. (2010), there are three ways to estimate the market risk premium. The first one is through the historical risk premium approach, which constitutes the difference between the returns of a certain stock with the returns of a risk free rate during a period of time (annual basis) (Damodaran, 1999a). However, despite its popularity among users, Damodaran (1999a) and Goedhart et al. (2010) concluded that there were disparities in the risk premium estimations, given the differences there could be in assumptions such as time period, risk free rate, among others. The second method consists in using a regression analysis to connect the market variables in order to achieve the market risk premium. To conclude, it could be used a DCF valuation and the current financial ratios.

Economic Value Added (EVA)

EVA is a measure of performance and residual income used by firms in order to achieve the value generated to the shareholders, or, in other words, the net income after the deductions demanded by the investors (Alexei, 2012; Brealey et al., 2011). It evaluates the efficacy of management in a certain year (Brigham & Ehrhardt, 2011). There are several ways used to calculate EVA. One of them is suggested by Alexei (2012) and is given by:

$$(6) \quad EVA = Income\ Earned - Cost\ of\ Capital \times Investment$$

2.2.1.2 Equity Valuation Models

The Equity Models focus on shareholders and their spar on the business. This is done by discounting the expected cash flows at a specific rate for the firm’s equity risk (Damodaran, 2006). In this review, it will be presented two of the models: the Dividend Discount Model (DDM) and the Free Cash Flow to the Equity (FCFE).

Dividend Discounted Model (DDM)

According to Damodaran (2006), DDM is considered the oldest discounted cash flow model. The author also states that the fundamental concept of this approach consists in the present value of dividends as follows:

$$(7) \quad Value\ per\ share\ of\ stock = \sum_{t=1}^{t=\infty} \frac{E(DPS_t)}{(1 + k_e)^t}$$

On Foerster & Sapp (2005) perspective, when it comes to equities, the expected cash flows are usually dividends. The first author to discover this relationship between the dividends and the shares’ value was William (1938). Durand (1957) initially developed the DDM model, which was later studied by Gordon, producing the Gordon Growth Model (GGM). This model considers the same definition previously stated, with the addition of a perpetual growth rate (Foerster & Sapp, 2005; Gordon, 1962).

$$(8) \quad Value\ of\ stock = \frac{DPS_t}{(k_e - g)}$$

According to Damodaran (2012b), by using stable growth rates, firms have to be careful about two aspects. The first one is that the growth rate chosen cannot be higher than the economy’s growth. The second one is based on the expectation of the other variables of the firm to grow at an equal rate as the dividends. This is due to the fact that one can surpass the other, which can disturb the steady state assumption.

Despite its popularity and simplicity, the GGM has some limitations. It is extremely sensitive to the assumptions for the growth rate and it is not useful for certain type of firms that do not follow the model characteristics, such as companies who do not pay

dividends or have an unstable growth. Moreover, it does not quickly adjust to market or companies with a fast changing pace (Damodaran, 2006), and assumes dividends as cash flows. It also relies on the assumption that the firm will always pay dividends, which is not necessarily true as lots of firms tend to retain the earnings instead of distributing it (Damodaran, 2006).

Free Cash Flow to Equity (FCFE)

The Free Cash Flow to Equity (FCFE) is the amount of cash that should be paid to the equity shareholders, after deducting all the expenses, investments and debt repayment (Damodaran, 2012; Steiger, 2010). It is given by:

$$(9) \quad \text{Free Cash Flow to Equity} = \text{Net Income} - (\text{Capital Expenditures} - \text{Depreciations}) - (\text{Change in non cash Working Capital}) + \text{New Debt Issued} - \text{Debt Repayments}$$

Presenting a similar behavior as DDM, the FCFE method will require the cost of equity discount rate for the calculations.

2.2.1.3 Adjusted Present Value (APV)

The APV approach was first proposed by Myers (1974) and it emerged as a possible substitute for WACC method among some users (Luehrman, 1997b). The APV describes a levered firm value as equal to an unlevered firm value added by a variation due to tax savings (Brigham & Ehrhardt, 2011; Ehrhardt & Daves, 1999).

According to Brigham & Ehrhardt (2011) and Goedhart et al. (2010), APV is able to divide the value of the firm in two: on one side the unlevered operational value of the company, and on the other side the value generated by financing, namely tax shields (VTS). VTS is a result of the tax savings' present value (Fernández, 2007).

In order to compute APV, there are three steps that, according to Damodaran (2006, 2012b) ought to be followed. The first one is to calculate the unlevered value of the firm. Given it has the postulation of the company being financed fully by equity, it is used the unlevered cost of equity (ρ_u) and an assumption that the cash flows grow at g .

$$(10) \quad \text{Value of Unlevered Firm} = \frac{FCFF_0(1 + g)}{\rho_u - g}$$

The second step is the computation of the value of tax benefits given a certain percentage of debt. Now that being a levered company, the rate used for the calculations is the cost of debt.

The third step is to perform an assessment of the impact that the percentage of debt used previously has on bankruptcy costs and the company's risk of default. This final procedure is visibly the most difficult one, given that the probability of bankruptcy or bankruptcy costs cannot be immediately calculated. Having all of these, the value of a levered firm through APV method is computed as:

$$(11) \quad \text{Value of Levered Firm} = \frac{FCFF_0(1 + g)}{\rho_u - g} + t_c D - \pi_a BC$$

As mentioned before, for some, APV came as a substitute for WACC methodology, since it can be used either when WACC is applicable and when it is not (Luehrman, 1997a). Some of the assumptions of WACC that constitute limitations are corrected by APV (such as fixed debt ratio and financial side effects), resulting in a model with fewer restrictions and consequently, fewer errors (Booth, 2002; Luehrman, 1997a). It also provides managers more significant information and it allows them to find the origin of the value of the firm's assets (Luehrman, 1997a). However, it allows the assumption of unreliable values for debt financing and consequently tax shield, financial distress and agency costs (Booth, 2002).

Despite all of these, Sabal (2005) states that after WACC, which is the most commonly used methodology, comes APV as the second most used method for valuations of companies.

2.2.2 Relative Valuation

According to Damodaran (2012b), relative valuation aims to value the company by comparing it to identical firms in the market.

To perform this analysis, Damodaran (2006) describes three fundamental steps. Firstly, the firm must search and identify comparable companies in the market. This procedure is not simple given the complexity of the criteria that should be used. In order to find comparable firms, not only should be concerned the fact that the companies can belong to one or more industries and sectors of activity, but also other factors that play a key role such as its risk level, growth and cash flows through time (Lie & Lie, 2002). The following step is based on the standardization of the prices into a variable that makes them comparable to each other, since they may be quoted differently in the market. Finally, the last step is to control the necessary adjustments to the values obtained.

According to Fernández (2015), there are three types of multiples.

Table 1 - Relative Multiples

Based on Equity Value (E)	Based on Enterprise Value (E+D)	Related to Growth
PER (Price Earnings Ratio), P/S (Price to Sales), P/BV (Price to Book Value)	EV/EBITDA (Enterprise Value to EBITDA), EV/Sales (Enterprise Value to Sales), EV/FCF (Enterprise Value to Unlevered FCF)	P/EG (PER to earnings per share growth), EV/EG (Enterprise Value to growth of EBITDA)

Source: Fernández (2015)

Having this, and the examples of multiples below, it is highly important to choose the right multiples to use. Lie & Lie (2002) considers the choice of multiples depend on the size of the company, its performance, among others aspects. Contrarily, Goedhart et al. (2010) affirms one should always start by computing Enterprise Value to EBITDA, since it leads to more efficient conclusions than the others.

Relative valuation methodology is one of the most popular methods being used globally. According to Damodaran (2012b), it has a simple approach which results in more understandable conclusions for stakeholders than a discounted cash flow valuation. Given its comparison to market prices, it also has a higher probability of revealing the actual conjecture of market. Moreover, it has less requirements and provides more directly and faster valuations (Fernández, 2002). However, this methodology is not the most appropriate when the business is very unique and there are not comparable firms that can provide useful results (Damodaran, 2012) or in environments with a fast pace, since it reveals past values.

For these reasons, Fernández (2015) and Schreiner (2007) state that multiples should be used after applying other valuation method. According to Goedhart et al. (2005) and Kaplan & Ruback (1995), DCF is the method that should be analyzed firstly, given its efficiency and better performance, being then complemented with the multiples.

2.2.3 Contingent Claim Valuation

Contingent Claim Valuation performs the valuation of assets, through option pricing models, that have options characteristics. These comprehend models such as Black-Scholes and Binomial models (Damodaran, 2012). According to Mason & Merton (1985) an option analysis provides the awareness of the option's value if, for example, the conditions of a project change and the company does not wish to continue with it. On the one hand, Copeland & Keenan (1998) state this model outperforms DCF models, for its better perspective not only on risk adjustment, but also on flexibility and when to leave and return to a certain business. On the other hand, Damodaran (2012b) considers that option pricing models bring more estimated errors to the results. According to Luehrman (1997b), the option pricing models provides managers more information about the value of new opportunities in long term, introducing a product in the market, acquisitions, among others, that DCF does not as clearly.

2.2.4 Asset Based Valuation

The final approach, asset based valuation, estimates the firm's value by valuing the assets the firm owns. According to Fernández (2002), this approach is mainly based on a company's balance sheet and accounting statements, having a stagnant perspective. Therefore, it does not consider any growth for the company or any aspects that can influence the firm on other terms, such as the market conjecture or internal concerns. Damodaran (2012b) states there are three types of valuing a company by this model. The first is liquidation value, which constitute the revenues obtained if the assets were sold today. The second is replacement cost, which is the cost of replacing every assets the firm owns. The third one is book value, which is represented by the equity parcel of the balance sheet (Fernández, 2002).

3. Investment Case

3.1 Company's Presentation

Sumol+Compal is a Portuguese firm, that resulted from the merger of two of the largest non-alcoholic beverages companies in Portugal, Sumolis and Compal, in 2008.

Sumolis group, formerly Refrigor, was founded in 1945 in Algés, with the purpose of manufacturing and commercializing soft drinks. The constant innovation (such as flavors without dyes or preservatives, or the green bottles to protect the drinks' properties) and the proximity with its clients were key factors for the company's success and thrive throughout the years.

Compal was founded in 1952, in Almeirim, with the name of Companhia de Conservas Alimentares, S.A.. It initially focused on the manufacture of preserved tomatoes, having later expanded its business to juices, soft drinks, nectars, canned vegetables and aerated waters.

With the merger, Sumol+Compal intended to become a reference in the Portuguese beverages' market, maintaining its strong position on canned vegetables and preserved tomatoes.

Today, Sumol+Compal has expanded its mission, and intends to become a reference not only in Portugal but also in Africa. Sumol+Compal is the leader of the non-alcoholic beverages in Portugal, having a market share superior to 25%. It is present in more than 70 countries, employs approximately 1300 people, and it is the single food and beverages firm present on the NYSE Euronext Lisbon.

The company is organized in: Sumol+Compal, S.A.; Sumol+Compal Distribuição, S.A.; Sumol+Compal Mozambique, S.A.; Sumol+Compal Angola, S.A.; and Sumol+Compal Marcas, S.A..

The first one, Sumol+Compal, S.A., constitutes the parent company and it is responsible for the decisions that affect the company. It provides support to the remaining holdings and it is assigned with tasks such as planning and organizing in order to monitor the firm on its activities, either operational or representative.

The second is Sumol+Compal Distribuição, S.A.. This division is responsible to secure the sales of the products and its respective distribution to their clients, not only in Portugal, but abroad as well.

Sumol+Compal Mozambique, S.A. and Sumol+Compal Angola, S.A.'s mission is to control the implementation of the industrial unit abroad Portugal and to guarantee the manufacture, evolution and performance of the brands present in Mozambique and Angola respectively, and in some countries of the Southern African Development Community. These divisions, by its nature, are capable of cooperating with the objective of the company to become more globally recognized.

Sumol+Compal Marcas, S.A. is the last segment from the company's organization. Its purpose is to manage the brands of the company, assuring their commercialization and distribution in the countries where the firm operates. It is also this division that is responsible to develop consumer studies and identify new opportunities. On November 2014, for 88,2 million euros, Sumol+Compal sold 49,9% of the holding to Copagef, a holding from Castel Group. Castel Group is a French company and its main business is related to the wine and beer industry. Currently, Copagef is one of the largest players in Africa. So, with this, Sumol+Compal may strengthen its position in Africa, expanding its business and reaching a largest target.

3.2 Business Units

Sumol+Compal has a wide portfolio of products which are divided in five major business units: soft drinks, juices and nectars, water and beer, canned vegetables and tomatoes, and finally, the distribution brands. These are framed into six portfolio brands, which are comprised by Compal, Sumol, Um Bongo, B!, Frize, Água da Serra da Estrela, Tagus, and Damm. Among these, Compal is the most consumed brand in the markets where the company operates (Appendix 1).

3.3 Future goals and strategic lines

Overall, the company is looking to have better results than in 2014, more specifically regarding turnover and operational returns.

It will also continue on focusing on innovation and communication of the brand and its new image, appealing to the concept of “Frutology” by investing and launching products that only contain Portuguese fruit.

Focusing on Portugal, the perspectives for the company are that the overall beverages’ sales continue to grow. Relying on an expected improvement on the country crisis, the private consumption is likely to grow, hence so should beverages consumption. However, the firm’s purpose will be to consolidate Portugal’s business and market share, so, it will continue to search for strategic partners.

Concerning international markets, the perspectives are for the sales to grow as well. Given Angola is the main location where the company operates abroad from Portugal, the growth of international sales will be highly impacted by the country’s results. The investment of a plant in Angola is expected to improve sales and reinforce the position and strength of the company. Therefore, it is crucial to maintain an efficient productive capacity, in order to fulfill and surpass demand. On the other hand, and due to the alienation of Sumol+Compal Marcas to Copagef, a strong player in Africa, the company is prospecting to strengthen its position in the continent, as well as to reach countries where it is not present.

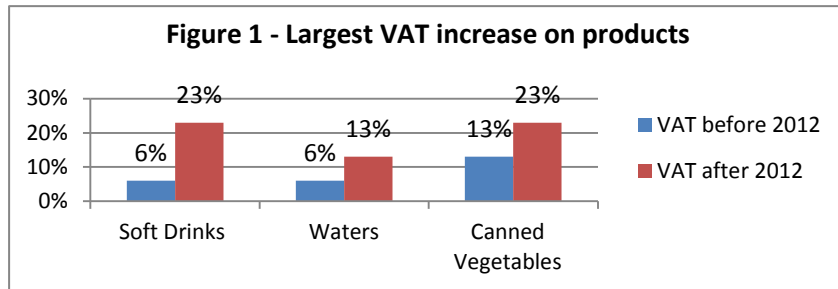
Having increased sales for its second year since it started, and having export for the first time to South Africa, Madagascar and Swaziland, a future goal for Sumol+Compal Mozambique, will be to expand and explore exports to Southern African Development Community (SADC).

3.4 Operational Performance

Turnover

The year of 2012 was especially difficult for the company, mainly due to the impacts of the economic recession. GDP suffered a reduction of 4%, and the beverages’ market was highly impacted by the increase of VAT. Restaurants and similar establishments raised VAT from 13% to 23%, and some of the products suffered from large VAT increases (Figure 1).

This just worsened the continuous tendency of the reduction of private consumption, having the company's sales decreased on 14,5% that year.



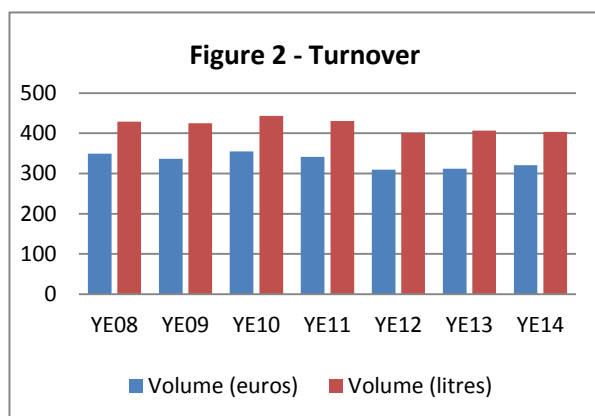
Source: Sumol+Compal

For the last three years, Sumol+Compal has been reverting this tendency, in which was able to slowly increase its turnover.

In 2014 the company presented 321 million euros of sales, having from 2012 to 2014, a positive growth of 3,8%. Despite the continuingly strong position Sumol+Compal has on domestic markets, being Portugal and Spain the main areas where the company operates and has more profits, international markets have been rising exponentially as well. The merger of Sumolis with Compal had a positive effect on this, since from 2010 to 2014, international markets have grown over 43%.

Last fall, along the sale of Sumol+Compal Marcas, the company not only had a boost of capital, but was also able to associate itself to Copagef.

This agreement will allow Sumol+Compal to strengthen its position in Africa, as well as to reach countries where the company is not present. Having this, it is expectable a positive growth of the turnover for the next years.

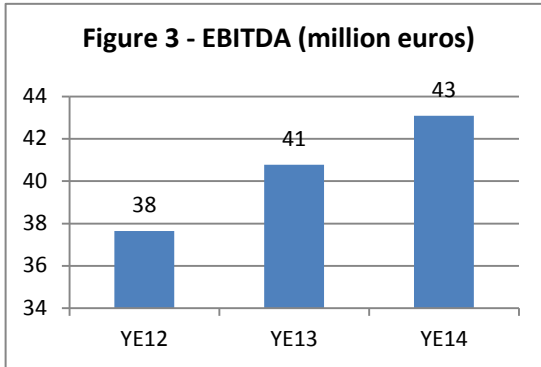


Source: Sumol+Compal

As it can be seen from Figure 2, there is a disparity among the volume in euros and in litres. However, this difference has been reducing, given the volume in litres has been growing more slowly than the volume in euros. This reflects the increase in prices the company had to incur.

EBITDA

EBITDA is the indicator that allows the company to analyze its profits liberating the operational activity. For the last three years, EBITDA levels are also increasing, always



Source: Sumol+Compal

presenting positive values. From 2012 to 2014, EBITDA increased 14,5%, which results from the increase of sales both on domestic and international markets, more specifically in goods, namely carbonated soft drinks and iced teas, and juices, nectars and fruit still soft drinks.

With the sale of Sumol+Compal Marcas, it is expectable that this indicator increases, given its expected positive growth for the turnover.

3.5 Financial Performance

Financial Expenses

The company's financial expenses had been reducing over time. Despite the small decrease (approximately 6%) from 2012 to 2014, it is considered a good indicator for the company.

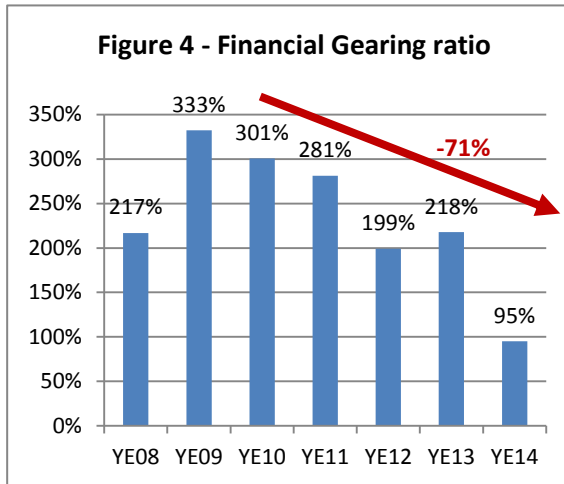
EBIT/Interest Coverage

The interest coverage ratio is the ability that a company has to pay its interest payments, with the earnings it has. Calculated by dividing EBIT by financial expenses, Sumol+Compal ratio has been increasing in the past years. The ratio suffered a decrease in 2012 due to the economic crisis, however, the value remained positive. From 2012 on, the ratio has been increasing, presenting 1,44 in 2014.

Financial Gearing

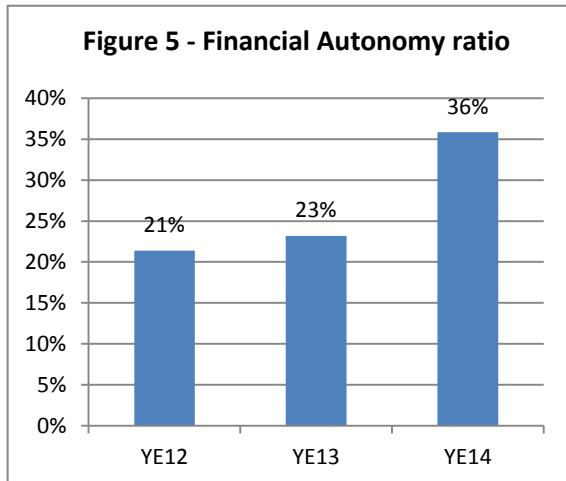
The financial gearing is the leverage ratio that measures the percentage of debt funded by the company's equity.

For the previous years, Sumol+Compal has been decreasing this ratio, having exposed a small increase in 2012, followed by a strong reduction to 2014, in 123%. This was mainly due to the reduction of net debt, more specifically, the long term interest bearing liabilities and the increase of the levels in cash, deposits and securities.



Source: Sumol+Compal

Financial Autonomy

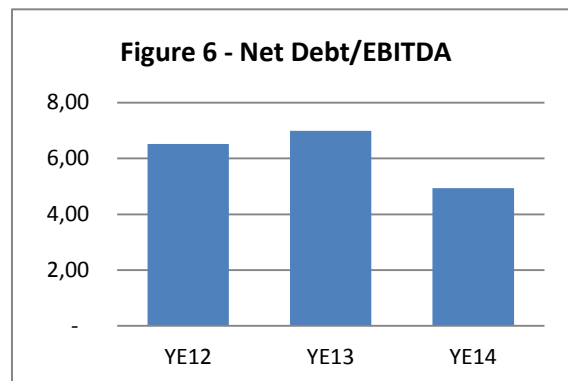


Source: Sumol+Compal

The financial autonomy ratio measures the solvability of the company, measuring the percentage of assets funded by equity. For the last years, the company has been increasing this ratio, more particularly in 2014. This growth was essentially due to the increase on minority interests, namely because of Sumol+Compal Angola, and recently, Sumol+Compal Marcas.

Net Debt/EBITDA

The Net Debt to EBITDA ratio shows how much time would take for the firm to meet its debt if EBITDA and Net Debt remained constant. As seen from Figure 6, in 2014 this ratio had a significant decrease, from 6,99 in 2013 to 4,93 in 2014.



Source: Sumol+Compal

This reduction was also due to the Sumol+Compal Marcas alienation, which made cash levels increase exponentially, approximately in 60 million. The increase in cash reduced the net debt, hence, the decrease in the ratio.

3.6 Stock Market Performance, Shareholder Structure and Dividends

In the past five years, from 2011 to 2015, Sumol+Compal stocks were very little volatile, decreasing its price throughout the years. In 2015, the price increased from a month to another performing at 1,139€ in 20 of April 2015 to 1,940€ in 20 of May 2015, reaching its maximum on 3 of June 2015, at 2,050€. This was the result of a reduction of the number of outstanding shares going from 96.030.687 to 60.499.364. In 31 of December 2014, Sumol+Compal was constituted by 100.092.500 shares, being 96.030.687 outstanding shares. The remaining 4.061.813 shares were held by the group. The main shareholders were Refrigor which held 70,53% of the shares and Caixa Geral de Depósitos that detained 10,50%. The company does not have a strict dividend policy having distributed dividends of 0,06€ per share in 2012. In 2014, due to the earnings and cash liquidity the sale of part of Sumol+Compal Marcas, the company distributed dividends on a total value of 15.658.444,48€.

3.7 Strategic Analysis

Table 2 - SWOT Analysis

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Company's strong reputation and brand • Diverse and innovative portfolio • Market leader in Portugal • Good business partnerships with strong clients in Portugal • Good relationship with labels such as Lipton, Pepsi, and Guaraná • Strong ambition to growth, by expanding the business internationally • Only Portuguese beverages company quoted 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • High levels of debt • Dependence on economic cycle, more specifically, private consumption • Low liquidity • Dependence on clients such as large distribution operators • HoReCa channel sales' decrease • Risk of large investments made on developing countries
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Expansion to other countries • Larger presence in international markets and the group's brands • Economic recovery • Developing countries opening up to new perspectives, becoming a world of unlimited opportunities • Consumers' mentality and behavior on a healthier lifestyle 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Political instability and vulnerability of countries such as Angola and Mozambique • Difficult penetration of the markets of the countries such as Angola and Mozambique • Continuing economic crisis • Dependence on weather climate • Strong presence of competitors globally • Volatility on oil prices • Closing establishments from HoReCa channel

A breakdown of the 5 Porter Forces was also considered, by analyzing the threat of new entrants, threat of substitutes, bargaining power of buyers and bargaining power of suppliers, in order to understand the industry the company is in (Appendix 2).

4. Macroeconomic Environment and Industry Sector

4.1 Macroeconomic Environment

Along Sumolis and Compal merger, in 2008, the world was facing a recession on the economy. The effects of this crisis impacted not only Portugal, but the rest of the world as well. Given the crisis' negative effects on GDP, unemployment rate and salaries, the confidence level of the consumers decreased as well as the private consumption. Naturally, so did beverages market suffered from the crisis.

Regardless of the merger's advantages and growth of the group's portfolio, Sumol+Compal was not an exception to the impacts of the crisis the world was facing, neither in Portugal, or the rest of the countries where the company operates.

In this section, it will be analyzed the macroeconomic scenario in the countries where the group mainly operates.

Portugal

As stated before, Portugal was also highly impacted by the crisis that reached worldwide economy. In an attempt to surpass the financial difficulties the country was facing, in 2011, Portugal asked for financial aid to the European Union and IMF. In exchange for their help, Portugal compromised on performing budgetary targets, structural reforms and several austerity measures. Troika composed by European Central Bank, International Monetary Fund and European Commission stayed in Portugal for three years with the program "Programa de Assistência Económica e Financeira".

During these three years, it can be said that Portugal faced a gradual economic recovery. Indicators such as GDP, volume of imports and exports, and unemployment rate reflect this economic conjecture, as can be seen in Appendix 3.

GDP suffered a strong decrease, presenting the major declines in 2009 and later on in 2011. It started to invert this tendency in 2013, having in 2014 increased by 0,9%.

Other indicators such as exports and imports volumes and unemployment rate confirm these betterments. In 2013 the level of imports and exports increased. Imports volume was the higher one (and the only positive record) since 2009, and exports risen by more than 100% since 2009 as well. This is due to the slight increase in private consumption and consumers' confidence level.

Regarding unemployment rate, after reaching its maximum in 2013, it started to decrease in 2014 by approximately 13,9%.

Overall, according to IMF, Portugal economic indicators are likely to increase for the following years, especially prices (inflation index) and total investment.

Africa

The African continent is considered one of the fastest growing economic regions. Despite its lack of conditions in terms of high levels of poverty, low education levels, health care and mortality indexes, the African continent has been reflecting a positive economic growth, being GDP an indicator that is expected to grow for the next years. Until 2008, Africa's economic growth was increasing exponentially, having reached its maximum in 2007 with a growth rate above 6%. With the economic crisis, African countries suffered a strong decrease in growth rate, having achieved 3% in 2009, less than half than two years ago. From 2009 on, with some volatility due to oil prices, the African continent has been increasing its growth throughout the years, being expected to grow 5% in 2016 according to African Economic Outlook.

Being Angola and Mozambique the main countries where Sumol+Compal is investing, the two will be analyzed in detail.

Angola

Despite being the second largest oil producer of Africa, Angola was not an exception to the crisis. In 2013 the country's economy suffered from the decline of oil prices globally, the largest period of drought of oil fields given the temporary pause of oil production. Decreasing over time, the prices per barrel have achieved its historical minimums in January 2015, quoting less than half in the homologous period.

In addition, the country also endured the consequences of the lack of efficiency on managing the public debt. Having this, authorities have ensured that the 2015 State Budget clearly reflected the cut in investment expenses due to the decrease in oil revenues. Moreover, the national currency has been depreciating its value, in order to maintain international reserves in stock and increase imports.

The slow recovery from oil prices and the consequent uncertainty relative to international markets is the main risk in order to recover the economic activity. Due to this, it is expected that the growth rates will decelerate to around 3,5% and 4,4% (IMF and State Government estimates respectively).

Even though, Angola's GDP has always been positive and with an increasing tendency until 2014 that decreased briefly (Appendix 4).

Mozambique

Overall, despite the global economic crisis, Mozambique has been having a significant increase in its economic activity, having risen again in 2014. Recovering from 2013 year-end political instability, GDP increased and presented a percentage change of 7,4% (Appendix 5). Impacted by presidential elections in the last quarter of 2014 and the floods in the beginning of 2015, it is expected a negative impact in the economic activity of 2015. Nevertheless, according to IMF and following Government guidelines for the next five years, it is expected that the country maintains its growth rates around 7% to 8% until 2019, as well as the inflation rate below 10%. In addition, the Government has the purpose of increasing the State revenues to 32,5% of GDP and public debt below 40% of GDP. With positive prospects, so are investments made in the country rising, representing almost 50% of its GDP in 2014 (Appendix 5).

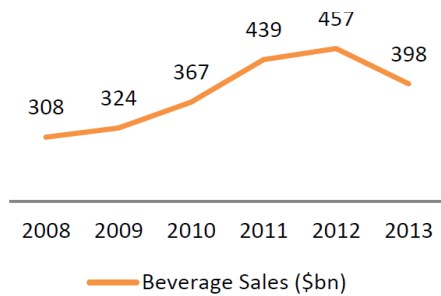
Mozambique's profitable sectors are represented by construction, transports and extractive industry. All of these industries are expected to grow in 2015, as well as the manufacturing industry, which is expected to grow approximately 5% due to the increase of beverages and textiles production. This was the industry that most contributed to GDP increase, having presented significant growths along the year.

4.2 Industry Sector

Overall Industry

The beverage industry is composed by companies that market alcoholic and non-

Figure 7 - Beverages Sales (billion euros)



Source: "Banco BIG" Sectorial Analysis and Bloomberg

alcoholic drinks, having worldwide players that have a strong impact on their segments. Determined by tendencies, this industry is affected by several macroeconomic factors that impact its evolution and progress. The first factor comes from merger and acquisitions operations. The entry or exit of large firms

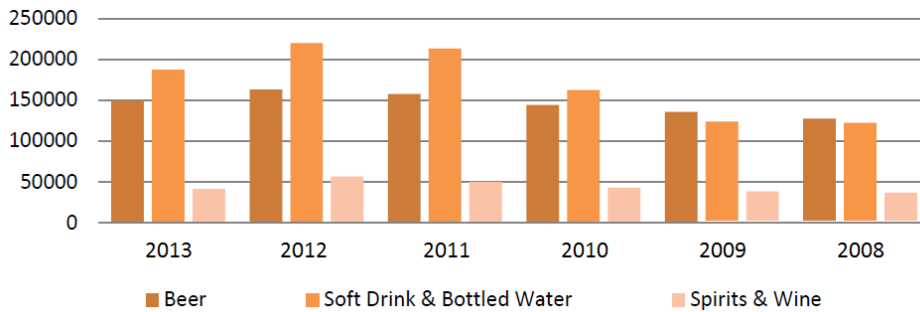
in the industry, leads to strong changes in the sector. These M&A operations have become more often and are making the industry more competitive, once companies are seeking for more revenues, market share, expand their portfolios, increase their bargain power, or economies of scale. According to Credit Sights, the M&A risk will increase, comparing to 2014. The second factor is globalization, which is allowing the industry to grow and to expand to other countries, such as emerging markets. Thirdly, comes the change on the concerns of the society, namely regarding lifestyles and attitudes towards health. Nowadays, consumers have been more informed and aware of the risks towards an unhealthy lifestyle. This is leading to a constant change in the sector, namely products diversification, since companies need to respond to the changing markets and its tendencies. This relates to the final trend which is product innovation. The key for beverages companies' success relies on differentiation, and as a result, society is always expecting new formulas, flavors and appearances.

Looking at the industry as a whole, its recovery since the 2008 crisis is evident. Looking at Figure 7, it can be seen that from 2008 on, the sector has shown, in average, a growth tendency, being more evident in 2012.

Concerning an analysis by product, through the figure below, Figure 8, it is able to confirm that in fact, beverages' sales have been rising since 2008, having all the segments slightly decreased in 2013. The aggregate with higher weight in the sector is

clearly soft drinks and bottled water segment, being spirits and wine the one with less contribution to the sector sales.

Figure 8 - Evolution of Sales (million euros)

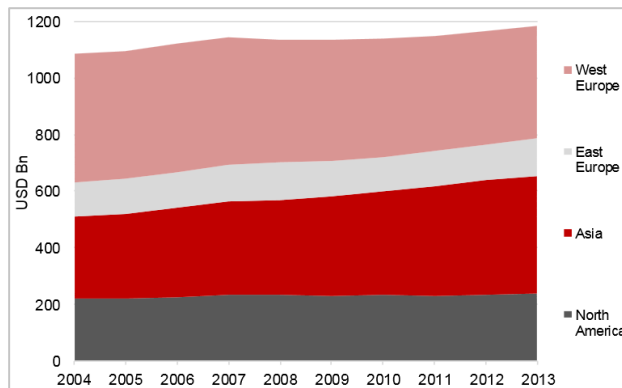


Source: “Banco BIG” Sectorial Analysis and Bloomberg

Alcoholic Beverages

The alcoholic beverages segment can be divided into three groups, namely, beers, spirits and the wines. Typically, beers represent 50% of the global consumption, spirits 20% and wines 30%. Throughout the years, and due to the current trends, the industry has been suffering from some volatility. Despite the overall growth of 1,4% in the past ten years, the largest market size on alcoholic beverages, held by Europe, has been decreasing its alcohol consumption (approximately by 0,9% in the past years). This tendency is mainly due to the crisis and consequent consumption reduction, and currency

Figure 9 - Alcoholic Beverages Sales Evolution (billion dollars)



Source: Dagong Europe Credit Rating and Bloomberg

volatility, especially negative to Euro. Contrarily, emerging markets have been growing steadily and have become the drivers of the alcoholic beverages performance. Asia, has been the continent with higher growth (approximately 3,9% in the past ten years), as a result of the increasing “urban lifestyle”. China, more specifically, contradicts its continent tendency, particularly concerning spirits segment. This is due to the

regulatory changes on anti-corruption and anti-fraud campaigns launched by the Chinese government in November of 2012.

From Figure 9, it is also noticeable the stability on North America throughout the years, representing 36% of the alcoholic consumption.

Having this, and looking closely to the segments, it can be perceived an overall growth on the spirits and wine, and beer segments, with a slight decrease in 2013, through the graph already seen above (Figure 8).

Spirits segment follows the tendency mentioned, growing until 2012, and decreasing in 2013. This is explained by the fact that the top players of this segment are majorly original from Europe. The top ten spirits producers represent 26% of the volumes, and six of them are European. As seen previously, Europe has been decreasing its sales on alcoholic beverages, which is partly responsible for this decrease.

The beer segment can be described as a concentrated market, since the global volume sold is mainly original from the top ten players, representing nearly 65%, and being all of them European companies with large scale economies.

The beer industry is highly dominated by mergers and acquisitions, having all the segment leaders been involved on these transactions as well.

The wine segment has been decreasing its consumption over the years. According to Bloomberg estimates, European countries such as Portugal, France, Italy, Switzerland and Slovenia, are the top consumers of wine. However, due to the last tendencies and to the crisis Europe is in, the overall consumption of alcoholic beverages decreased, and so did the wine segment.

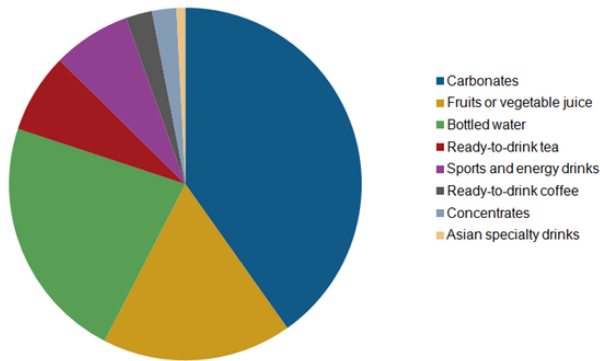
Non-alcoholic Beverages

The non-alcoholic beverages comprise carbonated soft drinks, juices and nectars, waters, and sports and energy drinks, ready-to-drink tea and coffee. Soft drinks constitute the leader segment on the non-alcoholic beverages, as it can be seen by the graph below.

As it can be observed through Figure 10, carbonated soft drinks is the segment with the larger market size, representing approximately 40% (337,8 billion dollars). Following, it comes bottled water, having a 189,1 billion dollars market size. Finally,

comes the segment of juices with 146,2 billion dollars of market size. These three together represent 80% of the market size of non-alcoholic beverages. With this, it is able to conclude that hot drinks, namely ready to drink teas and coffees, and sports and energy drinks represent a very small minority on the total. However, these

Figure 10 - Global Soft Drink Market Size (2013)



Source: Market Realist and Euromonitor International

minorities and bottled waters have grown in 2013, contrarily to carbonated soft drinks, juices and nectars. As seen before in Figure 8, the aggregate soft drinks and bottled water decreased its sales from 2012 to 2013. This was mainly due to the impact of soft drinks and not bottled waters, given the last ones increased its sales. Ready to drink coffees have increased more than the other segments. Nevertheless, this percentage is still little significant in the total market size, having its share on the total non-alcoholic beverages remained the same. Similarly to ready to drink coffee, so did energy drinks. Sports beverages on the other hand have grown significantly from 2011 on, which made Gatorade company enter as the fifth largest beverage trademark in 2013 in the US. Despite its decrease on sales, carbonated soft drinks segment remained as the leader of non-alcoholic beverages, being highly represented by two main players: Coca-Cola and Pepsi.

5. Valuation

5.1 Methodology

Sumol+Compal equity value resulted from a Sum of the Parts method. This valuation methodology consists in determining the value of the company by separately adding the value of its segments. In the case of Sumol+Compal, it was added according to its segments and geographical region.

Nevertheless, considering the existing synergies between the operational areas of the company, a single Cash Flow Statement was used to compute the Enterprise Value of the company. To these cash flows the Discounted Cash Flow methodology was applied, hence obtaining the present value of future cash flows. The operational forecasts were made for a five year tenor, followed by a perpetuity beginning in the sixth year. In order to obtain the equity value, the Net Debt and Minorities of the current fiscal year (2015) were deducted to the equity value. This method is the most appropriate to be used to Sumol+Compal, not only because it is the most used methodology for corporate valuations (Arumugam, 2007), but also due the reduced volatility of the company's debt-to-capital ratio following the sale of Sumol+Compal Marcas.

5.2 Assumptions

In order to determine the value of the business segments, there were several assumptions that had to be taken into account when projecting FCFF and WACC rate.

5.2.1 Turnover

Sumol+Compal turnover was determined for each of its business segments, taking into account its geographical footprint. The business segments estimated were (i) carbonated soft drinks and ice tea; (ii) juices, nectars, and fruit soft drinks (iii) waters; (iv) beers and (v) others. The geographical regions were aggregated into Africa and Middle East; Europe; America and Asia; and Portugal and Spain. It was also considered in this section a portion for others shared services, franchising and other activities that are not integrated in the services provided by the firm. For the calculations, it was considered the IMF's GDP and inflation forecasts until 2020, for all of the geographical

regions (Appendix 6 and Appendix 7 respectively). The calculation of the turnover for each business segment was performed by multiplying the volume in litres and the price for each segment.

So, firstly, it was computed the percentage of sales that each geographic region had on the total sales of Sumol+Compal in 2014 (Table 3).

Having this, and in order to forecast their weight on the sales until 2020, it was assumed that Africa and Middle East, Europe, and America and Asia weight on total sales would increase according to its respective GDP. Moreover, the percentage that the group others has on the total sales, would only represent ninety percent of the previous year sales. The remaining would be represented by Portugal and Spain.

Since the company has been focusing on its expansion to international domains, the percentage on the total sales of Portugal and Spain had to decrease. With the alienation of Sumol+Compal Marcas, the company hopes to have a stronger presence in the African continent. In addition, and given Angola is the main international market the company is in, the investment on the Angolan plant is expected to increase its sales, as well. For these, it was also natural to assume, that throughout the years, the company's sales to Africa and Middle East aggregate would have a stronger impact on the total sales of the company. The active and growing presence of the *non-brands* on the consumers' households also constitutes a threat, and a reason for Portugal and Spain have their shares reduced on the total sales. However, it is important to denote, that despite Portugal and Spain represent a smaller share over the years, they still constitute the majority of the total sales of the firm.

Table 3 - Percentage of Sales of Sumol+Compal's geographical regions and others

	2014	2015E	2016E	2017E	2018E	2019E	2020E
Africa and Middle East	22,98%	23,81%	24,86%	26,07%	27,27%	28,54%	29,87%
Europe	4,04%	4,13%	4,23%	4,33%	4,44%	4,55%	4,66%
America and Asia	1,20%	1,25%	1,30%	1,36%	1,42%	1,49%	1,56%
Portugal and Spain	71,30%	70,38%	69,22%	67,89%	66,56%	65,15%	63,66%
Others	0,47%	0,43%	0,38%	0,34%	0,31%	0,28%	0,25%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Source: Sumol+Compal and own calculations

Then, it was estimated the volume (in liters) for each business segment until 2020. For this, it was used the volume in liters in 2014 for the respective segment, and added the percentage of sales each region has on total sales of Sumol+Compal computed previously, and its GDP projection for the respective year.

The formula used to estimate the volume in liters to all the segments is given by Equation 12. Given the fact that the company does not have a significant presence of the segments waters, beers and its other products abroad, these were only considered for Portugal and Spain region (Table 4).

$$(12) \quad \begin{aligned} \text{Volume in liters 2015} = & \text{Volume in liters 2014} \times (1 + \text{GDP Africa} \\ & \text{and Middle East 2015} \times \% \text{ of sales Africa and Middle East 2015} \\ & + \text{GDP Europe 2015} \times \% \text{ of sales Europe 2015} + \text{GDP America} \\ & \text{and Asia 2015} \times \% \text{ of sales America and Asia 2015} + \text{GDP} \\ & \text{Portugal and Spain 2015} \times \% \text{ of sales Portugal and Spain 2015}) \\ & /100) \end{aligned}$$

Table 4 - Business Segments Geographical Presence

Juices, Nectars and Fruit Still Soft drinks	Carbonated Soft drinks and Ice tea	Waters	Beers	Others
Africa and Middle East				
Europe				
America and Asia				
Portugal and Spain				Portugal and Spain

Source: Sumol+Compal

Afterwards it was estimated the price for each segment. Following the same pattern as above, the price practiced in 2015 was calculated by multiplying the price in 2014, and added the percentage of sales of each region on total sales and the respective inflation projection for the year. As previously, for the segments waters, beers and others, it was only considered the values for Portugal and Spain region (Table 4).

Therefore, the multiplication of the volume and the price reached for each business segment, provided the total sales for each unit (Appendix 8).

Having the total sales of goods, it remained the total services provided. Given these are provided in Portugal, it was assumed these would vary from the previous year, according to Portugal inflation rate (Appendix 8).

So, according to the sum of the parts methodology, the sum of the sales of each segment reached, and the services provided, are the total sales for the year.

5.2.2 Operational Costs

To properly assess operational cost structure, recent years' evolution of costs concerning total turnover were analyzed. Production costs, as well as the other costs, are not released on a product by product basis. The information is given on a consolidated perspective, mainly due to the several synergies the company has between all the areas. Furthermore, the group has transversal holding areas, thus, operational costs were calculated in total terms (Appendix 10). The overall structure of costs is not very volatile. However, as it is expectable for volumes to increase, it is conceivable that the company might have scale economies. Hence, particularly in the cost of sales, an improvement is expected. Nevertheless, the percentage regarding sales remains the same as the previous year. Due to marketing needs and staff requirements to increase production, staff costs will increase in 0,5% regarding previous year's sales. Being stable over the past years, external services and supplies and other operating costs will always remain constant regarding sales.

5.2.3 Investment in Capital Expenditures and Depreciations and Amortizations

The investment on capital expenditures was calculated on a consolidated perspective as well. Regarding tangible and intangible assets, both will evolve according to sales, with an assumption of maintenance of 1% of sales for intangible assets and 3% of sales for tangible assets, being 1% as an historical ratio for the past four years, and 3% given it is a sector average. Concerning amortizations and depreciations, both tangible and intangible, will evolve according to the respective investments of tangible or intangible assets of the year. The percentage of depreciation will remain constant, having as reference the ratio for the previous year, 2014.

So, the total Capex is the sum of the investments on the net tangible and intangible assets, deducted by its respective amortizations and depreciations (Appendix 11).

5.2.4 Working Capital

The working capital is the ability the company has to face its short term commitments. It is calculated by the difference between the current assets and the current liabilities. Regarding current assets, it was calculated by the sum of the inventory and short term debtors, being short term debtors composed by trade debtors and other short term debtors (such as State and Public Entities, and others). For these calculations it is assumed that short term debtors will change upon the weight of the respective collection period on total sales.

Concerning inventory, it was firstly projected the days in inventory, from which the inventory would change upon total sales. It was assumed to be the same as in 2014 (Equation 13).

$$(13) \quad \text{Inventory} = \frac{(\text{Days in inventory} \times \text{Sales in 2015})}{365}$$

Then, for short debtors, following the same pattern as inventory, it was assumed a collection period of 80 days, an increase compared to the previous year, from which short term debtors would change upon total sales.

Regarding current liabilities, composed by short term trade creditors, state and public entities, and others (including bank overdrafts), it was assumed a constant payment period, having as reference, the period presented for 2014. Then, it was calculated the proportion of the payment period on total sales to determine the total liabilities (Appendix 12).

For these calculations, it had to be taken in account the historical negotiable capacity of the company. Despite the alienation of Sumol+Compal Marcas, and the possible consequence of the company being a stronger player in Africa, and so, benefit from a greater bargaining power on this region, the average collection period has been suffering from a lot of pressure over the firm. The volatility among distribution channels, namely HoReCa, and the constant delay concerning wholesale markets, may lead to an expectable increase on the average collection period.

In this particular aspect, bank overdrafts represent a typical way that Sumol+Compal has to protect itself regarding payments. Given the delay the company suffers concerning collection period, the firm maintains bank overdrafts, in order to be able to pay its suppliers on time. In addition, the 80 days would also represent a period of days closer to the average practiced over the years after the merger.

Contrarily, the average payment period was assumed to remain constant. On the one hand, the company has a stronger negotiable power over the national farms with whom it works with. However, on the other hand, external suppliers demand other type of requirements. Hence, it was expectable to remain constant.

5.2.5 Net Debt

Being a levered company, the calculation of net debt was necessary. This was calculated by the difference between the sum of the long term and short term interest bearing debt with cash. It was assumed that the total interest bearing debt would remain constant with reference to the previous year (Appendix 13).

5.2.6 WACC

For the calculations of the weighted average cost of capital (WACC), some assumptions had to be considered. It is noteworthy though, that despite the assumptions to be considered, WACC will be different every year. This is due to the slight changes in Debt and Equity levels during all the timeframe, thus resulting in different values for WACC.

5.2.6.1 Cost of equity

5.2.6.1.1 R_f

Regarding the risk free rate, and despite the fact that Sumol+Compal operates in several geographical regions, the group is Portuguese. So, the risk free rate used was Portuguese government bonds for 10 years on 31 of December of 2014, of 2,69%.

5.2.6.1.2 Beta

The beta was firstly estimated through a linear regression between Sumol+Compal and PSI20. From this approach, it was reached a beta of 0,07.

The formula (Equation 14), where R_S represents the returns of the stock and R_M the return of the portfolio, also resulted in a beta of 0,07.

$$(14) \quad \text{Beta} = \frac{\text{Cov}(R_S, R_M)}{\text{Var}(R_M)}$$

However, it was through the linear regression test, which gave the relation between the explanatory variable (PSI 20) and the explained variable (Sumol+Compal), using R squared coefficient of determination, which would be able to check if the variables had statistical evidence of correlation between them. Given the R squared of the regression presented minimum values (0,190%), there was no statistical evidence of correlation between Sumol+Compal and PSI 20 (Appendix 14).

The same procedure was also applied to PSI General, where the company is quoted, nevertheless, this presented even lower values, with a beta of 0,000008 and an R squared of 0,03%. Having this, it was used the beta of the industry instead. The industry beta according to Damodaran was 0,8. This value also corresponded to Bloomberg estimates. For an R squared of 30%, the beta correspondent is also 0,8.

5.2.6.1.3 Market Risk Premium

The market risk premium was determined according to a weighted average between the risk premium and the turnover by geographical region. Firstly, it was performed an average of the risk premiums of each country, in order to aggregate them into Sumol+Compal's geographical regions. Finally it was computed the total weighted average of the total risk premiums by region reached with the total turnover weight in 2014, having reached a MRP of 9,32% (Appendix 15).

5.2.6.1.4 Cost of Debt

The calculation of the cost of debt was based on Damodaran's approach, in adding the risk free rate to a default risk spread. Through the interest coverage ratio (EBIT/Financial Expenses), it was able to reach a given rating and the correspondent spread. By adding the risk free rate considered to the spread, it was achieved the cost of debt. Since Sumol+Compal is a Portuguese company, the cost of debt should include the component of the country's economic conjecture as well.

Therefore, this procedure was also performed to Portugal, using the country’s rating of BB+. Having an average of both, it was achieved a cost of debt of 8,06% (Appendix 16).

5.2.6.1.5 Tax rate

The tax rate considered was a fixed rate of 21%.

5.2.6.1.6 Perpetual Growth Rate

The perpetual growth rate is the rate assumed for the company’s growth in perpetuity. The rate applied was 1,5%.

5.3 FCF and Enterprise Value

After all the assumptions and calculations were performed, the free cash flows were calculated on a consolidated perspective. Having this, it was achieved an Enterprise Value of 484,56 millions, being 391,11 millions correspondent to the Terminal Value and 93,45 millions to the five year tenor.

Table 5 - Discounted Cash Flow Statement

DISCOUNTED CASH FLOW STATEMENT	YE15	YE16	YE17	YE18	YE19	YE20
EBIT	28,57	28,99	30,53	32,17	33,93	35,83
EBIT (1-T)	22,57	22,90	24,12	25,41	26,81	35,83
Depreciation & Amortization	14,60	16,17	16,77	17,41	18,10	16,35
EBITDA	37,17	39,07	40,89	42,82	44,90	52,19
Change in Working Capital	8,51	4,57	3,65	3,87	4,18	4,51
Capital Expenditures	-12,91	-13,51	-14,15	-14,83	-15,56	-16,35
Free Cash Flow	15,74	20,99	23,09	24,12	25,16	31,32
Terminal Value					523,69	
WACC	0,074	0,075	0,075	0,075	0,076	
Discounted Terminal Value					391,11	
Discounted Cash Flow	15,74	19,53	19,98	19,40	18,79	
Enterprise Value	484,56					

6. Valuation Results

After having achieved the Enterprise Value, it was calculated the Equity Value. For this, it was deducted from the Enterprise Value, the value of Net Debt, which corresponds to the sum of the long term and short term Interest Bearing Debt minus the Cash, and the Minorities Interests.

Table 6 - Sumol+Compal's Target Price

Valuation	
DCF Valuation	484,56
Enterprise Value (EV)	484,56
- Net debt	214,88
- Minorities	72,14
Equity Value	197,53
Number of shares outstanding	96,03
Value per share	2,06 €
Market Value (31-Dec-2014)	1,13 €
Market Value (31-Aug-2015)	1,90 €

Having this, the target price for Sumol+Compal reached was 2,06€ per share. This represents a potential valorization of the shares of 82%, comparing to the 1,13€ per share in 31 of December of 2014. Comparing to a more recent data, namely 31 of August of 2015, the price per share on this date was 1,90€, hence a potential valorization of 8%.

It is noteworthy that the value reached may not be totally accurate, given the assumptions used for the calculations. Hence, it was performed a relative valuation in order to compare Sumol+Compal with its peers (Appendix 18) and a sensitivity analysis (Appendix 19) so that these values could be measured when facing different scenarios, having thus, a more accurate valuation.

7. Conclusions

The purpose of the valuation performed was to determine a fair price of Sumol+Compal' shares. Despite all the approaches presented in the literature review, the more adequate methodology was the Free Cash Flow to the Firm (FCFF). In order to complement this method, a relative valuation was also carried out, so that the valuation could take into account the industry's comparable firms to Sumol+Compal.

Despite having suffered from the negative effects of the economic crisis, the company managed to increase its sales and expand its business. Having a strong position in Portugal's market, the company is focusing on innovation, communication, and solid strategic partners, as well as trying to have a more solid footprint internationally.

Through the results obtained with the DCF methodology, it was possible to conclude that Sumol+Compal's price is undervaluated. With the sensitivity analysis performed, it was able to notice, that facing the scenarios used to perpetual growth rate and beta, the share price in the worst scenarios would be higher than the market price at 31 of December 2014 (1,13€). Looking at a more recent date, the price had increased (1,90€). However, it was still lower than the target price reached (2,06€). In a period of eight months, the shares increased its price in almost 70%, therefore, the recommendation to future investors at the present date, would be to buy the shares, once they may provide larger returns in the future.

Concerning the company's future, it will depend on the impacts of both macroeconomic and company events. On the one hand, the potential economic recovery could lead to an increase of private consumption, and therefore, a growth of the company's sales. On the other hand, the impact of the sale of Sumol+Compal Marcas and the plants in Mozambique and Angola are expected to reinforce and strengthen the company's market position in Africa and consequently improve the company's sales as well. However, it is noteworthy that, being developing countries, they also represent a risk for the firm. As such, an aspect to focus on future Sumol+Compal's equity researches could be the impact of African countries on the firm and the company's internationalization.

BIBLIOGRAFIA

Academic material:

- Alexei, S. (2012). Economic value added (EVA) - Main indicator in measuring the value creation of the Target Corporation Inc. *International Journal of Research and Reviews in Applied Sciences*, 12, 1–34.
- Arumugam, T. T. (2007). An analysis of discounted cash flow (DCF) approach to business valuation in Sri Lanka. St Celements University.
- Booth, L. (2002). Finding Value Where None Exists: Pitfalls in Using Adjusted Present Value. *Journal of Applied Corporate Finance*, 15, 95–104.
- Brealey, R. A., Myers, S. C., & Allen, F. (2011). *Principles of Corporate Finance* (10th Ed.). McGraw-Hill.
- Brigham, E. F., & Ehrhardt, M. C. (2011). *Financial Management: Theory and Practice*.
- Carvalho das Neves, J. (2002). *Avaliação de Empresas e Negócios*. McGraw-Hill.
- Copeland, T. E., & Keenan, P. T. (1998). How much is flexibility worth? *McKinsey Quarterly*, (2), 38–49.
- Damodaran, A. (1999a). Estimating Equity Risk Premiums. Stern School of Business.
- Damodaran, A. (1999b). Estimating risk parameters. Stern School of Business, 1–31.
- Damodaran, A. (2002). Approaches to Valuation and The Basics of Risk. In *Investment Valuation: Tools and techniques for Determining the Value of Any Asset* (pp. 11–30).
- Damodaran, A. (2006). Valuation Approaches and Metrics: A Survey of the Theory and Evidence. Stern School of Business, 693–784.
- Damodaran, A. (2008). What is the riskfree rate? A Search for the Basic Building Block. Stern School of Business, 1–33.
- Damodaran, A. (2012). *Investment Valuation: Tools and Techniques for determining the value of Any Asset*. Stern School of Business (2nd Ed.). John Wiley & Sons.
- Damodaran, A. (2013). Equity Risk Premiums (ERP): Determinants, Estimation and Implications. Stern School of Business, 1–102.

- Durand, D. (1957). Growth Stocks and the Petersburg Paradox. *Journal of Finance*, 1–6.
- Ehrhardt, M. C., & Daves, P. R. (1999). The Adjusted Present Value: The Combined Impact of Growth and the Tax Shield of Debt on the Cost of Capital and Systematic Risk, 1–27.
- Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33, 3–56.
- Fama, E. F., & French, K. R. (1996). Multifactor Explanations of Asset Pricing Anomalies. *Journal of Finance*, 51 (1), 55–84.
- Fama, E. F., & French, K. R. (2004). The Capital Asset Pricing Model: Theory and Evidence. *Journal of Economic Perspectives*, 18 (3), 25–46.
- Fernández, P. (2002). *Valuation Methods and Shareholder Value Creation*. Academic Press.
- Fernández, P. (2007). A More Realistic Valuation: Adjusted Present Value and WACC with Constant Book Leverage Ratio. *Journal of Applied Finance*, 3 (715), 13–21.
- Fernández, P. (2015). *Valuation Using Multiples: How Do Analysts Reach Their Conclusions?* IESE Business School.
- Fernández, P., & Bilan, A. (2007). 110 Common Errors in Company Valuations. *Business*, 3 (714), 40.
- Foerster, S. R., & Sapp, S. G. (2005). The dividend discount model in the long-run: A clinical study. *Journal of Applied Finance*, 15, 55–75.
- Goedhart, M., Koller, T., & Wessels, D. (2005). The Right Role for Multiples in Valuation. *McKinsey on Finance*, 15, 7–11.
- Goedhart, M., Koller, T., & Wessels, D. (2010). *Valuation: Measuring and Managing the Value of Companies* (5th ed.). McKinsey & Company.
- Gordon, M. J. (1962). *The Investment, Financing, and Valuation of the Corporation*. The Irwin Series in Economics.
- Kaplan, S. N., & Ruback, R. S. (1995). The Valuation of Cash Flow Forecasts: An Empirical Analysis. *Journal of Finance*, 50 (4), 1059–1093.

- Lie, E., & Lie, H. J. (2002). Multiples Used to Estimate Corporate Value. *Financial Analysts Journal*, 58), 44–54.
- Luehrman, T. A. (1997a). Using APV: A Better Tool for Valuing Operations. *Harvard Business Review*.
- Luehrman, T. A. (1997b). What's It Worth? - A General Manager's Guide to Valuation. *Harvard Business Review*.
- Mason, S. P., & Merton, R. C. (1985). Role of Contingent Claims Analysis. In *Recent Advances in Corporate Finance*.
- Myers, S. C. (1974). Interactions of Corporate Financing and Investment Decisions- Implications for Capital Budgeting. *The Journal of Finance*, 29(1), 1–25.
- Ross, S. A. (1976). The Arbitrage Theory of Capital Asset Pricing. *Journal of Economic Theory*, 341–360.
- Sabal, J. (2005). WACC or APV?: The Case of Emerging Markets, 1–19.
- Schreiner, A. (2007). Equity valuation using multiples: An empirical investigation. *Equity Valuation Using Multiples: An Empirical Investigation*, (3313), 1–170.
- Sharpe, W. F. (1964). Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk. *The Journal of Finance*, 19, 425–442.
- Steiger, F. (2010). The Validity of Company Valuation Using Discounted Cash Flow Methods.
- William, J. B. (1938). *The Theory of Investment Value*. Cambridge: Harvard University Press.

Reports:

- African Economic Outlook, African Economic Outlook – Regional Development and Spatial Inclusion (2015)
- African Economic Outlook, Angola (2014)
- African Economic Outlook, Angola (2015)
- African Economic Outlook, Mozambique (2015)
- APED Flash Report, Retail (December 2014)
- Banco BIG Sectoral Analysis, Beverages (2014)

- Banco de Portugal, Projections for the Portuguese Economy: 2015-2017 (2015)
- BPI Flash Notes, Africa Monthly Macro Overview (July 2015)
- BPI Flash Notes, Portugal Update (July 2015)
- BPI Research, Angola Outlook (September 2015)
- BPI Research, Mozambique Outlook (May 2015)
- Coca-Cola, Annual Report (2014)
- Credit Sights, Euro Food & Beverage (1) Outlook 2015 (December 2015)
- Dagong Europe Credit Rating, Alcoholic Beverages (December 2014)
- First Beverage Group, The Evolving Non-Alcoholic Beverage Landscape (March 2015)
- Heineken, Annual Report (2014)
- International Monetary Fund, Angola Economic Update (2013)
- Sumol+Compal, Reports and Accounts (2008, 2009, 2010, 2011, 2012, 2013, 2014)
- Saint John's University Research, Industry Analysis: Soft Drinks (2006)

Internet Sources:

- African Economic Outlook - <http://www.africaneconomicoutlook.org/en/>
- APED - <http://www.aped.pt/>
- Banco de Portugal - <https://www.bportugal.pt/pt-PT/Paginas/inicio.aspx>
- Banco BIG - <https://www.big.pt/InformacaoMercados/AnalisesBig/NotasSectoriais>
- Beverage Marketing Corporation - <http://www.beveragemarketing.com/>
- Bloomberg – www.bloomberg.com
- BPI Research - <http://www.bancobpi.pt/grupo-bpi/estudos-e-publicacoes-bpi/research>
- Credit Sights - <https://www.creditsights.com/>
- Damodaran Online - http://pages.stern.nyu.edu/~adamodar/New_Home_Page/
- Euromonitor - <http://www.euromonitor.com/>
- Focus Economics - <http://www.focus-economics.com/>
- Iapmei - <http://www.iapmei.pt/>
- INE – www.ine.pt

- Infinancials - <http://www.infinancials.com/>
- International Monetary Fund - <http://www.imf.org/external/index.htm>
- OECD - <http://www.oecd.org/>
- Portugal Economy PE Probe - <http://www.peprobe.com/>
- Reuters - <http://www.reuters.com/>
- Sumol+Compal - <http://www.sumolcompal.pt/>
- Value Line - <http://www.valueline.com/>

Databases:

- Bloomberg;
- Damodaran – spreadsheets;
- Fativa;
- IMF – World Economic Outlook Database, April 2015
- Reuters.

8. Appendixes

Appendix 1 - Sumol+Compal Business Units

Carbonated Soft Drinks and Ice Tea	Juices, Nectars, and Fruit Still Soft Drinks	Waters and Beers	Canned Vegetables	Distribution Brands
<ul style="list-style-type: none"> • Sumol • Sumol Zero • B! • Pepsi Twist • Pepsi Light • Pepsi • 7Up • 7Up Light • Blendz • Guaraná Antarctica • GUD • Citro • Gatorade • Lipton 	<ul style="list-style-type: none"> • Compal Clássico • Compal Light • Compal Fresh • Compal Vital • Compal Essencial • Um Bongo • Compal 100% • Um Bongo 100% 	<ul style="list-style-type: none"> • Tagus • Serra da Estrela • Frize • Estrella Damm • Estrella Damm Inedit • Voll Damm • Free Damm • Bock Damm 	<ul style="list-style-type: none"> • Compal da Horta (Vegetables) • Compal da Horta (Tomato) 	<ul style="list-style-type: none"> • Lipton • Gallo • Ucal

Source: Sumol+Compal

Appendix 2 - 5 Porter Forces

- **Threat of New Entrants**

The beverages industry has a strong presence of economies of scale, which reflects on higher production costs. Moreover, the current increase of mergers and acquisitions in the industry leads to even larger companies, constituting then a strong competitor for new entries. Today, consumers have larger needs on the products to buy, so, it would reflect on larger investment costs. The industry itself requires high capital investments, since a company needs to incur in a lot of high valued material to develop the activity. The access to raw materials is medium, once it will depend on the quality of the materials and in weather conditions. Finally, the brand reputation is important in this industry, given it is dominated by some market players in each business segment. The new entrants would have to invest not only in material goods but also nonmaterial. Despite the reasons mentioned above, it must be taken into account the continuing and strong presence of store brands. Due to the quality price ratio they offer, store

brands have been growing as a strong competitor, impacting on their sales. However, this impact does not become so large, in the case of Sumol+Compal, once store brands do not possess factories to produce their products, using then the company's ones to produce its goods.

Another aspect is relative to mergers and acquisitions. Despite the propensity to become a barrier for a new entry, it could also have the opposite effect. Being a small company, it could easily be merged, resulting in more power for the parent company.

In spite of all of this, it is possible to conclude that the threat of new entrants in the industry is weakened and uncertain.

- **Threat of Substitutes**

Being beverages industry composed by waters, carbonated soft drinks, juices, nectars, and fruit soft drinks, ready to drink tea and coffee, beers, wines, among others, there is currently no substitute product to a beverage.

Therefore, this represents a low threat for Sumol+Compal.

- **Bargaining power of buyers**

The bargaining power of buyers can be divided into their role on the distribution of the products. This is due to the fact that large chains such as supermarkets and hypermarkets have more bargaining power than HoReCa channels. Given the volume of their purchases and their concentrated nature, distribution companies relative to supermarkets and hypermarkets have a big negotiation power, having the characteristics of discounts by quantity and a large payment period. On the other hand, HoReCa channels have a smaller dimension each, so, its bargaining power is smaller. In addition, due to the current crisis, the number of establishments of this channel has been reducing over time. This aspect contributes for the diminishment of their negotiation power as well.

So, this reflects a moderate power of buyers.

- **Bargaining power of suppliers**

The bargaining power of suppliers also depends on their nature. On the one hand, companies have a stronger negotiable power over farms. Producers firms, due to their

dimension and volume of orders, represent an important role on the farms' sales. On the other hand, there are external suppliers. These demand other kind of requirements, being its business not dependent on beverages companies. Therefore the companies' bargaining power is smaller.

Hence, this represents a moderate power of suppliers.

- **Rivalry among existing competitors**

The industry rivalry between companies is medium. On the one hand, not all of the companies commercialize the same products. Actually, despite the large number of competitors, most firms choose to focus on either alcoholic beverages or non-alcoholic beverages, and some, more specifically in a certain business segment. For instance, Coca-Cola and Heineken are two examples of high specialized beverages competitors that do not have other business segments, yet, are among the top industry players. So, even though the large number of competitors, the industry is concentrated on larger players.

Appendix 3 - Portugal Economic Indicators

	Unit	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
GDP	Δ %	-4,03	-1,61	0,90	1,60	1,54	1,40	1,25	1,16	1,15
Inflation	Index	115,85	116,36	116,18	116,91	118,43	120,25	122,17	124,26	126,38
Imports (vol.)	Δ %	-11,35	6,71	6,60	3,93	4,70	4,67	4,56	4,50	4,50
Exports (vol.)	Δ %	-2,72	11,92	4,05	5,87	4,70	4,52	4,41	4,44	4,47
Total Investment	% GDP	15,72	14,48	14,88	14,64	15,02	15,20	15,35	15,64	15,90
Unemployment rate	% labor force	15,53	16,18	13,89	13,07	12,56	12,10	11,66	11,22	10,78

Source: International Monetary Fund, World Economic Outlook Database, April 2015

Appendix 4 - Angola Economic Indicators

	Unit	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
GDP	Δ %	5,16	6,80	4,22	4,50	3,94	5,13	5,28	5,61	5,84
Inflation	Index	116,45	126,68	135,92	147,33	159,78	172,13	184,57	196,98	209,79
Imports (vol.)	Δ %	8,55	8,88	5,21	-22,76	5,46	4,03	5,63	3,44	2,67
Exports (vol.)	Δ %	3,84	0,06	-3,11	12,66	0,33	2,68	0,29	0,37	0,63
Total Investment	% GDP	14,93	14,79	14,15	9,22	10,45	10,77	11,06	11,42	12,06

Source: International Monetary Fund, World Economic Outlook Database, April 2015

Appendix 5 - Mozambique Economic Indicators

	Unit	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
GDP	Δ %	7,08	7,44	7,37	6,50	8,09	7,78	7,96	7,59	14,51
Inflation	Index	182,97	190,67	195,03	204,78	216,2	228,36	241,14	254,65	268,91
Imports (vol.)	Δ %	65,18	-5,11	-5,10	13,20	18,75	7,60	22,95	2,98	7,01
Exports (vol.)	Δ %	41,38	1,21	0,25	13,91	17,38	24,37	6,87	8,94	37,30
Total Investment	% GDP	56,51	55,58	47,15	51,57	56,63	50,83	62,87	60,24	52,01

Source: International Monetary Fund, World Economic Outlook Database, April 2015

Appendix 6 - GDP of Sumol+Compal Geographical Regions

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Africa and Middle East	5,87	4,76	4,55	3,71	3,71	3,62	4,40	4,85	4,60	4,66	4,66
Europe	3,39	3,50	0,23	1,20	1,83	2,19	2,43	2,46	2,46	2,47	2,47
America and Asia	7,81	6,30	4,95	4,98	4,05	3,75	4,21	4,49	4,61	4,73	4,77
Portugal and Spain	0,96	-1,22	-3,06	-1,42	1,15	2,03	1,80	1,58	1,50	1,45	1,45

Source: International Monetary Fund, World Economic Outlook Database, April 2015

Appendix 7 - Inflation of Sumol+Compal Geographical Regions

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Africa and Middle East	7,19	9,10	9,54	7,94	6,42	6,42	6,71	6,32	6,06	5,81	5,68
Europe	3,62	4,07	4,23	2,82	2,10	1,38	2,37	2,48	2,65	2,79	2,87
America and Asia	5,66	6,66	5,40	5,96	3,53	2,99	3,12	3,31	3,51	3,73	3,74
Portugal and Spain	1,72	3,30	2,61	0,98	-0,17	-0,05	0,99	1,17	1,38	1,51	1,61

Source: International Monetary Fund, World Economic Outlook Database, April 2015

Appendix 8 - Sumol+Compal's Turnover by business segment

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Goods	322,00	317,20	283,50	289,40	300,40	311,74	326,52	342,36	359,20	377,32	396,86
Juices, Nectars and Fruit Still Soft drinks	139,40	135,60	110,10	118,20	123,10	128,09	134,56	141,52	148,92	156,89	165,50
Volume (liters)	129,90	129,80	104,70	111,80	113,20	115,95	118,84	121,82	124,78	127,84	131,04
Price	1,07	1,04	1,05	1,06	1,09	1,10	1,13	1,16	1,19	1,23	1,26
Turnover (euros)	139,40	135,60	110,10	118,20	123,10	128,09	134,56	141,52	148,92	156,89	165,50
Carbonated Soft drinks and Ice tea	130,40	134,50	135,30	132,70	136,80	142,35	149,54	157,27	165,49	174,35	183,92
Volume (liters)	187,00	195,90	206,10	201,90	198,90	203,73	208,81	214,05	219,24	224,63	230,25
Price	0,70	0,69	0,66	0,66	0,69	0,70	0,72	0,73	0,75	0,78	0,80
Turnover (euros)	130,40	134,50	135,30	132,70	136,80	142,35	149,54	157,27	165,49	174,35	183,92
Waters	25,20	22,50	19,10	19,50	20,00	20,40	20,97	21,55	22,17	22,83	23,54
Volume (liters)	54,20	50,40	45,60	47,90	51,40	52,44	53,38	54,23	55,04	55,84	56,65
Price	0,46	0,45	0,42	0,41	0,39	0,39	0,39	0,40	0,40	0,41	0,42
Turnover (euros)	25,20	22,50	19,10	19,50	20,00	20,40	20,97	21,55	22,17	22,83	23,54
Beers	4,80	4,00	3,80	4,80	5,20	5,30	5,45	5,60	5,76	5,94	6,12
Volume (liters)	4,90	4,10	3,40	4,00	4,30	4,39	4,47	4,54	4,60	4,67	4,74
Price	0,98	0,98	1,12	1,20	1,21	1,21	1,22	1,23	1,25	1,27	1,29
Turnover (euros)	4,80	4,00	3,80	4,80	5,20	5,30	5,45	5,60	5,76	5,94	6,12

Others	22,20	20,60	15,20	14,20	15,30	15,60	16,00	16,41	16,85	17,30	17,78
Volume (liters)	20,70	18,40	14,40	13,70	14,20	14,49	14,71	14,92	15,10	15,28	15,46
Price	1,07	1,12	1,06	1,04	1,08	1,08	1,09	1,10	1,12	1,13	1,15
Turnover (euros)	22,20	20,60	15,20	14,20	15,30	15,60	16,00	16,41	16,85	17,30	17,78
Services	11,89	10,20	13,54	10,14	11,02	11,09	11,23	11,41	11,59	11,79	11,99
Services Provided	11,89	10,20	13,54	10,14	11,02	11,09	11,23	11,41	11,59	11,79	11,99
Total	354,57	341,76	309,19	311,80	321,00	322,83	337,75	353,76	370,79	389,10	408,85

Source: Sumol+Compal and own calculations

Appendix 9 - Sales growth rate (g sales)

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Growth rate	5,3%	-3,6%	-9,5%	0,8%	3,0%	0,6%	4,6%	4,7%	4,8%	4,9%	5,1%

Source: Sumol+Compal and own calculations

Appendix 10 - Operating Costs

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Total Sales	354,57	341,76	309,19	311,80	321,00	322,83	337,75	353,76	370,79	389,10	408,85
Cost of Sales	-150,46	-153,55	-144,16	-145,43	-146,02	-146,85	-153,64	-160,92	-168,66	-177,00	-185,98
% of Sales	42,43%	44,93%	46,63%	46,64%	45,49%	45,49%	45,49%	45,49%	45,49%	45,49%	45,49%
External Services and Supplies	-109,49	-98,19	-87,34	-87,68	-94,25	-94,78	-99,17	-103,87	-108,87	-114,24	-120,04
% of Sales	30,88%	28,73%	28,25%	28,12%	29,36%	29,4%	29,4%	29,4%	29,4%	29,4%	29,4%
Personnel Expenses	-37,30	-36,18	-35,35	-35,10	-34,57	-34,94	-36,56	-38,29	-40,14	-42,12	-44,26
% of Sales	10,52%	10,59%	11,43%	11,26%	10,77%	10,82%	10,82%	10,82%	10,82%	10,82%	10,82%
Other Operating Costs	-4,73	-7,30	-4,69	-2,81	-3,07	-3,09	-3,23	-3,38	-3,54	-3,72	-3,91
% of Sales	1,33%	2,14%	1,52%	0,90%	0,96%	0,96%	0,96%	0,96%	0,96%	0,96%	0,96%

Source: Sumol+Compal and own calculations

Appendix 11 - CAPEX and Amortizations and Depreciations projections

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Intangible Assets										
Variation	4,11	2,82	2,16	2,24	3,23	3,38	3,54	3,71	3,89	4,09
% of Turnover	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
% of Amortization	0,89%	0,91%	1,26%	1,41%	1,41%	1,41%	1,41%	1,41%	1,41%	1,41%
Tangible Assets										
Variation	7,82	-3,99	5,23	4,80	9,68	10,13	10,61	11,12	11,67	12,27
% of Turnover	2%	1%	2%	1%	3%	3%	3%	3%	3%	3%
% of Depreciation	4,17%	0,02%	2,95%	2,51%	2,51%	2,51%	2,51%	2,51%	2,51%	2,51%

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Net Intangible Assets	290,47	290,44	288,64	286,44	285,18	284,02	282,97	282,04	281,24	280,58
Investments										
Initial balance	304,68	308,79	311,61	313,78	316,02	319,25	322,62	326,16	329,87	333,76
Variation	4,11	2,82	2,16	2,24	3,23	3,38	3,54	3,71	3,89	4,09
Final balance	308,79	311,61	313,78	316,02	319,25	322,62	326,16	329,87	333,76	337,85
Amortizations										
Initial balance	-15,59	-18,33	-21,17	-25,14	-29,58	-34,07	-38,61	-43,19	-47,83	-52,52
Variation	-2,73	-2,84	-3,97	-4,44	-4,49	-4,54	-4,59	-4,64	-4,69	-4,75
Final balance	-18,33	-21,17	-25,14	-29,58	-34,07	-38,61	-43,19	-47,83	-52,52	-57,27
% Amortization	-0,89%	-0,91%	-1,26%	-1,41%	-1,41%	-1,41%	-1,41%	-1,41%	-1,41%	-1,41%

Source: Sumol+Compal and own calculations

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Net Tangible Assets	75,74	71,80	67,27	63,64	64,66	64,66	64,66	64,66	64,66	64,66
Investments										
Initial balance	322,15	329,97	325,98	331,21	336,02	345,70	355,84	366,45	377,57	389,24
Variation	7,82	-3,99	5,23	4,80	9,68	10,13	10,61	11,12	11,67	12,27
Final balance	329,97	325,98	331,21	336,02	345,70	355,84	366,45	377,57	389,24	401,51
Depreciations										
Initial balance	-240,46	-254,23	-254,18	-263,94	-272,37	-281,04	-291,17	-301,78	-312,91	-324,58
Variation	-13,77	0,05	-9,76	-8,43	-8,67	-10,13	-10,61	-11,12	-11,67	-12,27
Final balance	-254,23	-254,18	-263,94	-272,37	-281,04	-291,17	-301,78	-312,91	-324,58	-336,85
% Depreciation	-4,17%	0,02%	-2,95%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%	-2,51%

Source: Sumol+Compal and own calculations

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Intangible Assets	18,33	21,17	25,14	29,58	34,07	38,61	43,19	47,83	52,52	57,27
Tangible Assets	254,23	254,18	263,94	272,37	281,04	291,17	301,78	312,91	324,58	336,85
Total Amortizations	272,56	275,35	289,07	301,95	315,11	329,78	344,98	360,74	377,10	394,12

Source: Sumol+Compal and own calculations

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Net Intangible Assets	290,47	290,44	288,64	286,44	285,18	284,02	282,97	282,04	281,24	280,58
Net Tangible Assets	75,74	71,80	67,27	63,64	64,66	64,66	64,66	64,66	64,66	64,66
Total Capex	366,20	362,24	355,91	350,07	349,84	348,68	347,63	346,70	345,90	345,24

Source: Sumol+Compal and own calculations

Appendix 12 - Working Capital projections

	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Assets	106,28	97,33	94,16	89,00	94,26	102,76	107,51	112,61	118,03	123,86	130,15
Inventory	30,00	30,11	31,21	28,42	31,83	32,01	33,49	35,07	36,76	38,58	40,54
Days in Inventory	30,89	32,15	36,84	33,27	36,19	36,19	36,19	36,19	36,19	36,19	36,19
Short Term Debtors	76,28	67,22	62,96	60,59	62,43	70,76	74,03	77,54	81,27	85,28	89,61
Collection Period	79	72	74	71	71	80,00	80,00	80,00	80,00	80,00	80,00
Trade Debtors	78%	74%	82%	85%	83%	83%	83%	83%	83%	83%	83%
Other ST Debtors	22%	26%	18%	15%	17%	17%	17%	17%	17%	17%	17%
Liabilities	90,95	96,47	102,88	43,97	31,07	31,07	31,25	32,69	34,24	35,89	37,67
Short Term Liabilities (Creditors + Payables to Public Entities + Others)	93,63	103,03	121,45	51,47	35,33	31,07	31,25	32,69	34,24	35,89	37,67
Payment Period	94	103	121	51	35	35,33	35,33	35,33	35,33	35,33	35,33
Short Term Trade Creditors	20%	16%	11%	28%	40%	40%	40%	40%	40%	40%	40%
Payables to Public Entities	5%	7%	2%	7%	18%	18%	18%	18%	18%	18%	18%
Other Short Term Creditors	74%	78%	87%	65%	42%	42%	42%	42%	42%	42%	42%

Source: Sumol+Compal and own calculations

	2015E	2016E	2017E	2018E	2019E	2020E
Working Capital	71,69	76,26	79,92	83,79	87,97	92,48
Change in Working Capital	8,51	4,57	3,65	3,87	4,18	4,51

Source: Sumol+Compal and own calculations

Appendix 13 - Net Debt

	2011	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Long Term Interest Bearing Debt	188,83	176,75	207,20	196,14	196,14	196,14	196,14	196,14	196,14	196,14
% of Total Interest Bearing Debt	69%	72%	72%	71%	71%	71%	71%	71%	71%	71%
Short Term Interest Bearing Debt	83,43	70,16	80,03	80,38	80,38	80,38	80,38	80,38	80,38	80,38
% of Total Interest Bearing Debt	31%	28%	28%	29%	29%	29%	29%	29%	29%	29%
Cash	0,80	1,57	2,24	63,93	61,64	66,67	79,78	97,80	118,68	142,32
Net Debt	271,46	245,35	284,99	212,59	214,88	209,85	196,75	178,73	157,85	134,21

Source: Sumol+Compal and own calculations

Appendix 14 - Linear Regression between Sumol+Compal and PSI 20

Summary Output	
Regression Statistics	
Multiple R	0,043597319
R Square	0,190%
Adjusted R Square	-0,000884789
Standard Error	0,026055923
Observations	360

Source: Own calculations

Appendix 15 - Market Risk Premium

	Average of Country Risk Premium	Average of Total Risk Premium
Africa	6,42%	12,23%
Asia	3,65%	9,46%
Australia & New Zealand	2,25%	8,06%
Caribbean	5,23%	11,04%
Central and South America	5,56%	11,37%
Eastern Europe & Russia	4,39%	10,20%
Middle East	2,42%	8,23%
North America	0,00%	5,81%
Western Europe (excluding Portugal and Spain)	1,85%	7,66%
Portugal and Spain	3,30%	9,11%
Total Geral	4,14%	9,95%

Source: Damodaran

	Total Equity Risk Premium	Country Risk Premium
Africa and Middle East	10,2%	4,4%
Europe	8,9%	3,1%
America and Asia	9,1%	3,3%
Portugal and Spain	9,1%	3,3%

Source: Damodaran and own calculations

	Total Equity Risk Premium	Weight of Sales
Africa and Middle East	10,2%	23,0%
Europe	8,9%	4,0%
America and Asia	9,1%	1,2%
Portugal and Spain	9,1%	71,3%
Others	0,0%	0,5%
Final Market Risk Premium	9,3%	100%

Source: Damodaran and own calculations

Appendix 16 - Cost of Debt

	2012	2013	2014
EBIT	21,25	24,57	27,46
Financial Expenses	20,26	20,11	19,10
EBIT/FE	1,05	1,22	1,44
Average	1,236035		

Source: Own calculations

	Sumol+Compal	Portugal
Risk free (R_f)	2,69%	2,69%
Spread (CC / BB+)	8,00%	2,75%
k_d	10,69%	5,44%
Average k_d	8,06%	

Source: Damodaran and own calculations

Appendix 17 - WACC Assumptions

WACC Assumptions	%
Cost of equity (k_e)	10,14%
Risk free rate (R_f)	2,69%
Market Risk Premium	9,32%
Beta	0,8
Cost of debt	8,06%
T	21,0%
D/(E+D)	72,0%
E/(E+D)	28,0%
WACC	7,42%

Source: Own calculations

Appendix 18 - Relative Valuation

According to Damodaran (2006), the determination of the comparable companies is the first step one should incur, when performing a relative valuation. Sumol+Compal has inherent several business units, therefore, the choice on the comparable companies had to take this condition into consideration.

The multiples used for the analysis were Equity based, namely PER, PBV and PS, and Enterprise Value based, specifically EV/EBITDA, EV/EBIT and EV/Sales.

In line with sources such as Bloomberg and Infionals, the comparable companies chosen for the valuation were Spadel, Heineken, Coca-Cola, Royal Unibrew, A. G. BARR, Nichols PLC, and Britvic PLC.

Given not all of the companies mentioned have all of Sumol+Compal business units, it was performed an analysis of Multiples Weighted by Sales. In order to do so, it was firstly resumed a breakdown of each of the business segment on Sumol+Compal total sales of 2015.

Sales' breakdown	%
Waters	6,3%
Beers	1,6%
Carbonated Soft Drinks and Ice Tea	44,1%
Juices, Nectars and Fruit Still Drinks	39,7%
Others	8,3%

Source: Own calculations

Afterwards, the multiples were calculated for each comparable company. Then, it was applied the Multiple Weighted by Sales. For this, it was multiplied the multiple computed relative to a given comparable company to the percentage of sales Sumol+Compal has on the business segment the comparable company operates. For instance, the multiple PER for Heineken that only commercializes beers would be multiplied by the percentage of beer on Sumol+Compal sales. Adding these multiplications for every comparable company, it was reached a single Multiple Weighted by Sales for every multiple. Using this approach instead of a simple average made the final value more comparable to Sumol+Compal. This hedged the fact that each company chosen does not have all the business segments of Sumol+Compal. After this procedure, the Multiple Weighted by Sales was multiplied by Sumol+Compal's EBITDA and then deducted by Net Debt and Minority Interests, in order to reach the Equity by peer valuation. Having this, it was able to calculate the target price for each multiple.

	PER	PBV	PS	EV/EBITDA	EV/EBIT	EV/Sales
Spadel (only waters)	17,98 €	2,53 €	1,29 €	6,11 €	9,22 €	0,94 €
Heineken (only beers)	22,36 €	2,52 €	1,76 €	10,85 €	16,46 €	2,38 €
Coca-cola (only carbonated soft drinks)	27,32 €	5,22 €	4,22 €	15,40 €	19,22 €	4,19 €
Royal Unibrew (only beers)	19,25 €	4,26 €	1,98 €	12,00 €	16,42 €	2,24 €
BARR (all but beers)	26,02 €	4,66 €	2,99 €	16,78 €	19,80 €	2,95 €
Nichols (all but beers and waters)	24,41 €	5,73 €	3,16 €	11,80 €	12,02 €	2,83 €
BRITVIC PLC (all but beers)	19,40 €	19,96 €	1,29 €	11,54 €	14,83 €	1,62 €
Average (without Sumol+Compal)	22,39 €	6,41 €	2,39 €	12,07 €	15,43 €	2,45 €
Weighted average sales multiple	11,48 €	4,54 €	1,28 €	6,53 €	7,78 €	1,27 €
Sumol+Compal 2014	21,36 €	0,68 €	0,34 €	8,94 €	14,03 €	1,20 €
EBITDA	43,09	43,09	43,09	43,09	43,09	43,09
EBITDA * Weighted average sales multiple	494,73	195,44	55,07	281,41	335,24	54,77
Net Debt + Minorities	-	-	-	-287,02	-287,02	-287,02
Equity by peer valuation	494,73	195,44	55,07	-5,62	48,22	-232,25
Value per share	5,15 €	2,04 €	0,57 €	-0,06 €	0,50 €	-2,42 €

Source: Bloomberg, Inf Financials, Fativa, Company's Annual Reports and own calculations

As it can be seen from the table, all of the multiples were significantly lower comparing with the market, some even presenting negative multiples. Comparing equity and enterprise value approaches, equity approach presented better results. This is due to the extraordinary capital gains resulted from the sale of Sumol+Compal Marcas, hence, the better capital profitability multiples. Operational multiples from enterprise value approach reveal to be significantly lower than the average of the comparables. This reflects the current status of the company, on the one hand headquartered in a country that has been largely impacted by the economic crisis, and on the other hand with high levels of debt. It is expectable, that for the next years, with the investments the company has been doing in international markets, the company's revenues increase and the situation reverts.

Appendix 19 - Sensitivity Analysis

In order to obtain other scenarios for the assumptions proposed for the valuation, a sensitivity analysis was necessary, so that it could be perceived different outcomes for Sumol+Compal's share price. The variables used were Turnover, Beta Unlevered (β_u) and Perpetual Growth Rate (g).

Turnover	Price	Δ inicial price
277,33	1,68 €	-18,20%
284,44	1,74 €	-15,35%
291,73	1,80 €	-12,43%
299,21	1,86 €	-9,44%
306,89	1,93 €	-6,37%
314,75	1,99 €	-3,23%
322,83	2,06 €	0,00%
330,90	2,12 €	3,23%
339,17	2,19 €	6,54%
347,65	2,26 €	9,93%
356,34	2,33 €	13,40%
365,25	2,41 €	16,97%
374,38	2,48 €	20,62%

Source: Own calculations

β_u	Price	Δ to inicial price
0,93	1,76 €	-14,58%
0,91	1,81 €	-12,12%
0,88	1,86 €	-9,68%
0,86	1,91 €	-7,24%
0,84	1,96 €	-4,82%
0,82	2,01 €	-2,40%
0,80	2,06 €	0,00%
0,78	2,11 €	2,45%
0,76	2,16 €	4,89%
0,74	2,21 €	7,31%
0,72	2,26 €	9,71%
0,70	2,31 €	12,10%
0,69	2,35 €	14,48%

Source: Own calculations

g	Price	Δ to inicial price
1,29%	1,91 €	-7,06%
1,32%	1,93 €	-5,99%
1,36%	1,96 €	-4,88%
1,39%	1,98 €	-3,72%
1,43%	2,00 €	-2,53%
1,46%	2,03 €	-1,29%
1,50%	2,06 €	0,00%
1,54%	2,08 €	1,30%
1,58%	2,11 €	2,66%
1,62%	2,14 €	4,06%
1,66%	2,17 €	5,52%
1,70%	2,20 €	7,04%
1,74%	2,23 €	8,62%

Source: Own calculations

Analyzing the effects of each variable individually, *ceteris paribus*, it is noteworthy the impact of these on the share price.

Having considered increases or decreases of 2,5%, looking at turnover, an increase of 2,5% would increase the share price in approximately 3,23%.

The variables of perpetual growth rate and beta analyzed individually also impacted the price. An increase of 2,5% in the growth rate, *ceteris paribus*, would lead to an increase of the price of, approximately, 1,30%. Contrarily, beta has the opposite effect, since the same decrease in beta, would lead to an increase of price.

Analyzing Perpetual Growth Rate and Beta combined, it can be concluded that the higher the growth rate, and the lower the beta, the higher the share price. From these scenarios, it is notable that bad possible scenarios reflect share prices that vary between 1,63€ and 1,82€ These prices are higher than the market price in 31 of December of 2014, where it was quoted at 1,13€. With this, and regarding these scenarios, it would also be possible to conclude that the share price of Sumol+Compal is being undervalued.

		g												
		1,29%	1,32%	1,36%	1,39%	1,43%	1,46%	1,50%	1,54%	1,58%	1,62%	1,66%	1,70%	1,74%
Beta	2,06 €	1,63 €	1,65 €	1,67 €	1,69 €	1,71 €	1,73 €	1,76 €	1,78 €	1,81 €	1,83 €	1,86 €	1,88 €	1,91 €
	0,93	1,68 €	1,70 €	1,72 €	1,74 €	1,76 €	1,78 €	1,81 €	1,83 €	1,86 €	1,88 €	1,91 €	1,94 €	1,97 €
	0,91	1,72 €	1,74 €	1,77 €	1,79 €	1,81 €	1,83 €	1,86 €	1,88 €	1,91 €	1,93 €	1,96 €	1,99 €	2,02 €
	0,88	1,77 €	1,79 €	1,81 €	1,84 €	1,86 €	1,88 €	1,91 €	1,93 €	1,96 €	1,99 €	2,01 €	2,04 €	2,07 €
	0,86	1,82 €	1,84 €	1,86 €	1,88 €	1,91 €	1,93 €	1,96 €	1,98 €	2,01 €	2,04 €	2,07 €	2,10 €	2,13 €
	0,84	1,87 €	1,89 €	1,91 €	1,93 €	1,96 €	1,98 €	2,01 €	2,03 €	2,06 €	2,09 €	2,12 €	2,15 €	2,18 €
	0,82	1,91 €	1,93 €	1,96 €	1,98 €	2,00 €	2,03 €	2,06 €	2,08 €	2,11 €	2,14 €	2,17 €	2,20 €	2,23 €
	0,80	1,96 €	1,98 €	2,00 €	2,03 €	2,05 €	2,08 €	2,11 €	2,13 €	2,16 €	2,19 €	2,22 €	2,26 €	2,29 €
	0,78	2,01 €	2,03 €	2,05 €	2,08 €	2,10 €	2,13 €	2,16 €	2,19 €	2,21 €	2,24 €	2,28 €	2,31 €	2,34 €
	0,76	2,05 €	2,08 €	2,10 €	2,13 €	2,15 €	2,18 €	2,21 €	2,24 €	2,27 €	2,30 €	2,33 €	2,36 €	2,40 €
	0,74	2,10 €	2,12 €	2,15 €	2,17 €	2,20 €	2,23 €	2,26 €	2,29 €	2,32 €	2,35 €	2,38 €	2,41 €	2,45 €
	0,72	2,15 €	2,17 €	2,19 €	2,22 €	2,25 €	2,28 €	2,31 €	2,34 €	2,37 €	2,40 €	2,43 €	2,47 €	2,50 €
	0,70	2,19 €	2,22 €	2,24 €	2,27 €	2,30 €	2,32 €	2,35 €	2,39 €	2,42 €	2,45 €	2,48 €	2,52 €	2,56 €
	0,69													

Source: Own calculations