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Equity Valuation Research:

Corticeira Amorim SGPS S.A.

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ABSTRACT**Equity Valuation Research: *Corticeira Amorim SGPS SA***

by *Tomás Sousa de Carvalho*

The main objective of Equity Valuation is to measure the value of a company based on its current assets and market position. The use of Equity Valuations help investors to make most informed investment decisions taking into account the true value of a company at any given time and its expected performance in the future. Notwithstanding, a good valuation must be based on consistent and solid assumptions in order to provide the most reliable illustration of the company business reality. In this sense, a proper equity valuation analysis needs to address all the critical endogenous and exogenous factors that influence the company business. The chosen valuation approach will also determine the accuracy of the final results.

This dissertation focus on the Equity Valuation of Corticeira Amorim SGPS SA, the world's biggest cork-transforming company and one of the most international Portuguese companies. In a period of unfavorable economic context, Corticeira Amorim has been able to buck the negative trend of most Portuguese companies based on its sustainable growth. Thereby, the company seems to be an interesting investment target to investors considering the recent and future optimistic perspectives of its business. Hereupon, the objective of this dissertation is to provide an investment recommendation based on the estimated market value of Corticeira Amorim. Throughout this dissertation, all the determinant topics that support the valuation results are discussed, namely: different valuation approaches, industry and company overviews and forecast assumptions. The final topic focus on the comparison between *BPI* bank and this dissertation analyzes, discussing the differences on both valuations.

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0. Introduction

The main purpose of this dissertation is to estimate the year 2013 target price per share of Corticeira Amorim SGPS SA, a portuguese holding company listed on the Lisbon Stock Exchange and the world's leading player in the cork industry. Corticeira Amorim is responsible for the core business of Amorim Group which is majorly hold by the Amorim Family. The major goal of the equity valuation analysis presented in this dissertation is to predict the market value of Corticeira Amorim and consequently its market price per share in order to provide an investment recommendation to current and potential investors of the company.

Nowadays, portuguese companies are facing extremely difficult economic and financial conditions mainly due to the current sovereign debt crisis of Portugal. The tough macroeconomic environment Portugal is living, has been affecting negatively most portuguese companies. Nonetheless, some companies have been registering very positive results despite the unfavorable context and Corticeira Amorim is a great example of that. With a very strong global presence in the most important construction and wine markets, Corticeira Amorim has been able to expand its cork business and strengthen its position as the world's leading company in the cork industry. The variety of segments where the company operates and its worldwide global presence has been allowing the company to grow consistently, controlling the business risks and somehow, overcoming the difficulties.

Corticeira Amorim is divided into five business divisions: Raw Materials, Cork Stoppers, Floor & Wall Coverings, Insulation Cork and Cork Composites. Holding a vast number of companies and subsidiaries, Corticeira Amorim is world leader in every cork segment where it is present. The equity valuation in this dissertation estimates separately the enterprise value of each business unit and then add them together in order to get the consolidated enterprise value of Corticeira Amorim.

The structure of this dissertation is organized into four major sections. Firstly, it is presented the Literature Review which explains in detail the most important Equity Valuation models and their applicability. The second section is related with the company and industry overview, analyzing the historical information of the cork, construction and wine industries in order to contextualize Corticeira Amorim cork business. The third section presents the Equity Valuation of the company and its five business units using the Discounted Cash Flow model complemented by a Relative Valuation. Finally, the results are compared with the ones of BPI Equity Research in its annual investment report to investors, discussing the different assumptions and results obtained in both valuations.

1. Literature Review

1.1. Valuation Approaches

As Damodaran (1996) states “Valuation can be considered the heart of finance”, given the great importance it has in helping managers to make sensible decisions. Valuation seems to be a very powerful tool for managers in analyzing the potential decisions to make in most financial fields of study. The assessment of investment, financing and dividends decisions in corporate finance, the estimation of the true value of a stock in portfolio management or its market price trend in empirical finance, are good examples of how important is valuation in achieving the ultimate goal of managers, the value creation.

In the business context of a firm, “the managers’ ability to estimate value is a critical determinant of how the company will allocate its resources” (Luehrman, 1997). In turn, according to Luehrman (1997) “the allocation of resources is a key driver of a company’s overall performance”, that is why valuation assumes such a preponderant role on the regular resource-allocation decisions of general managers. In order to make a recommendation and explain why this valuation brings value added to potential investors, the focus of this dissertation is on the price per share of *Corticeira Amorim SGPS SA*, which reflects its equity value.

From all the models usually used in firm valuation, the WACC-based DCF (Discounted Cash Flow) is the one that most companies use to value their corporate assets. This model consists in “valuing the business according to its expected future cash flows discounted to present value at the weighted-average cost of capital of the firm” (Luehrman, 1997). Despite being the most generic model in firm valuation, there are different types of valuation problems which may require distinct analytical challenges and approaches from the WACC-based DCF.

According to Luehrman (1997), managers need to address three different valuation problems: valuing operations, opportunities and ownership claims. The author states that the Adjusted Present Value (APV), the Option Pricing and the Free Cash Flow to Equity (FCFE) are the most suitable models for each type of problem, respectively. The main difference among these valuation methods is expressed in the nature of the cash flows used in the value estimation.

Generally, there are four approaches in firm valuation (Damodaran, 2006): the **Discounted Cash Flow valuation**, already mentioned, the **Asset-Based valuation**, the **Relative valuation** and the **Contingent Claim valuation**. The Asset-Based valuation usually values the existing assets of a firm through accounting estimates or book value, the Relative valuation estimates the value of the assets by looking at the pricing of comparable assets in the market and some of the firm's variables like earnings, sales, book values or cash flows, the Contingent Claim valuation values the assets that share option characteristics using option pricing models.

According to the overall characteristics of *Corticeira Amorim SGPS SA*, the Discounted Cash Flow method is the most suitable approach taking into account the company's "big picture". The valuation analysis in this dissertation is mostly based on this method and complemented with the Relative valuation approach, in order to test the consistency of forecasts. Despite using only these two approaches in this dissertation, all the previous referred valuation approaches and respective models are also discussed in **Appendix 1**.

1.2. Discounted Cash Flow (DCF) Valuation

From all the firm valuation approaches, the Discounted Cash Flow valuation seems to be the most consensual among the critics, emerging in the last few decades as the best practice for valuing corporate assets. This valuation approach consists in a simple relationship between the present value and the future (expected) value from the firm's corporate assets. The basic logic of Discounted Cash Flow valuation is to determine the present value of the corporate assets by discounting the forecasted expected future cash flows on the same assets at the opportunity costs of funds, depending on the discount rate. Both expected future cash flows and discount rates require a few set of assumptions which will determine the accuracy of the valuation.

Taking in consideration the underlying uncertainty involved in the firm's assets, the expected future cash flows are forecasted according to future growth rates expectations assumed by managers. The discount rate is associated to the opportunity cost of the company, representing the return its owners expect to earn on an alternative investment implying the same risk (Luherman, 1997). The discounted rate is simply "the return investors expect to earn on a risk-free investment for a period of time, plus the risk premium, which reflects the extra return they can expected from bearing a certain level of risk" (Luherman, 1997).

The same logic applies to all the different Discounted Cash Flow valuation methodologies, regarding the relationship between present value and future value of cash flows generated from the firm's assets. The differences among them are the cash flow components, discount rates and tax effects associated to each specific method. From all the Discounted Cash Flow models used, the most commonly used are the **Free Cash Flow to the Firm (FCFF)**, the **Free Cash Flow to Equity (FCFE)** and the **Adjusted Present Value (APV)** method, which are going to be discussed in this chapter. Other DCF valuation method addressed in this discussion is a FCFE variant, the Dividend Discount model, as well as alternative approaches like the Excess Return models.

1.2.1. Free Cash Flow to the Firm (FCFF) Model

According to Damodaran (2006), there are two ways of approaching the Discounted Cash Flow valuation: either valuing the entire business of the company with both assets in-place and growth assets (firm/enterprise valuation) or valuing the equity stake in the business (equity valuation). The value of the equity can also be obtained through the first approach by netting out the value of all non-equity claims from the firm value. If the valuation estimates are based in consistent assumptions and correctly calculated, the value of the equity must be the same in both cases.

In the firm valuation approach, the Free Cash Flow to the Firm or WACC-based Free Cash Flow (FCF) analysis is considered by many the best valuation method regarding the valuation of corporate assets or at least, the most consensual among the financial academia. In the last few decades, this particular methodology of the Discounted Cash Flow valuation emerged as the best practice for companies in their capital-budgeting process due to its simplicity, being relatively intuitive and easy to learn. The major advantage of using the firm valuation approach compared to the equity valuation approach is explicitly expressed in cases where the leverage is expected to change significantly over time. Being a pre-debt cash flow, the FCFF does not need to consider the cash flows related to the debt, being very useful to apply in cases of leverage variation over time, regarding new debt issues and debt repayments (Damodaran, 2006). Although it does not take in consideration debt related cash flows, the use of the FCF method addresses the firm's debt ratios and interest rates in order to estimate the weighted average cost of capital.

According to Froot (1997), the Free Cash Flow to the Firm may be defined as "after-tax earnings before deductible financing charges such as interest expense, lease rentals and so forth (...) plus all deductible

non-cash charges (e.g., depreciation, deductible amortization, deferred taxes, etc.) and less new cash outlays for required capital expenditures and investment in net working capital". Basically, it represents the cash flows available to all the financial investors of the firm.

The formula of the FCFF is given by:

$$\text{FCFF} = \text{EBIT} \times (1 - \text{Tax rate}) + \text{Depreciation} - \text{Capital Expenditure} - \Delta \text{Working Capital}$$

1.2.1.1. Variables of the FCFF model

In firm valuation, the value of a company reflects not only the value of its assets but also the present value of the forecasted expected cash flows generated by the same assets. Bearing in mind the future perspectives and expectations taken into account when valuing a firm, the assumptions made for each of the variables turns out to be critical to determine the FCFF model accuracy and effectiveness. As Janiszewski (2011) states, "the financial projections of the valued entity should be based on independent factors that have material impact on the company financial performance". The author considers that an in-depth analysis of the relevant variables affecting financial performance and the correct selection of the key drivers are the two necessary elements of an appropriate DCF approach. These two elements will determine the FCFF model accuracy, so it is critical to understand the different forecast performance methods for each of the variables in order to support the financial projections.

According to the period of time determined for the valuation given the company future prospects, the **EBIT (Earnings Before Interests and Taxes)** is forecasted for each period, usually on annual or semester basis. The EBIT calculation is based on the firm's operating revenues minus its operating expenses, before deducting interest payments and income taxes. The estimates for the EBIT in each period will be determined by the growth rates assumed for operating revenues and expenses. The macroeconomic, industry and business information are the three main factors that should be considered in the growth rates assumptions, given the expectations and perspectives of the firm (Janiszewski, 2011).

Regarding the **tax rate** used in the FCFF computations, there are two options: the marginal tax rate or the effective tax rate. The marginal tax rate is the incremental tax the firm has for an additional dollar on its income whereas the effective tax rate is based on actual taxes being paid, taxes due/taxable

income. Usually the effective tax rate is the most commonly used but it is correct to use any of the two, as long as the after-tax cost of debt computation for the WACC is done using the same tax rate.

In order to forecast the **depreciation** for future time periods, there are three possible options (Koller et al, 2005). The first option is to forecast depreciation based on depreciating methods and policies set out by the company. This approach only makes sense when insight detailed information is available, given that equipment purchases and depreciation schedule of the company are usually the main forecast drivers. There is also the option to estimate depreciation as percentage of revenues or a percentage of property, plant and equipment (PP&E). Koller et al. (2005) defends that using these two options is indifferent in cases where the CAPEX projections are steady over the time, due to the fact that depreciation is directly related to CAPEX, the capital expenditures incurred in fixed asset purchases. When large CAPEX fluctuations are predicted, the best option is to estimate depreciation as a percentage of PP&E, since the value of fixed assets will depend on the CAPEX values.

The **CAPEX (Capital Expenditures)** are investments made regarding the purchase of new physical assets like PP&E or investments to upgrade the useful life of the firm's existing capital assets. Sometimes represented as Net Capital Expenditures (CAPEX – Depreciation), it reflects the growth expectations of a firm, typically much higher in high growth firms than low growth firms. The most common methods to predict CAPEX for future periods are based on the firm's historical accounting data or the reinvestment rates of peer companies, by industry group (Damodaran, 2002). In this last one, the reinvestment rate is given by the average ratio CAPEX/Depreciation of the peer companies by industry. It represents how much companies are reinvesting their earnings on corporate assets to generate future growth. Keeping this in mind, the use of reinvestment rate as a proxy for CAPEX forecasts is more reliable when valuing high growing firms. Damodaran (2002) also presents the use of other possible average ratios (by industry) like Net CAPEX as a percentage of sales or earnings as alternatives to estimate future capital expenditures.

The operational **working capital** represents the difference between current assets and liabilities. It reflects the ability of the company in meeting current obligations and to expand without recurring to debt financing. A negative working capital traduces the problem of the company in paying back to its creditors in the short term. To forecast the operational working capital, all the items which it depends on have to be forecasted as well. Current operating items like accounts receivable, inventories, accounts payable, accrued expenses, net PP&E and goodwill have to be forecasted in order to

compute the operational working capital. According to Koller et al (2005) the best driver to forecast these items is revenue, meaning all these items should be forecasted as percentage of revenues. Items like inventories and accounts payable might also be forecasted as percentage of costs of goods sold (COGS). Nonoperating items such as excess cash, short-term debt and dividends payable should be excluded from calculations.

1.2.1.2. Value of the firm

Under the FCFF model scenario, the value of the firm is given by discounting the expected future cash flows to the firm at the weighted average cost of capital (WACC). According to Damodaran (2006), when a firm is growing at a steady state, predicted to sustain in perpetuity, the enterprise value (operating assets) is given by:

$$\text{Value of firm} = \frac{\text{FCFF}}{\text{WACC} - g}$$

The **FCFF** represents the expected free cash flow in the first year forecast and **g** the assumed growth rate in perpetuity.

The author argues that there are two major conditions regarding the growth rate assumptions that have to be respected when using this model, also applicable to FCFE and dividend discount models. The first condition imposes that the assumed growth rate used in the valuation cannot be bigger than the growth rate in the economy, either in nominal and/or real terms. The second one is related to the fact that reinvestment rates assumed for the expected free cash flows to the firm have to be in harmony with the firm's growth rate assumption; otherwise changes in capital expenditures relative to depreciation will have a negative correlation in these same cash flows, contradicting the growth assumption previously mentioned. The two main drivers of the growth rate should be the company's business growth strategy (e.g.: acquisitions, product innovation, R&D, etc.) and the industry/markets where the company operates (Koller et al., 2005).

After computing the value of the firm operating assets, there are adjustments needed to be done in order to get the final equity value of the firm. Although having direct impact in the enterprise value, the non-operating assets are not taken into account in the FCFF forecast. These assets "represent all the assets whose earnings are not counted as part of the operating income" (Damodaran, 2006), that

have to be added to the value of the company operating assets in order to get the real enterprise value /the value of the firm assets. Excess cash, marketable securities and minority holdings in other companies are some of the most common non-operating assets that need to be considered in the final enterprise valuation. Finally, in order to get the final equity value of the firm, all the non-equity claims have to be subtracted from the adjusted enterprise value. Non-equity claims are mostly composed by net debt and minority interests (market value) as well as underfunded/overfunded pension liabilities, capitalized leases and some special dividend payments.

1.2.1.3. Terminal Value

The terminal value or continuing value is the discounted value of the expected future cash flows generated by the firm after the financial projections period. According to Damodaran (2012) there are three ways to estimate the terminal value: the liquidation value approach which basically represents the market value of the firm in the terminal year, the multiples approach which relies on multiples from comparable firms and is not applicable to discounted cash flow valuation and the stable growth model approach. The first two approaches are not going to be used in this dissertation.

Focusing on the stable growth model, the terminal value estimation relies on a steady long-term growth perpetuity assumption that will have a direct impact on the value of the company, since it represents the majority of the final firm value. Therefore, assumptions related to the expected long-term growth rate in perpetuity need to incorporate not only the company future perspectives but also the industry and economy expectations, in order to get accurate and reliable firm value estimations. In cases where a zero long-term growth is assumed, it is implicit that the firm will earn its cost of capital on all new investments into perpetuity (Janiszewski, 2011).

Under the stable growth model approach, there are some constrains implied in the long-term growth rate estimation which need to be taken in consideration in order to get an accurate terminal value and firm value (Damodaran, 2012). Besides, the growth rate limited value imposed by the economy where the company operates, Damodaran points out two other important constrains which may affect the estimation rate. The adjustments in the stable growth rate have to be in accordance with the currency being used to estimate cash flows and discount rates. The author alerts that higher growth rates are expected for high-inflation currencies and lower growth rates expected for low-inflation currencies “since the expected inflation rate is added on to real growth”. The other constrain is also related to the

fact of expecting higher/lower growth rate estimations depending on the nominal/real term valuation being done, respectively. Kaplan and Ruback (1995) also highlight the importance of adjustments related to capital expenditures and depreciation in the last forecasted year. Both authors defend that capital expenditures should equal depreciation in the last forecasted year to eliminate the inconsistency regarding the difference between these two elements. The logic behind this assumption is the fact that firms will only reinvest enough funds to replace the value of their assets, in the long term.

The formula to estimate the terminal value using the stable growth model, under the FCFF approach is given by:

$$\text{Terminal Value} = \frac{\text{FCFF}_{n+1}}{\text{WACC} - g_n}$$

Assuming that the firm “will continue to reinvest some of its cash flows back into new assets and extend their lives” (Damodaran, 2012). **FCFF_{n+1}**, represents the expected cash flow to the firm one year following the terminal year, **WACC** the weighted cost of capital and **g_n** the constant growth rate in perpetuity. The same formula is applicable to the FCFE and Dividend Discount model context, depending on the cash flow nature used in the valuation.

Having the terminal value calculated, the value of the operating assets of the firm is given by:

$$\text{Value of Operating Assets of the firm} = \sum_{t=1}^{t=n} \frac{\text{FCFF}_t}{(1 + \text{WACC})^t} + \frac{\text{FCFF}_{n+1}/(\text{WACC} - g_n)}{(1 + \text{WACC})^n}$$

The first period corresponds to the present value of cash flows during explicit forecast period and the second period to the present value of cash flows after the explicit forecast period, representing the terminal value.

An important aspect that affects the terminal value and the value of the explicit period is the forecast horizon assumed in the valuation, represented by **n** in the formula above. Koller et al. (2005), state that the length of the explicit period forecast does not affect directly the firm value but it will affect the “distribution of the company’s value between the explicit forecast period and the years that follow”. The longer the explicit forecast period is the less weight the terminal will have on the total

firm value. According to the authors, when changes in economic assumptions related to the terminal value estimate are expected, the forecast horizon affects indirectly the firm value. This is explained by the excess value of the return on invested capital (ROIC) over the cost of capital of the firm during the explicit forecast period, since it is commonly assumed that both values are equal during the continuing value period. The appropriate length of the forecast explicit period should be equal to the period when the company reaches a steady state regarding its growth, margins, capital turnover and WACC (Koller et al., 2005), otherwise the terminal value estimate will not be useful. In order to set an appropriate forecast horizon, Janiszewski (2011) points out the length of high growth/transition growth period, the industry cycle and competitive structure (operating margins), the economic cycle and the length of any competitive advantage as the main drivers of the explicit forecast period. Although there is no specific limit to the forecast length period, authors like Ohlson and Xiao-Hun Zhang (1999), defend that explicit forecast period should never surpass 15 years.

1.2.2. Weighted Average Cost of Capital – WACC

Over the last decades, the most common technique used in the discounted cash flow valuation approach is the WACC-based DCF analysis. According to this DCF method, “the value of a business equals its expected future cash flows discounted to present value at the weighted-average cost of capital” (Luherman, 1997). Koller et al. (2005) refer that “the WACC represents the opportunity cost that investors face for investing their funds in one particular business instead of others with similar risk”. Usually companies use two sources of financing to fund their businesses, either through equity or debt, and sometimes hybrid securities. Given that free cash flows represent the cash flows available to all the financial investors of a company, the WACC have to incorporate the required rates of return of equity and debt holders, expressed in the market cost of equity and after-tax cost of debt, respectively. Therefore, the opportunity cost of capital is obtained by adding the weighted market cost of debt and equity according to the proportional claim of each funding source in the capital structure of the company.

When valuing leveraged firms, the WACC computations must be done in after-tax terms in order to capture the value of tax shields by using debt, in the cost of capital. This value represents the tax benefits available from interest expenses tax exemption which is not included in the FCF calculations, thus it has to be incorporated in the cost of capital. As Froot (1997) states, “ by employing the after-tax cost of debt in the weighted average, the tax advantage of using debt to finance the investment is

automatically captured in the discounted-cash-flow analysis". In general terms, the weighted-average cost of capital formula is given by:

$$\text{WACC} = \left(\frac{\text{D}}{\text{V}}\right) \text{Kd}(1 - \text{tc}) + \left(\frac{\text{E}}{\text{V}}\right) \text{Ke}$$

As the formula suggests, the WACC calculation relies on three components that need to be estimated: the market after-tax cost of debt ($\text{Kd}(1 - \text{tc})$), the market cost of equity (Ke) and the weights of debt (D/V) and equity (E/V) regarding the enterprise value (in target values). The marginal corporate tax rate is represented by tc (Koller et al., 2005).

Usually, the WACC is calculated assuming that companies will set a target optimal capital structure over time. As explained before, the use of debt as source of financing allows the company to increase its value until a certain point, capturing the value of the interest tax shields. The bigger the debt weight is, the smaller will be the cost of capital of the company, until the point where the positive value of interest tax shields is offset by the negative value of expected bankruptcy and agency costs related to an excessive debt weight. Hence, this point represents the optimal financing mix which is assumed in this particular model in order to maximize the enterprise value.

Although it is commonly seen as a simple, robust and intuitive valuation method among the financial academia, some critics point out drawbacks in the WACC-based DCF analysis. Miles and Ezzel (1980) argue that a constant capital structure over time is not realistic most of the times; therefore the model is not always reliable. Luherman (1997) also criticizes the capacity of the model to handle with "all the adjustments required by a complex capital structure, since the WACC is a tax-adjusted discount rate built to pick up the tax advantage associated with corporate borrowing for a simple capital structure". The author also questions the "fairly restrictive assumptions" which WACC relies on regarding complex tax positions, which may lead not only to the "misevaluation of the interest tax shields but also other cash flows associated with projects and its financing".

On the other hand, Damodaran (2006) defends that the WACC approach does not require the assumption of a constant debt ratio, stating that "the approach is flexible enough to allow for debt ratios that change overtime". In fact, according to the author the model flexibility is one of its biggest strengths given that changes in the financing mix "can be built into the valuation through the discount rate rather than through the cash flows".

1.2.2.1. Cost of Equity

Being part of the weighted average cost of capital, the cost of equity is commonly used by managers as hurdle rate in investment-related decisions. Since it is impossible to predict with total certainty the expected rates of return from investments, usually financial managers rely on asset-pricing models to estimate those same returns which are translated in risk. The most common used asset-pricing model to estimate expected returns and determine the cost of equity of a company is the Capital Asset Pricing Model (CAPM), which defines the cost of equity as the expected return on a company's stock.

According to Mullins (1982), the model assumes that "a stock's expected return is the shareholder's opportunity cost of the equity funds employed by the company", explaining that the cost of equity is the minimum return a company must expect on the "equity-financed portion of its investments". In cases where this condition is not valid, the author argues that the company should invest in other securities with the same risk level in the financial marketplace otherwise the stock price of the given stock will deteriorate.

The main insight acknowledged by the model is the fact that market risk is the only relevant variable that affects equity-related investments and consequently their expected rates of return. Since the model assumes all investors are sophisticated well-informed and risk-averse, the diversifiable or unsystematic risk is eliminated through simple portfolio diversification, being the systematic/market risk the only risk investors are exposed to (Mullins, 1982). Therefore CAPM's objective is to estimate the expected return on investments described by the market behavior, represented by the security market line (SML) which reflects the risk/expected return relationship. By definition, the SML will also provide estimates of cost of equity given by:

$$\text{Cost of Equity} = \text{Risk-free rate} + \text{Market Premium} \times \text{Beta}$$

In order to determine the cost of equity, the risk-free rate, the expected return on the market and the beta need to be estimate. According to Koller et al. (2005), the beta is the only of the three variables that varies across companies. The authors define beta as "the stock's incremental risk to a diversified investor, where risk is defined by how much the stock covaries with the aggregate stock market". The stronger the correlation between the stock and the aggregate market is, the higher the beta will be and vice-versa.

Despite being widely used in estimating the cost of equity, CAPM's assumptions suggest some critics regarding its applicability. Mullins (1982) argues that a complete elimination of the unsystematic risk is impossible given that perfect negative relationship between the returns of two stocks is very rare in real markets. The fact postulated by CAPM that only systematic risk matters, is criticized by the author, arguing that most of the investors "do not hold adequately diversified portfolios", leading them to be compensated with "higher expected returns for bearing only market-related risk", which may not be in accordance with the empirical evidence. Other underlying assumption of the model concerning a market with no imperfections like transaction costs, taxes and restrictions on borrowing and lending, are unrealistic to the author given the real behavior of the complex financial markets. Fama and French (1999) point out "empirical failures of the CAPM due to bad proxies for the market portfolio" because they are not mean-variance-efficient unlike the true market. Despite some criticism about its shortcomings, CAPM seems to be the most consistent model to estimate the cost of equity. As Mullins (1982) states, "CAPM's deficiencies appear no worse than those of other approaches (...) Its key advantage is that it quantifies risk and provides a widely applicable, relatively objective routine for translating risk measures into estimates of expected return".

Alternatively to asset-pricing models, namely the CAPM, the Dividend Growth model or Gordon-Shapiro model is other approach used to estimate the cost of equity. This model is a simple discounted cash flow technique which demonstrates that the price of a company's stock equals the present value of future dividends per share discounted by the cost of equity capital (Mullins, 1982). The main constrain of the model is related with the assumptions related to perpetual growth rate in dividends per share that cannot be higher than the cost of equity. Thus, the model excludes companies with unsteady dividend payments and high growth rates (Mullins, 1982).

1.2.2.2. Risk-free rate

Koller et al. (2005) recommend focus on government default-free bonds, especially long-term government bonds to estimate the risk-free rate. The authors argue than in develop countries like the US or Western Europe, betas are extremely low therefore long-term government bonds are consistent proxies to estimate risk-free rates for companies operating there, like *Corticeira Amorim SGPS SA* case. For European companies, the most common proxy to estimate the risk-free rate is the 10-year German Eurobond given its high liquidity and low risk whereas for US-based ones, the most common one is the 10-year government bond (Koller et al., 2005). Regarding the maturities of the bonds, Koller et. al

(2005) assume that “for simplicity most of the times analysts choose a single yield to maturity from one government bond that best matches the entire cash flows stream being valued”. Moreover the authors alert to the importance of having both cash flows and cost of capital estimated in the same currency, in order to deal with inflation issues.

1.2.2.3. Equity Beta

According to the CAPM principles, the beta of a stock measures the systematic/market risk a diversified investor is exposed to since all the unsystematic risk is entirely eliminated through his portfolio diversification. Mullins (1982) explains that “it confers the tendency of the return of a security to move in parallel with the return of the aggregated stock market”. The greater the beta is (above 1.00), the stronger will be the correlation between the individual corporate stock return with the market return as a whole, measuring the sensibility of the company’s stock relative to the aggregate market fluctuations, the level of systematic risk. The same applies in the opposite situation; the lower the beta is (below 1.00), the lower will be the systematic risk affecting the marginal investor. Therefore investors in companies with higher betas will be exposed to greater risk, expecting to yield higher returns from those investments and vice-versa.

Damodaran (1999) presents beta and the fundamental beta. The most commonly used method is the historical market beta which uses linear regressions of historical corporate stock’s returns against the chosen market index’s returns, representing a proxy to the true market portfolio. After computing the linear regressions, the beta estimate will be expressed by the slope of those same regressions. According to the author, the model is significantly affected by the choice of three variables which determine the beta estimate accuracy: the market index, the time period (length) and the return interval.

The choice of a market index is a determinant variable in the model since the true market portfolio is unobservable, hence a proxy as to be used. Damodaran (1999) alerts to potential error induced by choosing certain market indices that “can be heavily weighted by a few dominant companies in the market portfolio leading to biased beta estimations”. Both Damodaran (1999) and Koller et Al. (2005) emphasize this problem in emerging markets, where normally market indices are heavily dominated by few industries so betas estimates reflect the correlation between the corporate stock’s return and the aggregate market’s returns but instead, the correlation between the corporate stock’s returns and

industries' returns. In order to solve this problem, Damodaran (1999) suggests to "look at the largest holders of stock in the valuated company and the markets where the trading volume is heaviest" when choosing the market index to estimate the betas. Other critic aimed to the model by the author regards the noisy (standard error) problem which is more relevant as the number of companies increases in the chosen market index. Mullins (1982) also points out the exposure of the model to statistical errors in betas estimation.

Finally, Damodaran (1999) alerts to the problem arising from capital structure change over time when using the historical market beta method. Since companies' capital structure and financial mix are frequently subject to changes as companies tend to grow, the use of historical data may lead to fallacious beta estimations. The problem inherent to the model is the fact that sometimes, the historical data does not reflect the current or future situation of the company, expressed in the author's statement, "the objective is not to estimate the best possible beta for the last period but to obtain the best beta we can for the future". In order to solve this problem, Damodaran (1999) suggests adjusting the choice of time period in accordance with the stability of the company. He adds that monthly returns should be used to collect historical returns in order to avoid non-trading securities' problems. By doing this, betas estimates will tend to be more accurate.

Taking in consideration the imprecise process implied in beta estimations using simple linear regressions under the CAPM model, Koller et. Al (2005) propose the use of industry comparable betas in order to improve the estimates. Since equity beta corresponds to operating risk, the authors suggest the use of simple weighted average of the unlevered betas of comparable firms in the same industry as a proxy for the corporate market risk, than relever it through a target leverage factor. Kaplan and Peterson (1998) argue that using this approach might bring some difficulties "in defining a peer group of similar companies in the same industry" and the problem of not including relevant companies in the valuation.

Although it is almost impossible to determine the real equity beta, the more consistent are the assumptions of the CAPM; the better will be the accuracy of the estimates. Damodaran (1999) draw the attention to the main drivers that must conduct the beta estimation, "the type of business the firm is in, the degree of operating leverage and the firm's financial leverage" in order to determine the proper beta.

1.2.2.4. Equity Risk Premium

Determining the equity risk premium is one of the most discussed issues in corporate finance, given its critical importance in estimating the cost of equity and the cost of capital. Since it is intuitive that the level of risk of an investment should reflect the level of expected return of investors on it, the equity risk premium represents the extra return investors demand for investing in the average risk equity investment (Damodaran, 2008). According to Damodaran (2008), the equity risk premium not only determines the expected return regarding the level risk but also the price investors are willing to pay for particular risky stock. In the CAPM context, it is assumed that market-related risk is the only risk investors are exposed to, thus the equity risk premium represents the market risk premium. It measures the performance of the market portfolio against riskless securities like long-term government default-free bonds.

Damodaran (2008) points out three possible approaches to estimate the market risk premiums: to survey investors and managers about their required market risk premiums, to use historical premiums of stocks over risk-free investments or to use forward-looking premiums based on current market prices. Also Fernandez (2009) distinguishes three types of equity premium concepts: the historical equity premium, the required equity premium by investors and the implied equity premium which assumes that the market price is correct.

In 2008, the same author conducted a survey and reported the average required market risk premium used by 180 academic professors around the world, more concretely in 18 countries, including the US, Portugal, Australia, Africa, China and several European countries where *Corticeira Amorim SGPS SA* is present (Fernandez, 2009). Damodaran (2008) alerts the latent problem of this method, given different existing expectations in the market which might hamper equity premiums estimates. Although the historical premium is the most common method, it might not be the best especially when it comes to estimate equity premiums for emerging markets (Damodaran, 2008).

The use of historical premiums is the most common used method. Although it is the most popular, Damodaran (2008) argues it is not the best method to use in some emerging markets, due to the short period of available data, leading to large standard deviations in the results. A common attempt to solve this problem is the use of country risk premiums in order to measure the risk in different countries and markets. Damodaran (2008) believes that using a country risk premium adjustment

seems to be obvious since there is always diversifiable risk in emerging markets and markets are not totally correlated among them. The use of sovereign ratings, country risk scores and market-based measures are three methods present by the author to estimate country risk premiums. On the other hand, James and Koller (2000) present an alternative approach which consists in incorporating the specific country risk in the cash flows estimates. Both authors argue that “using profitability-weighted scenarios help managers to understand the impact of specific risks on value and make better plans to mitigate them”.

Finally, the use of the implied risk premium derives from the assumption that market prices reflect the fair value of the stocks. Implied risk premiums are generally estimated through dividend discount model estimates, relying on the assumptions assumed in this model forecasts (Damodaran, 2008).

According to Damodaran (2008), the right approach to determine the equity risk premium among the existing alternatives “will always be determined by the macroeconomic volatility, the investor risk aversion and the behavioral investor component at stake”.

1.2.2.5. Cost of Debt

The other component in the weighted average cost of capital of a firm is the cost of debt. Generally, companies fund their businesses using different sources of financing, either through equity, debt or even hybrid securities. Therefore, the cost of capital must reflect not only the different sources of financing but also the weight they have in the financing mix.

According to Damodaran (2012), there are three variables that determine the cost of debt: the riskless rate, the default risk and the tax advantage associated with debt. The author defines two possible approaches to estimate the cost of debt of a company. The first one must be used in cases where the company has long-term bonds outstanding which are widely traded in the market. In this situation, yields can be computed and used as proxies to determine the cost of debt. In situations where the company being valued lack from highly traded bonds, the cost of debt can be estimated through the company investment rating and its associated default spreads. The process involves calculating the firm financial ratios, usually the interest coverage ratio, in order to get the correspondent company rating. When identifying the specific company rating, the default spread associated to it must be added to the assumed riskless rate to get the pretax cost of debt. Since interests are tax deductible, the tax advantage must be incorporated in the cost of debt by computing the tax benefits as function

of the tax rate. The author states that the correct tax rate to use is the marginal tax rate. The formula is given by:

$$\text{After-tax cost of debt} = \text{Pretax cost of debt} \times (1 - \text{Tax rate})$$

The investment rating tables are available through rating agencies like *Moody's*, *Fitch* and *Standard & Poor's*. Damodaran also presents interest coverage ratios and rating tables on his academic website.

1.2.2.6. Weights of Debt and Equity

In order to compute the weights of debt and equity needed to estimate the WACC, it is important to define in which terms both components should be determined. Most publicly traded companies tend to define target capital structures or target ranges with the purpose of having the most favorable financial mix in terms of financing costs. According to the basic trade-off theory of corporate capital structures (Kraus and Listzenberger, 1973 and Miller, 1977), there is an optimal capital structure level for each company where the cost of capital is minimized. That is the reason why managers ought to set target capital ratios over time. Nevertheless, this theory is criticized by authors like Myers (1984), arguing that what determines the capital structure of companies is the hierarchization of the funding source preferences – the pecking order theory. This theory suggests that the cost of financing increases with asymmetric information, therefore internal financing would be preferred to external financing (debt and equity). The first funding option is internal sources, followed by the use of external debt and equity.

A relevant factor is underlined by Damodaran (2012) regarding the debt weight over the total value of the company. “The level of debt used in the WACC computation, should only include interest-bearing debt instead of all the liabilities”, argues the author. This must be done in order to avoid getting a fallacious cost of capital when applying the after-tax cost of debt to non-interest-bearing debt like trade credit or accounts payable. Other adjustment purposed by the author concerns the incorporation of operating leases into debt, since “it provides the same tax deductions that interest payments on debt do”.

Other relevant aspect is the use of market values vs. book values. Damodaran (2012) argues that using market values should be used when calculating the debt and equity weights. The author states that the use of market values instead of book values is more reliable since it reflects more accurately the true

value of debt and equity. Besides, investors will invest their money in issued shares and bonds on a market value basis (Damodaran, 2012). As Koller et al (2005) refers, “book values represent sunk costs, so it is no longer relevant”. The process of getting market values, especially for the debt, is not always simple. Usually, the equity market value is equal to the current stock price of the company times the number of shares outstanding (Damodaran 2012). The author argues that it is more difficult to get the market value of debt since “very few firms have all their debt in the form of bonds outstanding trading in the market”. Therefore, the solution purposed by Damodaran (2012) to estimate the market value of debt is “to treat the entire debt on the books as one coupon bond, with a coupon set equal to the interest expenses on all the debt and the maturity set equal to the face-value weighted average maturity of the debt, then to value this coupon bond at the current cost of debt for the company”.

The final aspect needed to be taken in consideration when computing the cost of capital is the use target weights instead of current weights of debt and equity. The reason behind this implication is the fact that sometimes current capital structures do not reflect the expected sustainable level over time for the business. According to Koller et al (2005), the use of current target capital structures in the cost of capital calculations may lead to overestimations (or underestimations) for companies whose leverage is expected to change over the years. This potential misevaluation is explained by tax shields changes as debt weight level changes. For that reason, using a WACC-based DCF approach when valuing a company, which is expected to have an unstable capital structure over time, is not recommendable.

1.2.2.7. Small Cap Discount

According to Damodaran (2005), “ investors are generally willing to pay higher prices for more liquid assets than for otherwise similar liquid assets”. There is a general consensus that illiquid assets are translated in lower prices and higher investment returns given the associated risk. The same author (2005) proves that illiquidity matters for investors and considers different ways of incorporating illiquidity into the company value. Under the DCF valuation, Damodaran (2005) presents two solutions for illiquidity adjustments: applying an illiquidity discount to the price after the business is properly valued or adjusting the discount rate to reflect that same illiquidity.

Despite being one of the most international portuguese companies and global leader in every cork segment, Corticeira Amorim is somehow illiquid in the markets due to its lack of visibility and size. The

cork industry and the portuguese market where the company operates are the two main reasons for its liquidity problem. In this sense, a small capitalization discount is used in Corticeira Amorim valuation to adjust the stock price to the illiquidity associated discount from investors.

1.3. Relative Valuation

Although it is considered by many to be the best valuation approach for valuing companies, projects or businesses, the discounted cash flow analysis is still subject to errors depending on its forecasts' accuracy. The consistency of the estimates are based on assumptions related to growth rates, cost of capital and reinvestment needs which might not be properly addressed by the DCF approach, leading to misevaluations. In this sense, Goedhart et al (2005) suggest that using relative valuation can be useful to test the consistency of those DCF forecasts. Damodaran (2006) defines this approach as "the valuation of corporate assets based on similar assets in the market", consisting in the comparison of a company's multiples with those of comparable companies. When applied correctly, the multiples analysis not only allows to "test the plausibility of DCF forecasts but also to explain differences between a company's performance and that of its competitors and support strategic decisions by identifying the key factors creating value in an industry" (Goedhart et al, 2005).

Despite being considered a simple and easy to apply valuation method, a proper multiples analysis requires some of the adjustments needed in the traditional DCF analysis. In order to avoid misevaluations, it is important to understand which multiples to choose as well as the guidelines for their correct application. Goedhart et al (2005) consider four basic principles that should be respected in a correct multiples analysis: the use of peers with similar ROIC and growth projections, of forward-looking multiples, and of enterprise-value multiples, as well as the adjustment of enterprise-value multiples for nonoperating items.

The first principle is based on the two major drivers of multiples, growth and return on invested capital. According to the authors "growth is a multiple driver but only when combined with healthy return on invested capital". It is applicable not only to multiples like price-earnings ratio (PER) but also to enterprise-value multiples given the relation between ROIC, cost of capital, growth rate and cash tax rate. Companies in the same industry can have very different growth rates and ROIC's, being extremely important to reduce the peer group to those with similar prospects regarding these two drivers in order to avoid misevaluations.

The use of forward-looking multiples is recommended based on the valuation principle that present value of future cash flows is equal to the firm value. Liu et al (2000) found evidence that forward-looking multiples are more accurate proxies of value than historical-based ones. Goedhart et al. (2005) also recommend the use of enterprise-value multiples instead of common equity-based multiples like PER. The logic behind it is the fact that equity-based multiples are significantly affected by capital structures and earnings may include nonoperating items which may result in fallacious values. This does not mean enterprise-value multiples do not need adjustments for nonoperating items, in fact items like excess cash, operating leases, pensions, employee stock options and other nonoperating assets must be adjusted under the same principles applied in the traditional DCF analysis.

According to Fernandez (2001), multiples can be separated into three groups: the equity-based multiples, the enterprise-value-based multiples and the growth referenced multiples. The multiples based on the company's capitalization have the advantage of being relatively intuitive and simple. Among all these multiples, the price-earnings ratio (PER) is the most widely used. This multiple is particularly useful to compare market expectations of growth for different companies in the industry. The price-to-sales (P/S), price-to-cash earnings (P/CE) or price-to-book value (P/BV) are other alternatives frequently used. Once again, the major disadvantage of these multiples is their vulnerability to constant capital structure fluctuations which affect not only the price of the shares but also earnings in multiples like PER. On the other hand, as Goedhart et al (2005) suggest, the multiples based on the company's value represent the best approach of relative valuation. These multiples are less dependent on the firm's capital structure but still subject to similar adjustments to those required in the DCF approach, already discussed.

The most widely used multiple in this group is the enterprise value-to-EBITDA (EV/EBITDA), followed by multiples like enterprise value-to-sales (EV/Sales) and enterprise to unlevered free cash flow (EV/FCF). Finally, the growth-referenced multiples represent an alternative to the traditional ratios used in the first two groups. As Goedhart et al (2005) refers, multiples like the price-earnings growth (PEG) or enterprise value to EBITDA growth (EV/EG) are more flexible in comparing companies with different stages of life cycle.

In order to get valuable insights Fernandez (2001) alerts that "all multiples should be contextualized either based on the company's history, market or industry", being the latter the more logical option. According to a Morgan Stanley (1999) research report referred by Fernandez (2001), the most

frequently used methods for valuing European companies are the PER followed by the EV/EBITDA. Nevertheless the chosen multiples in the valuation should always take in consideration business critical success factors of the firm like types of product, access to certain markets, economies of scale and other strategic drivers (Goedhart et al, 2005). Given the specific characteristics of *Corticeira Amorim SGPS SA*, the multiples used would be the PER and EV/EBITDA.

1.3.1. Price Earnings Ratio (PER)

$$PE = \text{Market price per share} / \text{Earnings per share}$$

Despite being the most popular method of valuation, it does not mean it is always correctly applied. Managers and analysts tend to rely too much on PER's simplicity in their valuations resulting in potential misevaluations especially when considerations about companies with different capital structures in the industry and nonoperating items are underestimated (Goedhart et al, 2005). The use of this particular multiple requires companies with steady capital structures given the direct impact fluctuations in companies' financial mix have in prices and earnings. In fact, this is one of the major flaws pointed out by Goedhart et al (2005). The other is related to cases where the company's nonoperating assets artificially decrease the earnings resulting in higher PER. Items like cash and operating leases should be removed from the equity before computing the multiple.

Nevertheless, when the peer group of comparable companies is driven by similar ROIC's and growth prospects and the company itself seems to have a steady capital structure, the PER can perform a reasonable valuation. It is also recommendable to use forward-looking PER instead of historical-based PER given the principle of investors' expectations over future expected cash flows to represent the fair value of the firm (Goedhart et al, 2005).

Under the same key drivers of traditional DCF valuation, PER is a function of growth, cost of capital (equity) and payout ratio (Damodaran 2006). Damodaran refers that managers can take valuable insights by looking at PER's values in terms of growth opportunities and levels of risk. Generally, "high PER values reflect that the company has good growth prospects, its earnings are relatively safe and deserve low cost of capital or both" (Damodaran, 2006). Academics like Zarowin (1990) found evidence that when PER is correctly applied, it can be very useful in measuring the level of risk and growth prospects of companies.

1.3.2. Enterprise value to EBITDA (EV/EBITDA)

$$\text{EV/EBITDA} = (\text{Market capitalization} + \text{Market net debt} + \text{Minority int.} + \text{Preferred shares}) / \text{EBITDA}$$

The EV/EBITDA is an alternative to PER multiple in a sense that it is less subject to capital structure fluctuations once the EBITDA is the profit available to investors and EV includes equity and debt (Goedhart, 2005). Unlike PER, this multiple does not mix expectations about operating performance, capital structure and nonoperating performance, being useful to compare companies with different capital structures and negative earnings (Goedhart, 2005). Despite this particular advantage, the multiple still have to be applied according to the principles already discussed, based on companies with similar ROIC and growth rates, preferably on a forward-looking basis and adjusted for nonoperating assets. The nonoperating assets usually include items like excess cash, which should not be included in EV, operating leases, pension funds and employee stock options. Most of the adjustments follow the same principles assumed in the DCF approach.

Despite its advantages regarding in relation to equity-based multiples, EV/EBITDA multiples have some limitations. Fernandez (2001) argues that “EV/EBITDA multiples do not take into account working capital requirements and reinvestment needs simply because these items are hidden and do not appear on the income statement”. Although some adjustments can be done in EBITDA to account for expected investments in working capital and PP&E, Koller et al (2005) consider it “highly subjective”.

1.3.3. Relative Valuation vs. DCF Valuation

Whereas DCF valuation focuses on estimating the value of corporate assets through their ability to generate cash flows assuming the market is not totally efficient, relative valuation focuses on estimating the value of those assets based on comparable assets in the market assuming on average, that it is correctly priced (Damodaran, 2006). If markets are efficient and assets correctly priced, both approaches will yield very similar values which is not so frequent given the market inefficiency in reality. Still, authors like Koller et al (2005) and Damodaran (2006) consider the DCF analysis to be the best approach in terms of results.

Since both approaches depend on risk, growth and cash flow generation, both share similar assumptions. Hereupon, the authors recommend the use of DCF valuation approach complemented by relative valuation analysis in order to “provide useful check for DCF forecasts and valuable insights into what drives value in a given industry”.

2. Company Overview

2.1. Global Information

Nowadays Corticeira Amorim is the world’s biggest producer of cork products and worldwide leader in all the cork product segments: corks stoppers, floor and wall coverings, composite cork and insulation cork. Being present in several countries and all continents, Corticeira Amorim is able to have an integrated management of the value chain and supply clients in more than 100 countries around the world. All the business activities related to procurement, transformation, production, research and development, sales and after-sales services are controlled and integrated in the company through its worldwide presence in all the important markets.

According to the quality oriented and business integrated strategy, the company structure is organized into three macro divisions - Amorim Natural Cork, Amorim Cork Composites and Amorim Cork Research - which subdivide into five business units: raw materials, cork stoppers, coverings, cork composites and isolations (**Appendix 2**). Currently, Corticeira Amorim SGPS SA represents the company holding quoted in the Euronext Lisbon Index. At the beginning of this dissertation, Amorim Capital SGPS SA (Amorim Group) continued to be the major shareholder with 51% stake in the company (**Fig.2**).

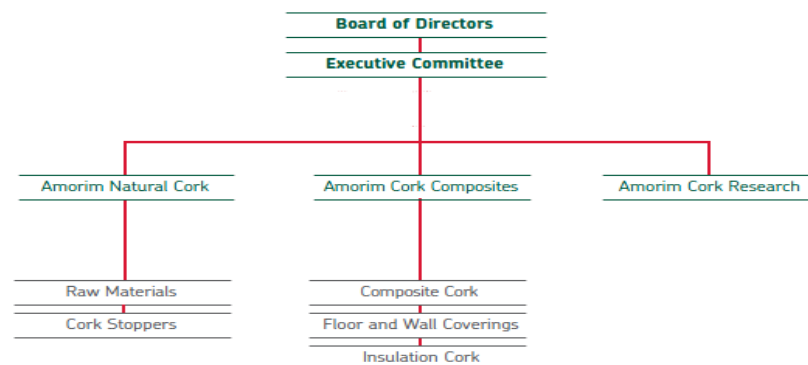


Fig.1 – Corticeira Amorim Business Structure

Source: Corticeira Amorim website

Corticeira Amorim SGPS SA Shareholder Structure	
Amorim Capital SGPS SA	51%
Investmark Holdings BV	19%
Amorim International Participations BV	13%
Treasury Stock	5%
Others	12%

Fig.2 - Corticeira Amorim Shareholder Structure

Source: Reuters

2.2. Business Activity

Being the most international Portuguese company and the biggest world producer of cork products, Corticeira Amorim holds a wide portfolio of high quality products used in several industries such as the aeronautical, automotive, civil construction and wine-producing industries. Besides the traditional cork stoppers supplied to the wine-producing industry, several cork applications such as coverings, composites and isolation solutions are produced and commercialized by the company.

Due to its strategic international presence (**Appendix 2**), the company is able to have an integrated management of the value chain controlling every activity of the business, from procurement to sales and after-sales services in order to meet its clients' needs. Currently, Corticeira Amorim is the leading company in the cork sector, being market leader in all cork product segments and distinct leader in production, transformation, research, development and innovation. In that sense and taking in consideration the recent adopted strategy involving the business restructuring, the company is organized into three macro divisions and five business units (BU) operating separately (**Fig. 3**).

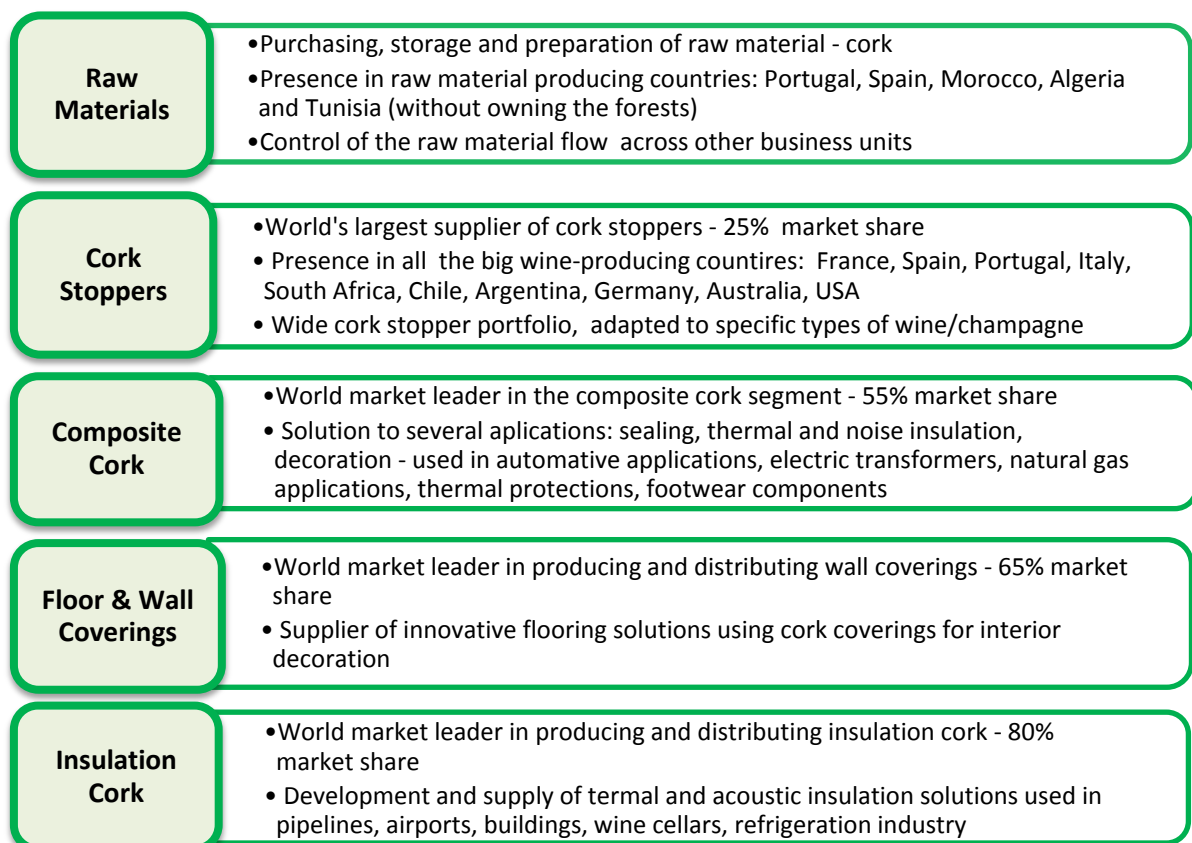


Fig. 3 – Corticeira Amorim Business Units

Source: Corticeira Amorim

Research, Development and Innovation

The areas of research, development and innovation (RDI) are also very important on the business strategy of the company. Each of the business units has R&D working teams designated to identify new market needs in different segments and develop technical characteristics of the products to meet those requirements. Apart from the R&D working teams in each business unit, Amorim Cork Research macro division is responsible for conceiving and developing new cork products and give technical support to new business areas. Under the name “MOR for Cork”, the Market Oriented Research department of the division is responsible for these related activities. Through several partnerships with prestigious centers of learning, numerous R&D projects have been taking place across the whole organization in order to promote a continuous innovation culture and implement sustainable practices in the business.

2.3. Strategic orientation and future objectives



Fig. 4 – Strategic orientation and main objectives of Corticeira Amorim
 Source: Corticeira Amorim

2.4. Recent Performance of Corticeira Amorim

After a turbulent period between 2008 and 2009, partially influenced by the world economic crisis, Corticeira Amorim group had its best performance ever in 2012 both in terms of sales and results. Despite the current economic crisis traduced in political instability and lack of confidence of the financial markets especially in European Union countries, other important markets like the US registered very optimistic values. The growth of important cork associated markets around the world like wine/sparkling wine/spirits markets, allowed Corticeira Amorim to capitalize on that and compensate the less positive impact European markets had on its business. The growth of an important wine industry like the Californian one represents an excellent indicator of the confidence increase in some of these markets during 2012, which strongly influenced the Group results.

Regarding the major highlights of Corticeira Amorim by different business units (BU), the Corks Stoppers unit was the one that most contributed to the positive consolidated results of the Group in 2012. This is mainly explained by the weight cork stoppers have in the company product portfolio and the benefits associated to the world growth of important wine/sparkling wine/spirits markets. Corticeira Amorim also availed from the world demand decrease in plastic and aluminum closures and reinforced its position as the world leading supplier of cork stoppers.

The Floor & Wall Coverings BU registered a small growth given the feeble civil construction activity in Europe. Nonetheless, non-traditional markets had significant growth rates, especially in East Europe and North America. Given the unawareness most of these markets have in relation to the cork application potentialities, the Group is planning to develop its business in these markets in the future.

The Composite Cork BU also registered a weak growth in terms of sales and results during 2012, following the recovery trend since the world economic crisis peak between 2008 and 2009. Due to its critical exposure to industrial activity effects, this BU was significantly affected by the world economic crisis, being in recovery since then with several investments initiated in 2011.

Despite the slightly increase of sales in the Insulation Cork BU, its EBITDA decreased in 2012 given the unfavorable situation of the European construction and building restoration markets which inflated the raw materials purshcaing prices as well as transportation costs.

Finally, the Raw Materials BU had significant sales growth but a decrease in EBITDA. Somehow, the recent social and political turmoil regarding the “Arab Spring” in some Northern African countries (cork regions) where the company operates had influence on the BU results (**Appendix 4**).

Sales by Business Unit

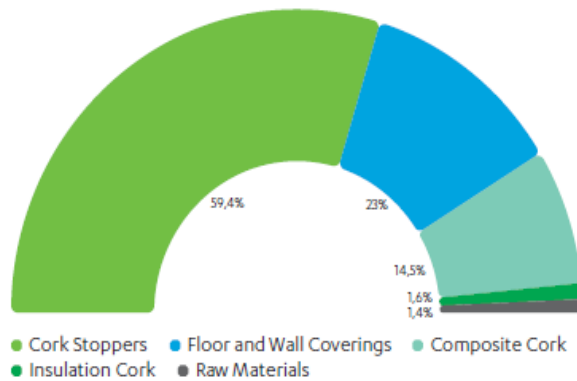


Fig. 5 – Consolidated Sales by BU
Source: Corticeira Amorim annual report 2012

Sales by Geographical Area

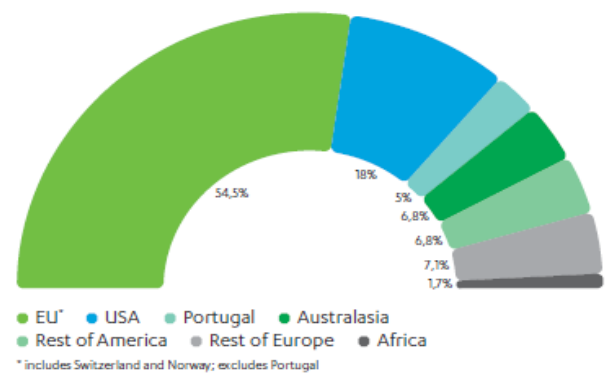


Fig. 6 – Consolidated Sales by countries/regions
Source: Corticeira Amorim annual report 2012

The consolidated sales of the company assisted to an annual increase of 8,3% (€ 39 million) in 2012, passing the €500 million. The acquisition of Trefinos SL, a group of six champagne and sparkling wine cork production companies operating in Spain, France and Italy, was a great contributor for the revenue increase (+ €16 million). Also the exchange rate fluctuations, especially in the US dollar, and inflating price effects, contributed in part for the very positive results obtained in sales during 2012.

In 2012 every BU increased its sales. Once again, the main responsible for the consolidated sales increase during 2012 was the Cork Stoppers BU, totaling more than half of the sales value of Corticeira Amorim Group (**Fig. 5**) and an annual growth of 9,4% (including the Trefinos effect). Also the Raw Materials BU registered significant sales growth of 15% due to the strong cork acquisition campaign.

Despite the slightly decrease in the gross margin percentage regarding 2011, it increased in absolute terms by 7,4% (€ 19 million) to a total of € 274 million. The decrease of the gross margin in relative terms is partly explained by the increased cost of raw materials (top quality cork and cork wastage).

The operating costs increased by 7,4% given the current economic crisis which inflated the price of some important services and consumables like fuel, electricity and other transportation costs. The inclusion of Trefinos in 2012 was a significant contributor to the operating costs increase, especially

the staff costs which contributed in part to higher operating costs in 2012 compared to 2011. Taking in consideration the present economic context, Corticeira Amorim is focusing on cost-cutting measures to offset margin reductions and continue to be the most competitive company in the sector. Despite the increase in total operating costs, the company was able to increase its EBITDA by 13,8% to €82.5 million and improve its EBITDA/Sales ratio in comparison with 2011. The Cork Stopper BU was the largest contributor to the consolidated EBITDA results in 2012 (**Appendix 4**).

Highlights of Corticeira Amorim - 2012	
Consolidated sales increased by +8%	to € 534,2 M
Gross Margin increased by of 7,4%	to €274 M
EBITDA increased by 13,8%	to €82,5 M
EBITDA/Sales ratio of 15,4%	
Net income increased by 22,9%	to € 31 M
Net bank debt of € 121,6 M	
Equity / net assets ratio of 45,9%	

Fig. 7 – Highlights of Corticeira Amorim Group in 2012 (YOY)
Source: Corticeira Amorim annual report 2012

Financial costs increased to €7.4 million in 2012 given the higher in interest rates paid by the company. The all-interest rate for the holding company’s debt rose to 5,21% (2011:5,16%). Nonetheless, Corticeira Amorim Group registered an increase in net income (attributable to CA shareholders) by 22,9% to € 31 million (**Fig. 8**).

Composition of Net profit (thousand euros)

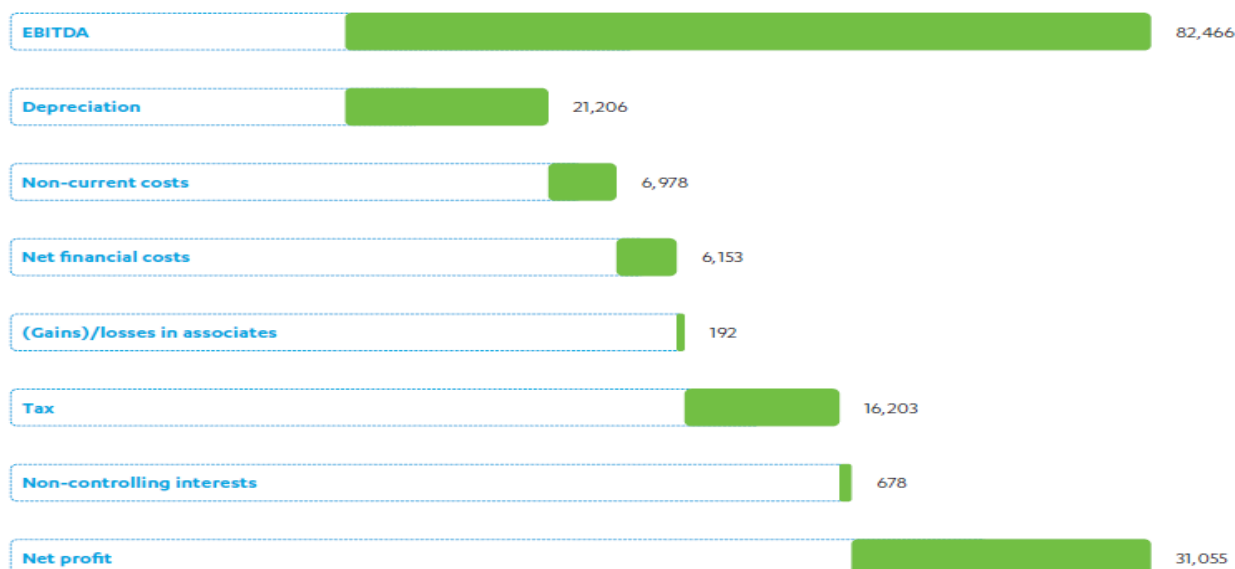


Fig. 8 – Composition of Corticeira Amorim Net Profit in 2012
Source: Corticeira Amorim Annual Report 2012

The total assets of Corticeira Amorim Group increased €43 million in 2012, explained in part by the investment made in Trefinos. The large cork purchasing campaign over 2012 lead to similar levels of raw material stock and stock account values in 2011. CAPEX totaled €21 million, expressing the high growing stage of the company, especially after the downturn coinciding with the world economic crisis peak between 2008 and 2009.

The consolidated equity value totaled € 295 million in 2012 whereas the autonomy ratio decreased to 45,9% in relation to 2011 (46,7%). The additional distribution of dividends in comparison to past years accounted for the ratio slightly decrease.

In terms of liabilities, the highlight was the significant change in the level of remunerated debt. The net bank debt rose to € 121.6 million at the end of 2012, in comparison to 2011 (€ 117.4 million). The investment related with the 90% purchase of Trefinos Group was a large contributor to this net remunerated debt increase (+ € 6 million).

Looking for Corticeira Amorim on the stock market, the share capital of the company at the end of 2012 was €133 million, presented by 133 million ordinary shares with a face value of €1 each. The share price closed the year of 2012 at € 1,60 representing a gain of 18,5% over the homologous period. Also a significant decrease in traded shares occurred in 2012 (-36% relative to 2011). Nonetheless, over 2.85 million shares were traded during the year (**Fig. 9**).

Stock market performance in recent years:

	2010	2011	2012
No. of shares traded	19,697,861	4,448,911	2 856,436
Share prices (€):			
Maximum	1.20	1.35	1.65
Average	0.96	1.14	1.42
Minimum	0.79	0.87	1.27
Year-end	1.16	1.35	1.60
Trading frequency	93.0%	90.5%	85.2%
Stock market capitalisation at year-end (€)	154,280,000	179,550,000	212,800,000

Fig. 9 – Corticeira Amorim Stock Market Performance

Source: NYSE Euronext

3. Cork Industry Overview

3.1. International Market for Cork

The role of Portugal as the unquestionable world leader in the production, transformation and commercialization of cork, is partly explained by the importance of Corticeira Amorim in the cork industry as the worldwide market leader in every segments it operates. According to APCOR, the Portuguese National Association of Cork (Source: APCOR Yearbook 2012), the world production of cork totaled 201 thousand tons in 2011, with Portugal leading the table of the worldwide cork producing countries (**Fig.1**). Portugal was also the world’s biggest cork exporter in 2011, having 62% share of the total 1.298,9 M € in world exports (**Fig. 2**). The world exports increased 6% in comparison to 2010, by 60 M €.

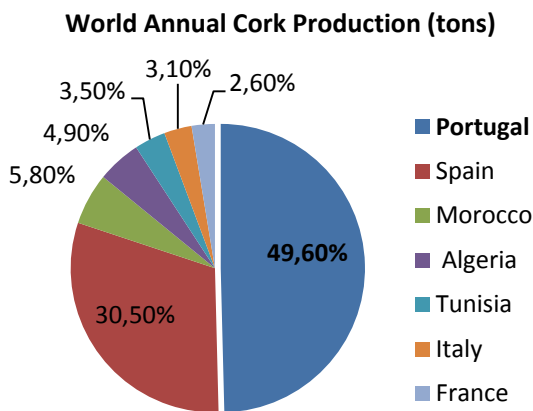


Fig. 1 – Production of Cork by Country (2011)
Source: APCOR Yearbook 2012

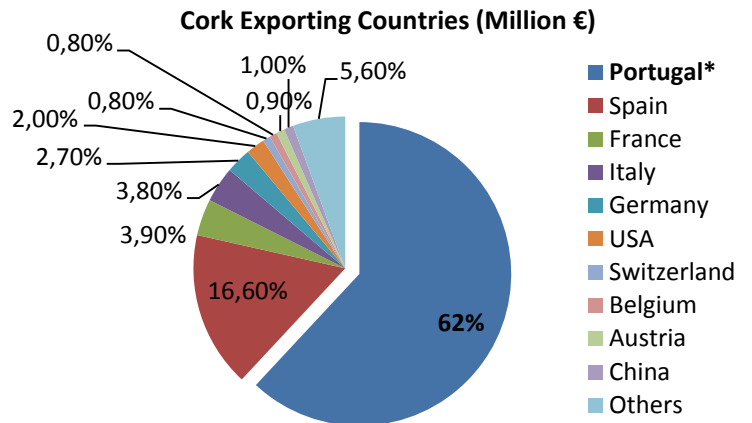


Fig. 2 – World Cork Exports in 2011
Source: APCOR Yearbook 2012

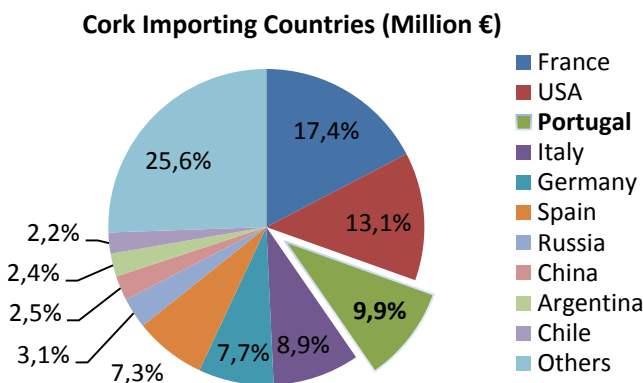


Fig. 3 – World Cork Imports in 2011
Source: APCOR Yearbook 2012

Regarding the world imports of cork, Portugal was the third largest importer in 2011 behind France (17% market share – 235 M €) and the USA (13% market share – 177 M€). With 10% of global market share, Portugal accounted 134,4M € in cork imports (**Fig.3**).

The world cork industry develops and produces a wide range of cork products and applications for several industries such as the construction, aeronautical and wine-producing industries. Currently, the global main cork activities are related with the development and manufacturing of cork stoppers, agglomeration and granulation. The cork stoppers, representing 40% of cork applications, reflect the significant importance of wine-producing markets in the cork industry.

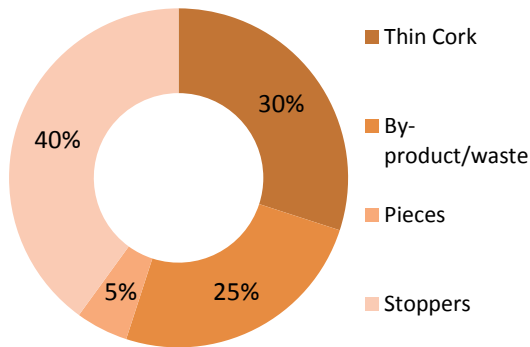


Fig. 4 –Main activities by applications (avg. values)
Source: APCOR Yearbook 2012

3.2. Portuguese Market for Cork

3.2.1. Cork Exports

Regarding the Portuguese cork industry, the major products are designated to the wine industry totaling 70% of the total production. The building industry is the second large destination of cork products totaling 22% including wall and floor coverings, insulation, flooring, cubes, strips, plates, sheets and other cork applications (Fig.5).

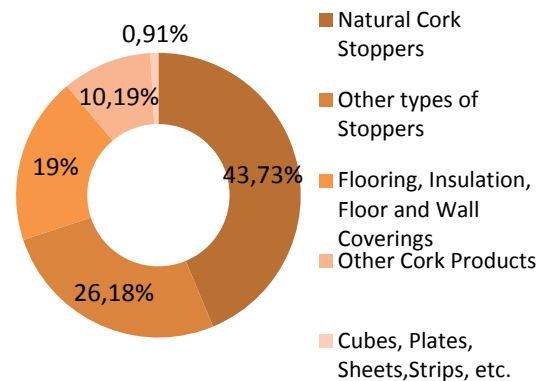


Fig. 5 –Structure of Cork Exports per product type (value)
Source: APCOR Yearbook 2012

According to INE (Portuguese National Institute of Statistics), the Portuguese cork exports have been recovering since 2009, registering an annual 6,7% growth in export value and 7% in volume in 2011.

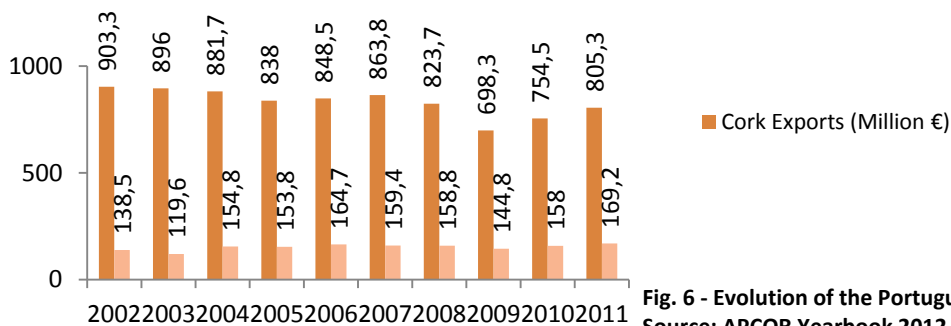


Fig. 6 - Evolution of the Portuguese Cork Exports
Source: APCOR Yearbook 2012

The same source reveals that Portuguese cork exports represent 2% of the total Portuguese exports. The cork industry is one of the best Portuguese industries in terms of commercial trade, registering a surplus of 670 M€ in 2011. In comparative terms, Argentina is the country which has the highest percentage of cork exports in relation to the total Portuguese cork exports (35%). The leading countries represent some of the most important wine markets in the world, expressing the interdependence between the two referred industries.

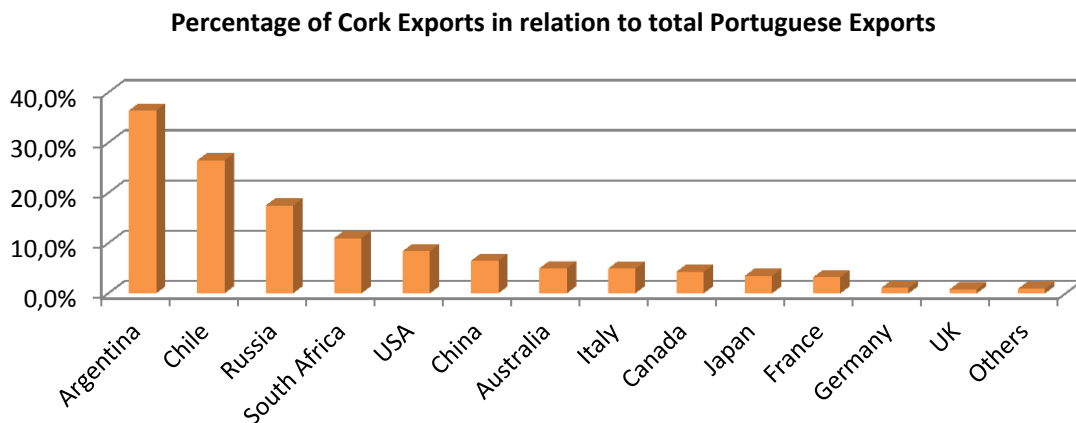


Fig. 7 – Comparison between Cork Exporting countries and Portugal (2011)
 Source: APCOR Yearbook 2012

The majority of Portuguese Cork exports are destined to European markets, where important wine producing countries like France, Spain and Italy have significant expression. Europe absorbs about 53% of Portuguese cork exports with France leading the cork imports, totaling 20% of the total Portuguese exports (162 M€), followed by the USA (16% - 125 M€), Spain (115 – 88M€) and Italy (10% - 76M€). Germany also presents interesting numbers representing 8% of the Portuguese cork exports given the increasing demand of “green materials” in the German construction industry (**Fig. 8**).

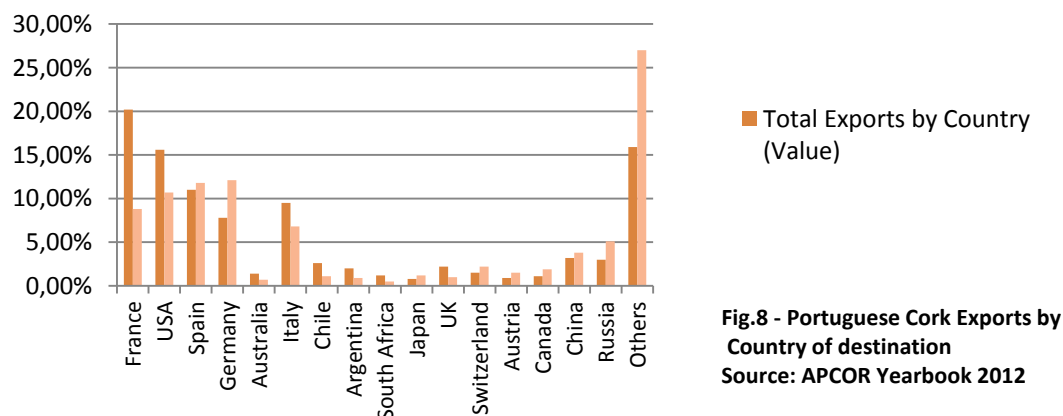


Fig.8 - Portuguese Cork Exports by Country of destination
 Source: APCOR Yearbook 2012

Regarding the Portuguese cork exports in terms of product type, cork stoppers are the most exported cork product by Portugal in terms of value, representing 70% of the total exports. Cork building materials are the second most exported type of product with 22% corresponding to 179M € (Fig. 9). In the past few years, cork stoppers have been growing at moderate growth (value and quantity) whereas building materials have been experiencing residual growth. The level of raw materials exporting values decreased significantly in 2008, remaining at steady values since then (Fig. 9 and 10).

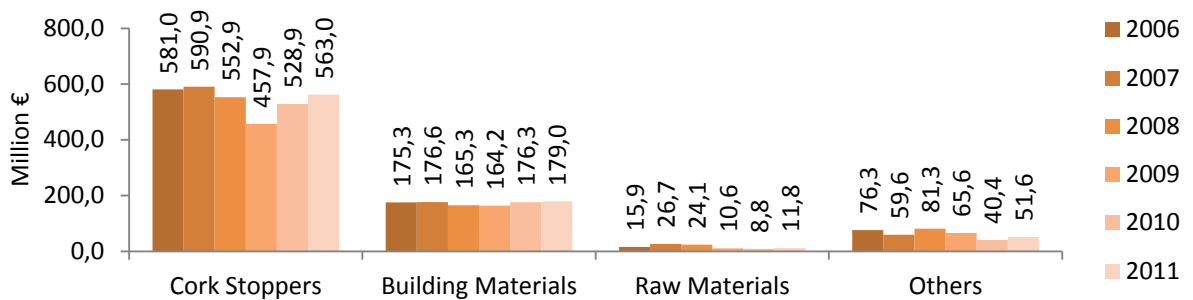


Fig. 9 – Evolution of the main Portuguese Exported Products (Value)

Source: APCOR Yearbook 2012

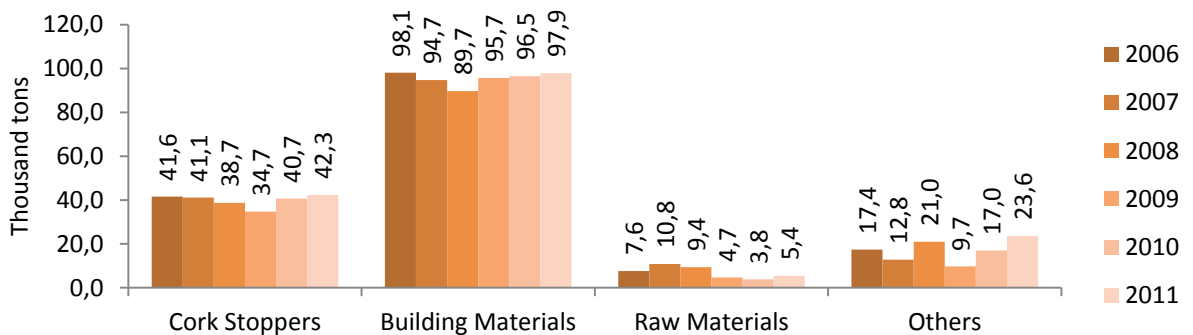


Fig. 10 – Evolution of the main Portuguese Exported Products (Quantity)

Source: APCOR Yearbook 2012

Focusing on the cork stoppers segment, natural cork stoppers are the most exported product whereas champagne and other types of cork stoppers have a minor role on Portuguese cork exports in terms of value (Fig. 11). France is the main consumer of natural cork stoppers given the relevance of the wine and spirits market in this country. Champagne cork stoppers most common destination is also France followed by Italy (Fig. 12).

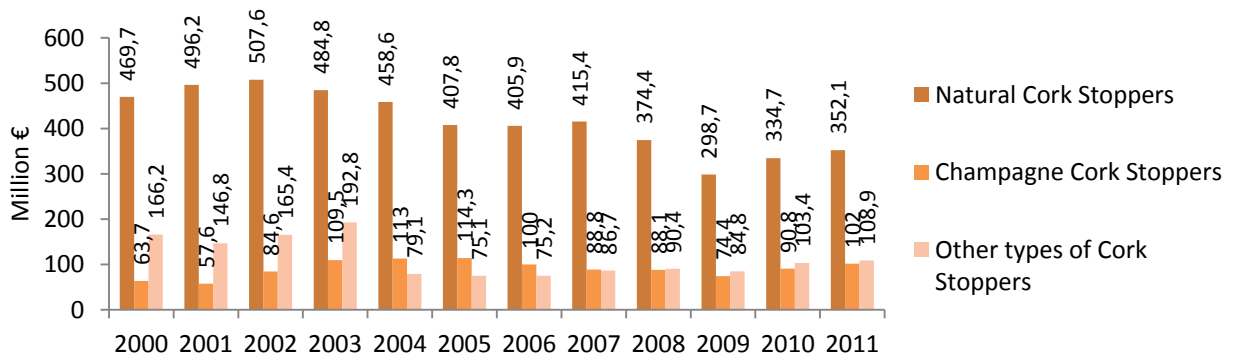


Fig. 11 – Evolution of Portuguese Cork Stopper Exports

Source: APCOR Yearbook 2012

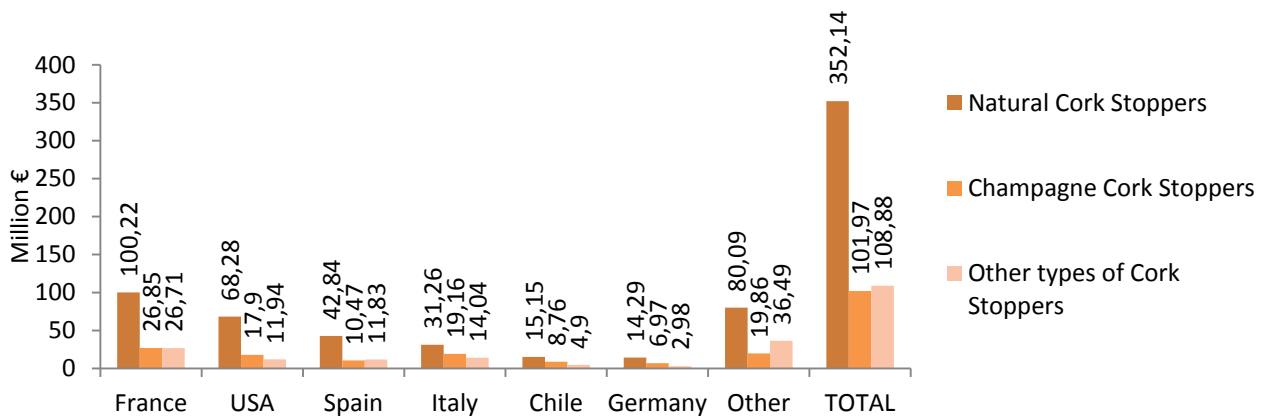


Fig. 12 – Portuguese Cork Stoppers Exports to 6 main Countries

Source: APCOR Yearbook 2012

In relation to building materials, the main exported products are blocks, disks and other products with agglutinant which represented 106 Million € (48 thousand tons) in 2011. The second most exported materials are similar to the previous ones but without agglutinant, totaling 26 Million € (16,1 thousand tons) (**Fig. 13**). Due to its strong construction and building industry, Germany is the main importer of Portuguese cubes and blocks with agglutinants (25 Million €), followed by the USA (20 Million €) and Russia (9 Million €). According to APCOR (Source: *APCOR Yearbook 2012*), the total market for this product category totaled 106 Million € in 2011, whereas the second largest category totaled 26 Million€ in Portuguese exports. Germany is also the largest consumers of the second product category with 6,4 Million €, followed by Italy with 3 Million €.

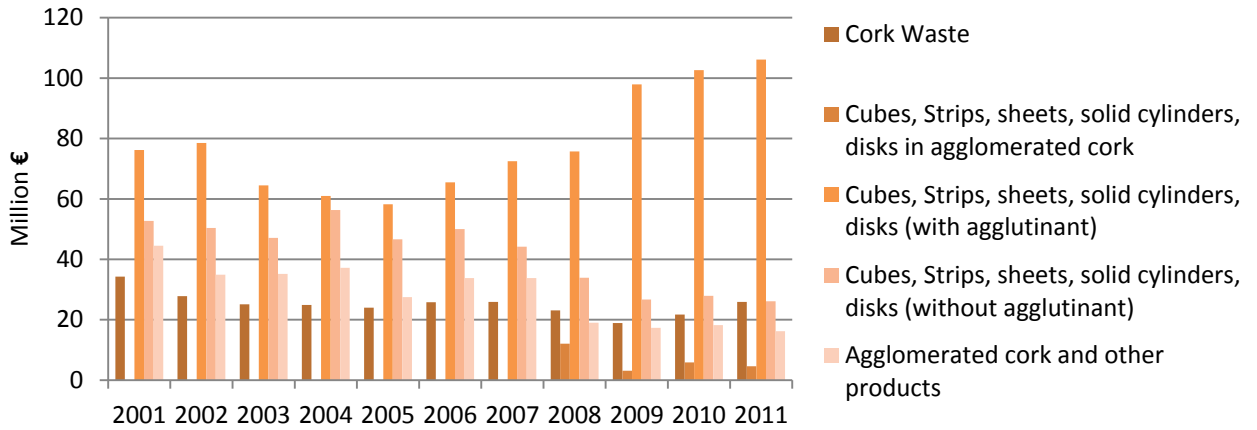


Fig. 13 – Evolution of the Portuguese Cork Exports - Building materials

Source: APCOR Yearbook 2012

3.2.2. Cork Imports

The Portuguese cork imports have been recovering since 2009 in terms of value and quantity, coinciding with the period following the world economic crisis peak which had influenced significantly the price of several raw materials, including cork. In 2011 Portugal registered a total of 135 Million € in cork imports, representing a 6,7% growth (value terms) in comparison to 2010.

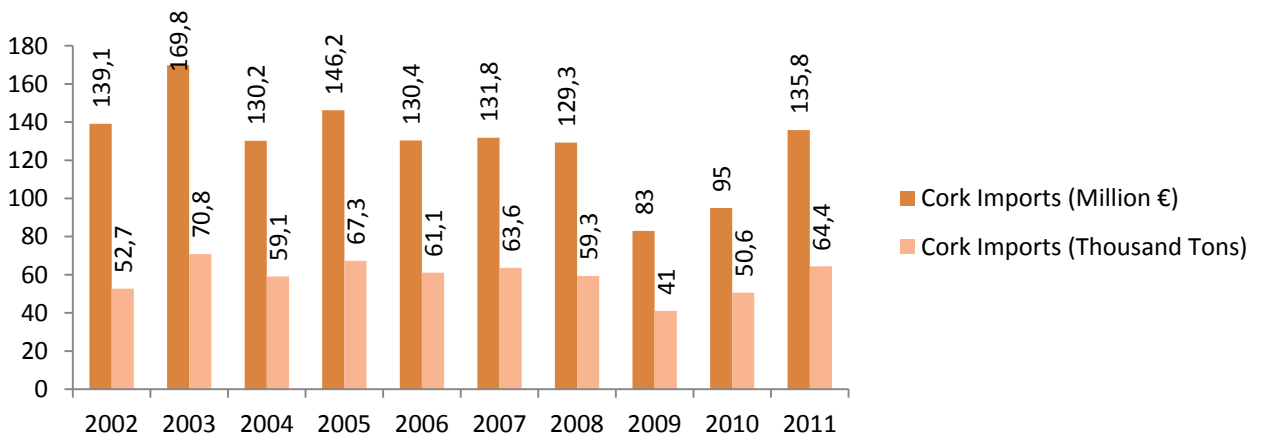


Fig. 14 – Evolution of Portuguese Cork Imports

Source: APCOR Yearbook 2012

In terms of countries of origin of imports, Spain was the main cork supplier of the Portuguese market representing almost 80% of the total imported value in 2011 (106 Million €). From all the imported cork products natural cork is the most demanded by Portugal, representing 69% of the total cork imports (Fig. 15).

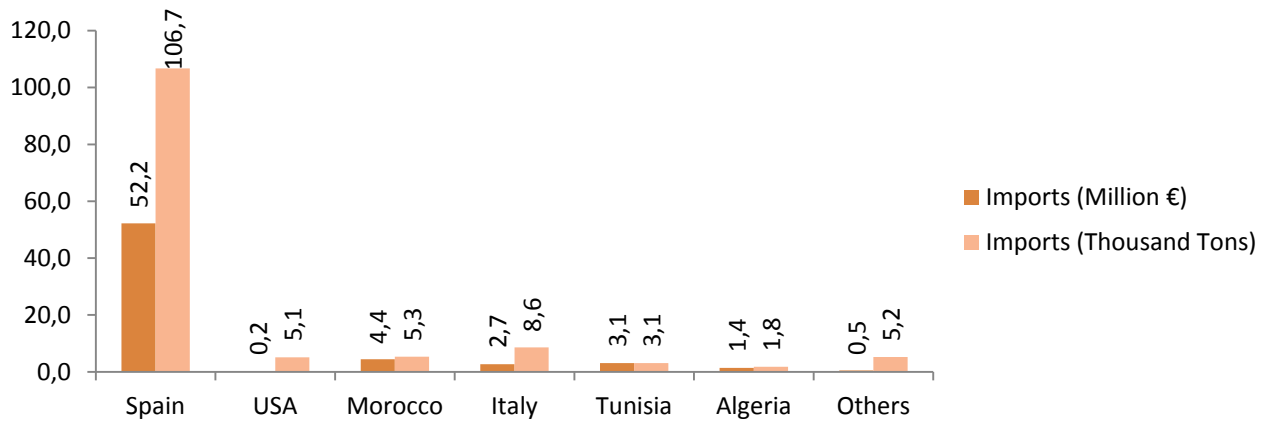


Fig. 15 – Main Countries of Portuguese Cork Imports

Source: APCOR Yearbook 2012

3.3. Wine Industry

The level of wine production has been decreasing in the EU-27 Union State Members since 2009. Despite the slightly recover in 2011, the downward trend seems to be evident among the 27 European State Members (Fig.16). From the 27 State Members, Spain, France and Italy are the biggest wine producing countries. According to APCOR, France was the biggest wine producer in 2011 with 49 Million hectoliters (Fig. 18). In the rest of the world, the trend seems to be reverse, registering higher volumes of wine production in recent years (Fig.17). The USA was the largest wine producer holding 26% of the total production (72 Million hectoliters outside Europe) followed by Argentina (21%) and Australia (19%). Chile, South Africa, New Zeland and Brazil are the other main wine producing countries (Fig.19).

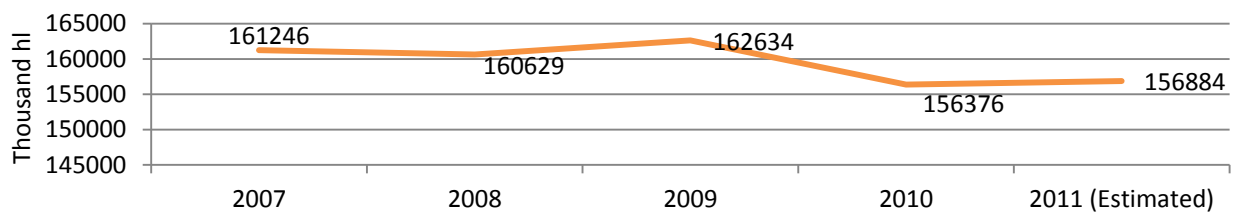


Fig. 16 – Evolution of Wine Production in EU-27

Source: APCOR Yearbook 2012

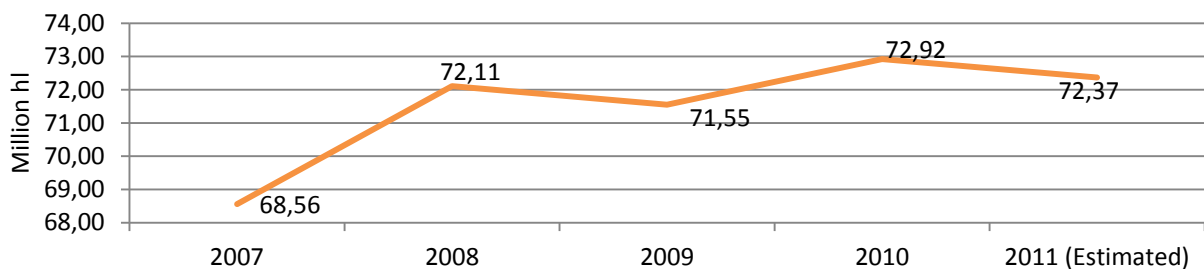


Fig. 17 – Evolution of Wine Production in the World (exc. EU-27)

Source: APCOR Yearbook 2012

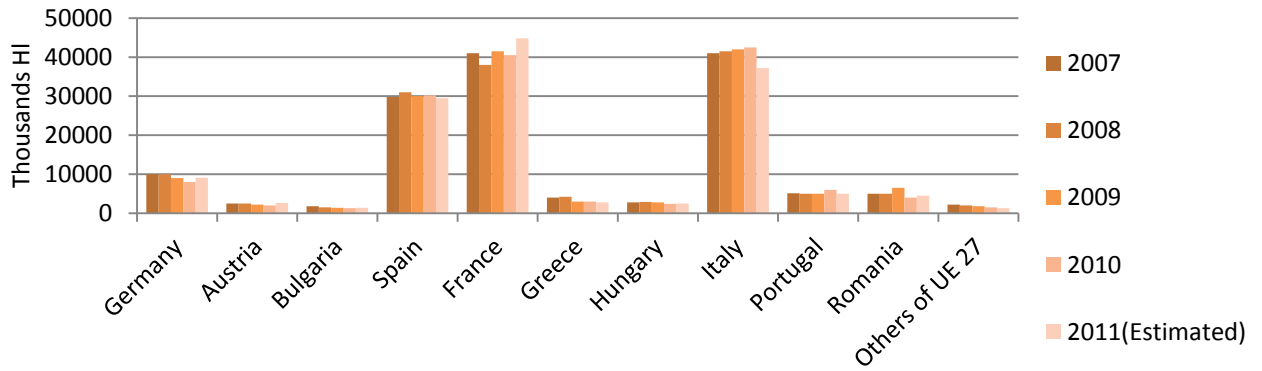


Fig. 18 – Evolution of Wine Production in EU-27

Source: APCOR Yearbook 2012

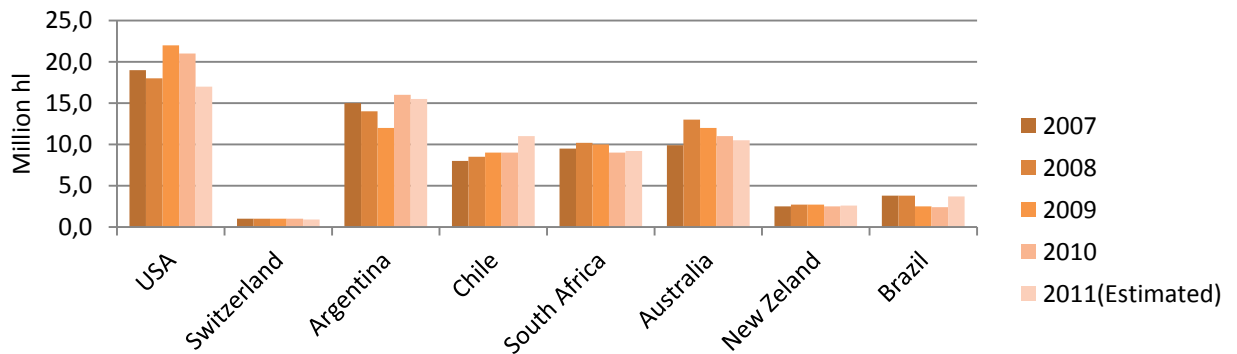


Fig. 19 – Evolution of Wine Production (exc. EU-27)

Source: APCOR Yearbook 2012

Regarding the global consumption of wine, it has been recovering at a very slow pace since the world economic crisis downturn between 2008 and 2009. The global wine production has been relatively steady in the last few years, exceeding in 9% the global consumption in 2011 (Fig.20). In terms of wine exports, Italy was the leading country holding 23% of the total wine exports, followed by Spain (22%) and France (14%). Portugal represents 3% of the total exported value (Fig. 21).

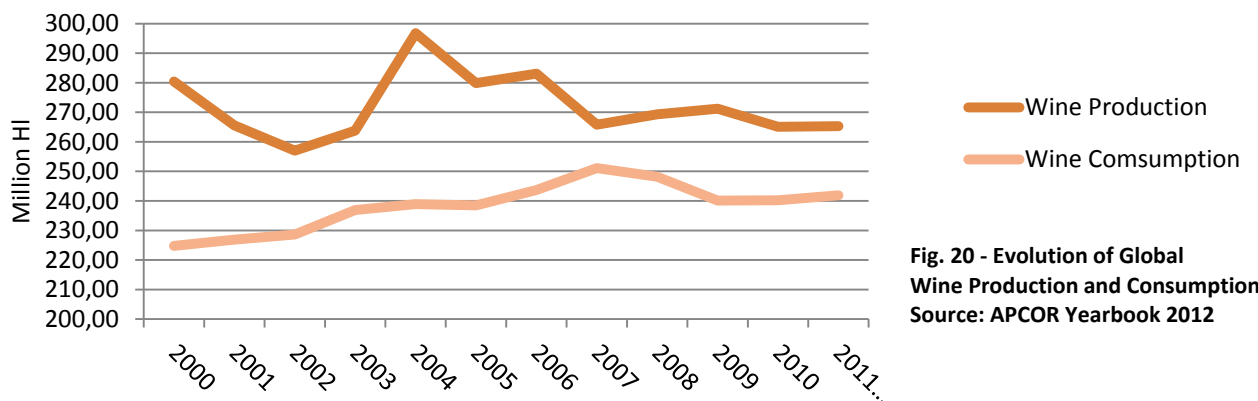


Fig. 20 - Evolution of Global Wine Production and Consumption
Source: APCOR Yearbook 2012

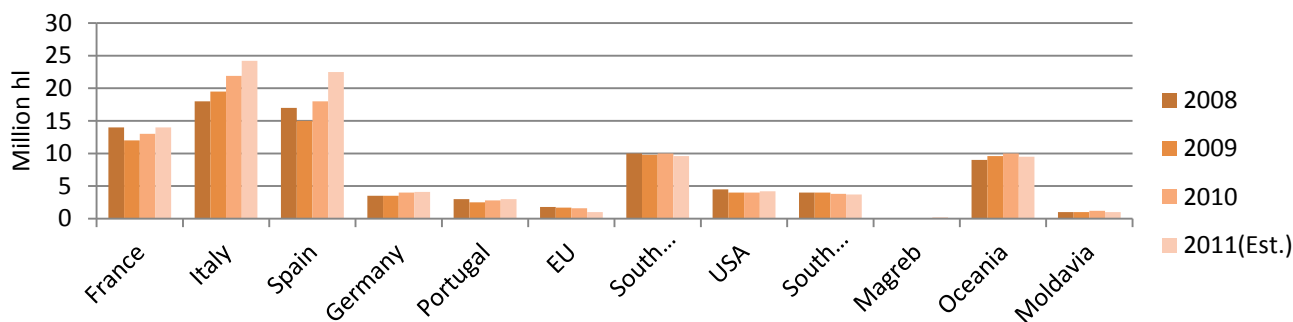


Fig. 21 – World Market of Wine Exports by country

Source: APCOR Yearbook 2012

3.4. Cork-related Industry trends and Market Outlooks

3.4.1. Wine and Spirits Market

The world wine consumption is expected to keep increasing in the future (Source: *Vinexpo*). Important markets such as the US will keep boosting the worldwide wine consumption until 2016. According to *Vinexpo*, the high-priced bottled wine is expected to be the fast-growing segment by 2016. The major trends of the world wine and spirits industry between 2011 and 2016 are presented in **Appendix 6**.

3.4.2. Construction and Building Materials Industry

The building materials sector represents a considerable part of the industrial base of developed countries, serving a wide range of related industries such as white goods, furniture and wiring manufactures. In this sense, one of the major trends in the construction and building industry is the increasing demand and focus on “green materials” and “green building”. Materials like woven, bamboo and cork have been gaining importance in the building materials sector given the increasing environmental awareness of the market. However, the green building materials category represents a small portion (1,2%) of the total market.

According to *IHS* (Source: *IHS Global Construction Overview Report*), the green floor-coverings sector, which represents the second most important unit of Corticeira Amorim business, is one of the biggest segments in the industry and the fastest growing market in the industry. Despite the lack of information in terms of cork related values, *IHS* predicts that the major growth driver of “green materials” is the residential market which is expected to reach a 4% average growth between 2009 and 2019. In terms of market growth by region, emerging markets mainly in Asia, are expected to experience strong growth in the construction and building materials industry, followed by South America and Middle East/Africa regions. The illustrative tables demonstrating the expected growth in the global construction industry between 2009 and 2019 are detailed in **Appendix 6**.

4. Methodology

The method used in the Equity Valuation of Corticeira Amorim is the WACC-based Discounted Cash Flow (DCF) model. Since the capital structure of the group has been relatively steady in terms of financial mix in the last few years (since 2005), the WACC-based DCF seems to be the most appropriate method to evaluate the company given the underlying assumptions of the model (**Chapter 1.2.2.**). The five business units (BU) are evaluated separately by this method and then added all together to get the final valuation of Corticeira Amorim.

According to the strategic guidelines of Corticeira Amorim's management, it is assumed a perfect capital financial mix combination of 40% Equity/Assets ratio and a range between 35% and 45% depending on future economic conditions, especially in the cork sector. According to the annual report of the company, the level of financial leverage is expected to remain relatively steady in order to "assure business continuity and develop proper return to shareholders and correspondent benefits to stakeholders". In this sense, it is assumed that the current financial mix will remain relatively stable over the forecasted period. This assumption clearly reflects the attempt of the company in minimizing costs and maximizing the enterprise value which is the ultimate goal stated by its management board. After computing the enterprise value using the Free Cash Flow to the Firm (FCFF) model, the equity value will be determined by netting out all the non-equity claims from it.

In order to test the consistency of the valuation given by the WACC-based DCF method, it is also presented in this dissertation a complementary relative valuation of the company using two common multiples, the PER and EV/EBITDA ratios. Finally, it is presented a comparison between the valuation values obtained in this dissertation and the ones presented by the portuguese investment bank *BPI*, in order to understand the different assumptions and results obtained in both valuation analyzes.

In a nutshell, the main purpose of the equity valuation presented in this dissertation is to obtain an estimated target price per share of Corticeira Amorim during 2013 and then, present investment recommendations to current or potential investors of the company based on this target price.

5. Forecast assumptions

5.1. Revenues of Business Units

Different forecast assumptions are used for the five business units' revenues of Corticeira Amorim (Raw Materials, Cork Stoppers, Floor & Wall Coverings, Composite Cork and Insulation Cork). The forecasted revenues of every business unit is according to its specificities, taking in consideration the factors that might influence each one in the future. Historical performances, the macroeconomic framework as well as industry and market perspectives are determinant to assume growth rates for every business unit annual revenues over the forecasted period.

Taking in consideration the size of Corticeira Amorim as a group, holding a large number of companies organized in different business units, it is logical that there is commercial activity among the companies of the group. The Raw Materials BU in particular, registers most of its revenues to the other business units of the group since it is responsible for supplying cork to all the operational units.

For evaluating Corticeira Amorim in consolidated terms, the sales accounted between companies of the group are not relevant for the valuation. In this dissertation, the assumptions used for revenues concern the total value (trade and non-trade sales) of each business unit. The trade sales growth, a relevant part of sales in consolidated terms, is presented according to each BU average in terms of weight over the total value of sales during the last 8 years (**Fig. 1**). For simplicity, it is assumed that the weight of trade sales in the total value will be represented as the 8-year average by BU, given the similar values over these years. An exception was made in Raw materials BU, assuming 2005 as an outsider due to its biased value compared to the remaining years.

Weight trade sales/total sales	2005	2006	2007	2008	2009	2010	2011	2012	Average
Raw materials	30%	15%	8%	6%	7%	4%	3%	6%	7%
Cork Stoppers	97%	98%	98%	98%	99%	98%	98%	98%	98%
Floor&Wall Coverings	98%	97%	98%	98%	99%	97%	97%	97%	98%
Composite Cork	66%	69%	73%	82%	83%	84%	87%	86%	79%
Insulation Cork	85%	92%	89%	91%	92%	94%	93%	92%	91%

Fig. 1 – Historical percentage of trade sales over the total sales by Business Unit

Source: Corticeira Amorim

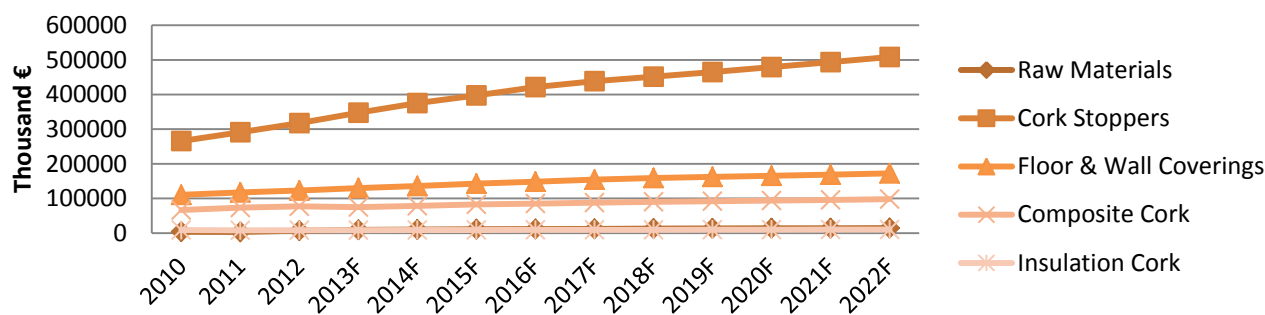


Fig. 2 – Forecasted Trade Sales of Corticeira Amorim by BU (Consolidated)

Trade Sales growth	2010	2011	2012	2013F	2014F	2015F	2016F	2017F	2018F	2019F	2020F	2021F	2022F
Raw Materials	-31%	-12%	112%	29%	10%	7%	7%	5%	5%	3%	3%	3%	3%
Cork Stoppers	13%	10%	9%	9%	8%	6%	6%	4%	3%	3%	3%	3%	3%
Floor & Wall Coverings	0%	6%	5%	5%	5%	5%	4%	4%	3%	2%	2%	2%	2%
Composite Cork	23%	11%	5%	-3%	5%	5%	3%	3%	3%	2%	2%	2%	2%
Insulation Cork	7%	-7%	1%	3%	4%	2%	2%	2%	2%	2%	2%	2%	2%

Fig. 3 – Forecasted Trade Sales Growth by BU

Total Sales growth	2010	2011	2012	2013F	2014F	2015F	2016F	2017F	2018F	2019F	2020F	2021F	2022F
Raw Materials	10%	12%	18%	10%	10%	7%	7%	5%	5%	3%	3%	3%	3%
Cork Stoppers	13%	9%	9%	9%	8%	6%	6%	4%	3%	3%	3%	3%	3%
Floor & Wall Coverings	1%	6%	5%	5%	5%	5%	4%	4%	3%	2%	2%	2%	2%
Composite Cork	23%	7%	6%	6%	5%	5%	3%	3%	3%	2%	2%	2%	2%
Insulation Cork	5%	-6%	2%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%

Fig. 4 – Forecasted Total Sales Growth by BU

5.1.1. Raw Materials

Unlike the remaining business units of Corticeira Amorim, the main source of revenues of the Raw Materials BU comes from sales to the other business units of the group. The Raw Materials BU has the critical role of supplying all the remaining business units of the group and ensuring a constant and stable cork supply flow across them, especially the Cork Stoppers BU.

Recently, the BU has been increasing its activity as part of the overall strategy of Corticeira Amorim in reinforcing its leadership in procurement and acquisition of raw materials. The company wants to maintain and reinforce its leadership in terms of cork supply not only to the other business units but also to clients outside the group. Bearing that strategic goal in mind, the company has been investing in R&D partnerships and technological products in order to improve the harvesting cork activity and respond to potential raw material consumption of the market (Appendix 7.1).

Taking in consideration the recent recovering trend after the 2008/2009 world economic crisis peak, the strategic guideline of Corticeira Amorim in terms of reinforcing its global leadership in the cork supply and the increasing needs of the remaining business units in the future to continue growing, it is assumed that Raw Materials BU revenues will keep growing at the 8-year historical growth rate (10%) until 2014 and gradually decrease to a steady growth rate of 3% in 2020. Over the next 3/4 years it is expected that high pressure on raw materials prices will continue as the world economic crisis turmoil persists, leading to higher prices charged by the Raw Materials BU to its clients (**Fig. 3 and 4**).

5.1.2. Cork Stoppers

The Cork Stoppers BU is responsible for more than half of the total revenues of Corticeira Amorim and the most important unit in the group, regarding the business strategy of the company. In the last few years, the Cork Stoppers BU revenues have been growing consistently at a moderate pace (5% average growth rate between 2005 and 2012), with the exception of 2009 caused by the world economic crisis negative impact. Since 2009 this BU has been growing at high growth rates, which reflects optimistic perspectives for the business in the forthcoming years. Its growth has been following the world wine consumption upward trend and the new market needs of the wine industry (**Appendix 7.2**).

Taking into account the historical performance and future growth perspectives for the world wine industry, it is assumed that the Cork Stoppers revenues will remain at the same levels of recent years, in line with the group's overall strategy. If the world wine consumption continues to grow and the production does not keep up with it, an upward price pressure on the win price is likely to occur. Therefore, Corticeira Amorim strategy will continue to focus on high value products and clients in order to maintain the same margin levels.

Given the forecasted world wine consumption growth until 2016 by Vinexpo (5,3%) and the average historical growth rate (5%) , it was assumed a similar growth during this time period and its gradual decrease after then. This assumption assumes a perfect correlation between the Cork Stoppers BU revenues and the global market, since Corticeira Amorim is global leader in this segment with 25% market share. After 2016, the world wine production is expected to stabilize as well as the wine consumption, leading to steady growth until 2022.

It is important to refer that the projected moderate growth of revenues in the forecasted period, considers that Corticeira Amorim is planning to improve its profitability mainly through costs reduction and improved supply chain management, and not directly through increased revenues. In this sense, revenue trend is expected to remain constant in the future (**Fig. 3 and 4**).

5.1.3. Floor & Wall Coverings

The Floor & Wall Coverings BU is the second largest contributor for the total revenues of Corticeira Amorim. Likewise the other business units of the group, the Floor & Wall Coverings revenues suffered a significant breakdown during 2009, given the economic crisis context. The global construction and building industry was one of the most affected industries by the economic crisis turmoil, having negative results in the flooring and coverings segment. The downward price pressure and lower demand were the responsible factors for the decrease in sales during this period. Since then, this BU has been focused on new value added products and market segments aimed to increase margins in order to respond to the current market adversity. The results have been visible so far, with very positive sales growth in 2012 (5% in total sales and 9% in trade sales). In this sense, the company intends to keep following this strategy in line with the group's overall strategy intended to face the upcoming challenges according to the macroeconomic and industry perspectives (**Appendix 7.3.**).

Considering the recent historical revenue performance as well as the construction industry perspectives, it is assumed that sales growth in this BU will continue to grow at similar levels of 2012 (5%) until 2014. It is assumed a similar growth to the construction residential segment given the excellent correlation between the "green" flooring and coverings market and this segment. From 2014 until 2022, a gradual growth decrease is expected following the industry growth in that specific period. The construction industry growth is assumed to be a good proxy for the forecasted revenues of Floor & Wall Coverings BU given the strong correlation between this segment and the industry (**Fig. 3 and 4**).

5.1.4. Composite Cork

Likewise all the business units of Corticeira Amorim, the Cork Composite BU is recovering from the general breakdown in revenues in 2009 for the reasons already explained. The main company operating in this activity, the Amorim Cork Composites, registered very positive revenue growths in 2011 (7%) and 2012 (6%) which clearly shows the recovery trend this BU is experiencing recently. Also the

trade sales (to clients outside the group) have been growing significantly with 1% in 2011 and 5% in 2012. Since 2005, the total sales grew on average 5% registering positive growth in every year with the exception of 2005 and 2009.

In line with one of the main strategic guidelines of Corticeira Amorim for the future, the Cork Composites BU has been focusing on the repositioning of its products in the market in order to increase the average customer value of its clients and maintain the same margins in the future.

(Appendix 7.4).

During the next 2/3 years it is expected that the BU revenues will continue growing at the average historical growth of 5% until 2015. This assumption takes into account the followed expansionist and repositioning strategy of the BU, expecting immediate results until 2015. From 2016 on, it is assumed that the company will be able to reach steady revenues once it retains the existing clients and attract new ones. Hence, revenues growth is assumed to drop to half of the average rate in 2016 (3%) as the company reaches sustainable growth and the revenues stabilize **(Fig. 3 and 4)**.

5.1.5. Insulation Cork

The Insulation Cork BU is the unit that less contributes to the group's total revenues and the second smaller contributor in terms of trade sales. The residual importance this BU has in Corticeira Amorim is represented in its small weight on the consolidated EBITDA and revenues of the group.

Since 2009, the BU has been struggling with the global economic adversity which led to the postponement of several projects it had in hands. Given the economic crisis, most the industries this BU activity depends on (building, aeronautical, wine and appliances) were significantly affected by the demand downfall **(Appendix 7.5)**. Despite registering negative growth in revenues recently, the company is still involved in several R&D projects and partnerships following the same strategic course of the other units of the group.

Taking in consideration the historical performance of Insulation Cork BU in terms of revenues, it is assumed that they will growth at the average growth rate of 4% during the next 2 years and then gradually decrease until 2022 once it reaches a steady state in terms of profitability **(Fig. 3 and 4)**.

5.1.6. Other considerations

The holding that owns totally or part of the other companies of the group is represented by *Corticeira Amorim SGPS SA*, which is responsible for the cork business sector of Amorim Group. Given the residual sales from the holding of the group, it is assumed for simplicity that they will remain at the same levels of 2012 during the forecasted period. It is not expected significant increase in sales of the holding in the future once it is not a core strategic business unit as the other ones. The Rubber BU was extinct in 2007 so no values are forecasted for it in this dissertation.

5.2. Operating Expenses and other Operating Income

The forecasted operating expenses and other operating income during 2013-2022 rely on recent historical values of Corticeira Amorim, since its restructuring in 2005. Apart from changes in manufactured inventories, all the forecasted operating expenses are presented as a percentage of total revenues.

After computing the operating expenses and other operating income forecasts (**Fig. 5**), the EBITDA and EBITDA margins forecasts were obtained. Since all operating expenses and other operating income were not available by business unit, their allocation was based on the historical weight each BU had on the total consolidated EBITDA of the group (**Fig. 6**). It was assumed a constant weight for each BU during the forecasting period based on reasonable target values given the recent historical weights. Operating expenses and other income are explained in more detail in **Appendix 8**.

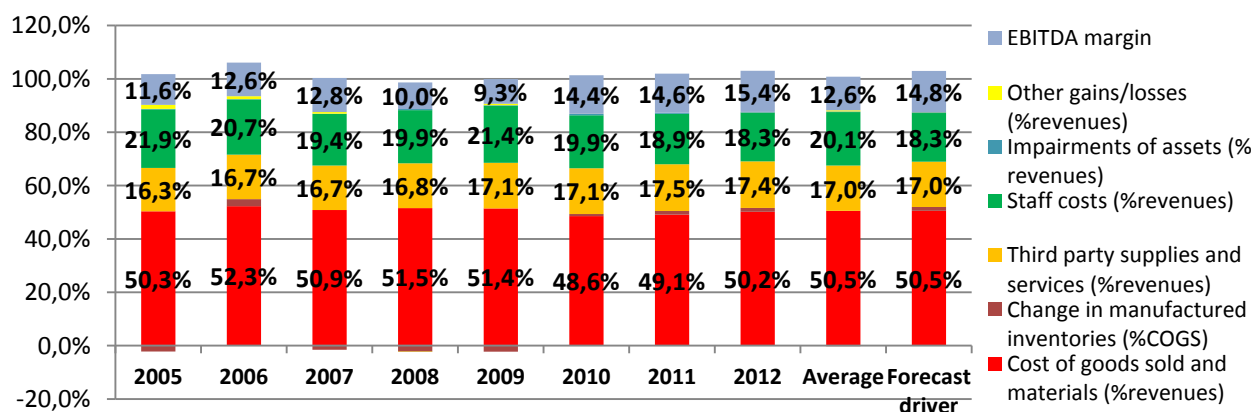


Fig. 5 – Forecasted Operating Expenses and Other Operating Income

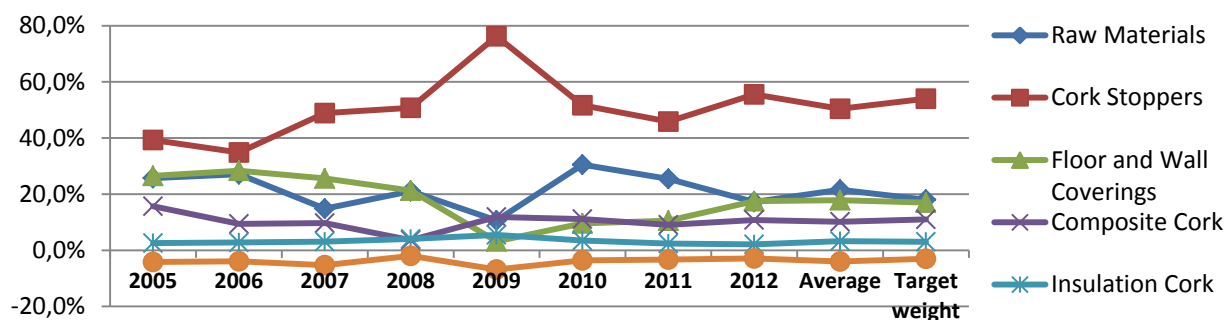


Fig. 6 – EBITDA margin by Business Unit of Corticeira Amorim

EBITDA/TOTAL EBITDA	Average	Target weight
Raw Materials	21,6%	18,0%
Cork Stoppers	50,4%	54,0%
Floor and Wall Coverings	17,8%	17,0%
Composite Cork	10,1%	11,0%
Insulation Cork	3,3%	3,0%
Holding	-4,0%	-3,0%
Adjustments	-1,8%	0,0%

Fig. 7 – Average EBITDA margin by Business Unit

Following the recent historical trend since 2009, the Raw Materials have been decreasing its EBITDA contribution in terms of importance. In this sense, the assumed target weight for this BU is slightly lower compared to the historical average and similar to 2012 values (17,2%). On the other hand, the target EBITDA weight of Cork Stoppers BU is relatively higher (54%) compared to the historical average.

This assumption takes in consideration the expected strategic growth of this unit as the core BU of Corticeira Amorim. Therefore, it is assumed a slightly higher target EBITDA weight.

For simplicity, all the non-allocated amounts and inter-BU transaction values are assumed to be null, therefore no forecasts are made for adjustments. After getting the target EBITDA weights, it was simple to allocate each operating expense and other operating income by business unit. Each one of them is allocated to each BU according to the respective target EBITDA weight. All the items related to operating expenses and other income are explained in **Appendix 8**.

5.3. Gross PP&E, Intangible Assets and Investment Property

Foremost, in order to forecast depreciation it was necessary to forecast the gross fixed assets of the company since depreciation is directly linked to these items. In the case of Corticeira Amorim, there are three categories subject to depreciation/amortization: property, plant and equipment (PP&E), intangible fixed assets and investment property. PP&E is divided in lands and buildings, machinery, advances-in-progress and others whereas investment property is mainly lands and buildings not used in operations.

The driver used to forecast these items is the average annual growths of them, based on the historical values since 2005. Although revenues are the most commonly used driver to forecast gross fixed assets, it was decided to use lower growth rates associated to the historical average annual growth of each of these items. The reason behind this assumption is related to the fact that Corticeira Amorim will continue to increase its revenues and expand its business and it would not need to acquire/expand new fixed assets at the same pace, once their efficiency is continuously improving and investment needs tend to decrease over time.

Given the lack of information of Corticeira Amorim annual reports, it was not possible to calculate the 8-year annual growth average for investment property and intangible fixed assets. Therefore, it was assumed that intangible fixed assets will grow during the forecasted period at the same constant growth of PP&E. On the other hand, investment property values are expected to remain at the same levels of 2012, since it is not expected future significant growth on non-operational buildings and lands taking in consideration the current macroeconomic context and strategic guidelines outlined by Corticeira Amorim. The detailed forecasts for PP&E are based on the 8-year historical average weight each item had on the total value. Forecast assumptions are detailed in **Appendix 9**.

PP&E,Intg.Assets,IP	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PP&E	592.957	605.968	619.265	632.854	646.741	660.933	675.436	690.257	705.403	720.882
Land and buildings	243.096	248.430	253.881	259.452	265.146	270.964	276.910	282.986	289.195	295.541
Machinery	298.986	305.547	312.251	319.103	326.105	333.261	340.574	348.047	355.685	363.489
Others	42.921	43.863	44.825	45.809	46.814	47.841	48.891	49.964	51.060	52.181
Advances in-progress	7.955	8.130	8.308	8.490	8.677	8.867	9.062	9.260	9.464	9.671
Investment property	15.641	15.641	15.641	15.641	15.641	15.641	15.641	15.641	15.641	15.641
Intangible Fixed Assets	3.906	3.992	4.079	4.169	4.260	4.354	4.449	4.547	4.647	4.749

Fig. 8 – Forecasted Gross Fixed Assets of Corticeira Amorim (Thousand €)

5.4. Depreciation

PP&E, Intg. Assets, IP	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PP&E	23.519	24.035	24.562	25.101	25.652	26.215	26.790	27.378	27.979	28.593
Land and buildings	6.267	6.404	6.545	6.689	6.835	6.985	7.139	7.295	7.455	7.619
Machinery	15.568	15.910	16.259	16.616	16.981	17.353	17.734	18.123	18.521	18.927
Others	1.684	1.720	1.758	1.797	1.836	1.877	1.918	1.960	2.003	2.047
Advances in-progress	-	-	-	-	-	-	-	-	-	-
Investment property	1.241	1.241	1.241	1.241	1.241	1.241	1.241	1.241	1.241	1.241
Intangible Fixed Assets	599	612	625	639	653	667	682	697	712	728

Fig. 9 – Forecasted year depreciation of Corticeira Amorim (Thousand €)

Depreciation is forecasted based on its historical values as a percentage of gross fixed assets. After analyzing the 8-year depreciation as a percentage of the total gross assets, it was calculated the historical average between 2005 and 2012 in order to get the forecast ratio to be used during the forecast period (**Appendix 9**). Given the similar percentages since 2005, it was assumed the 8-year historical average rates as the forecast ratios between 2013 and 2022 assuming they will remain constant over the this period for every category of gross fixed assets.

The allocation of total year depreciation to each BU of Corticeira Amorim was estimated based on the 8-year historical average weight each business unit had over the total value. According to the assumptions made, the Cork Stoppers BU holds 41% of total year depreciation followed by the Floor & Wall Coverings BU with 23% and the Raw Materials BU with 15%.

5.5. Net PP&E, Intangible Assets and Investment Property

The net PP&E, intangible assets and investment property are also forecasted based on its historical values as a percentage of the respective gross fixed assets. The forecast ratios are the 8-year historical weight average of each type of asset, assuming they will remain constant over the forecasting period. Apart from intangible fixed assets historical ratios, the other two categories present similar ratios in the past 8 years. The net fixed assets segmented by BU are explained in more detail in **Appendix 9**.

PP&E, Intg. Assets, IP	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PP&E	197.705	202.044	206.477	211.008	215.638	220.370	225.205	230.147	235.197	240.358
<i>Land and buildings</i>	97.850	99.997	102.191	104.434	106.725	109.067	111.461	113.906	116.406	118.960
<i>Machinery</i>	82.243	84.047	85.892	87.776	89.703	91.671	93.682	95.738	97.839	99.986
<i>Others</i>	9.621	9.833	10.048	10.269	10.494	10.724	10.960	11.200	11.446	11.697
<i>Advances in-progress</i>	-	-	-	-	-	-	-	-	-	-
Investment property	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460
Intangible Fixed Assets	553	565	578	591	603	617	630	644	658	673

Fig. 10 – Forecasted net PP&E, Intangible Fixed Assets and Investment Property (Thousand €)

5.6. CAPEX

The Capital Expenditures forecasts between 2012 and 2021 are based on the annual variation of net fixed assets plus the respective total year depreciation in each BU. Taking in consideration the estimated depreciation values during the forecasting period, it was assumed that Corticeira Amorim will continue to invest in new markets and new cork solutions in order to increase its portfolio of value added products. Improving the customer value and strengthen the R&D positions are two important

strategic guidelines of Corticeira Amorim which justify the estimated CAPEX values for the next years. The recent acquisition of *Trefinos* in 2012 and other R&D joint-ventures in the Chinese market are good examples of Corticeira Amorim strategic path for the next few years aiming for sustainable growth. Being the world's cork leader in every segment where it operates, it is plausible Corticeira Amorim may have higher CAPEX levels compared to recent years. However, the values of CAPEX for 2013 are higher because it is considered the variations for investment property and intangible assets during this year. The historical depreciation and CAPEX values can be compared in **Appendix 9**.

CAPEX	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Raw Materials	4.998	4.440	4.534	4.629	4.727	4.827	4.929	5.033	5.140	5.249
Δ Net PP&E	1.190	738	754	770	787	804	822	840	859	877
Δ Net Investment Property	187	0	0	0	0	0	0	0	0	0
Δ Net Intangible Assets	-5	2	2	2	2	2	2	2	2	2
Depreciation	3.625	3.701	3.778	3.857	3.938	4.020	4.105	4.191	4.279	4.369
Corks Stoppers	15.596	12.316	12.576	12.841	13.112	13.389	13.672	13.961	14.256	14.558
Δ Net PP&E	11757	868	887	906	926	946	967	988	1010	1032
Δ Net Investment Property	565	0	0	0	0	0	0	0	0	0
Δ Net Intangible Assets	26	2	2	3	3	3	3	3	3	3
Depreciation	5584	5701	5820	5942	6066	6193	6323	6456	6592	6730
Floor & Wall Coverings	17.933	6.571	6.709	6.850	6.995	7.142	7.293	7.447	7.604	7.765
Δ Net PP&E	2398	564	576	589	602	615	629	642	657	671
Δ Net Investment Property	193	0	0	0	0	0	0	0	0	0
Δ Net Intangible Assets	1	2	2	2	2	2	2	2	2	2
Depreciation	3437	3509	3582	3657	3733	3812	3892	3973	4057	4142
Composite Cork	6.029	4.074	4.160	4.248	4.337	4.429	4.522	4.618	4.715	4.815
Δ Net PP&E	221	87	89	91	93	95	97	99	101	103
Δ Net Investment Property	25	0	0	0	0	0	0	0	0	0
Δ Net Intangible Assets	0	0	0	0	0	0	0	0	0	0
Depreciation	601	613	626	639	653	666	680	694	709	724
Insulation Cork	846	700	715	730	745	761	777	794	810	827
TOTAL	45.403	28.102	28.693	29.298	29.916	30.547	31.193	31.852	32.526	33.215

Fig. 11 – Forecasted CAPEX by BU of Corticeira Amorim (excluding Holding) (Thousand €)

5.7. Working Capital

The healthy operating liquidity of Corticeira Amorim is expressed in its robust Net Working Capital values over the last recent years. Given the historical high levels of Net Working Capital, the company has been able to fund its operations and to satisfy short-debt obligations as well as operating expenses (**Appendix 9**). The recent strategic goal in reinforcing procurement and raw materials acquisition allowed the company to accumulate high levels of inventories and meet its short/medium term

obligations related to liabilities. The Raw Materials BU has been the major buyer of raw materials in order to keep increasing the supply to the other business units and to strengthen global leadership in every cork segment following the overall strategy of the group.

The forecasts for non-cash working capital are based on the 8-year historical average of NWC as a percentage of total revenues. The only exception made is the forecast ratio used in Trade Payables and Other borrowings/creditors which is computed using the 3-year historical average in line with the recent trend in each item (**Appendix 9**). Despite the downward trend over the last years in terms of NWC value (as % of revenues), it is expected that Corticeira Amorim will be able to maintain its operating liquidity in the future supported by the sustained growth of its global cork business. The historical NWC of Corticeira Amorim and the NWC allocated by BU are presented in **Appendix 9**.

Net Working Capital (exc. Cash and equivalents) = Current Assets – Current Liabilities

Current Assets = Inventories + Trade Receivables + Tax Assets + Other Assets

Current Liabilities = Trade Payables + Other borrowings and creditors + Tax liabilities

NWC	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Inventories	257.471	275.128	289.919	304.791	316.557	326.114	334.727	343.575	352.665	362.003
Trade receivables	134.744	143.984	151.725	159.508	165.666	170.667	175.175	179.805	184.562	189.450
Current tax assets	23.232	24.825	26.160	27.502	28.564	29.426	30.203	31.002	31.822	32.664
Other current assets	16.958	18.121	19.095	20.074	20.849	21.479	22.046	22.629	23.228	23.843
Trade payables	113.128	120.886	127.385	133.919	139.089	143.288	147.072	150.960	154.954	159.057
Other borrowings/ creditors	42.973	45.920	48.389	50.871	52.835	54.430	55.867	57.344	58.861	60.420
Current tax liabilities	12.896	13.780	14.521	15.266	15.855	16.334	16.765	17.209	17.664	18.132
NWC	263.408	281.472	296.605	311.820	323.858	333.634	342.446	351.498	360.797	370.351
NWC (% Revenues)	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%
Δ NWC	18.993	18.064	15.133	15.215	12.038	9.776	8.812	9.052	9.300	9.554

Fig. 12 – Forecasted NWC of Corticeira Amorim (Thousand €)

5.8. Cost of Equity

5.8.1. Risk Free Rate

The default-free German Government Bond is assumed to be a good proxy to estimate the risk-free rate for Corticeira Amorim. In line with the 10 year forecasting period used in this dissertation, the chosen German Government Bond maturity is also 10 years. The fact that the EURO (€) is the legal currency of Corticeira Amorim and two thirds of its business is done with this currency, makes the

German Government Bond 10 years yield a consistent proxy for the risk-free rate. Corticeira Amorim is one of the most international portuguese companies and world market leader in every segment where it operates. Although it is a portuguese-based company, the business of Corticeira Amorim as a high worldwide exposure and high financial liquidity which determines the lower risk perception investors may have in relation to other portuguese companies. Thus, the risk-free rate is **1,73%** according to recent market information (*Data from 21/06/13*).

5.8.2. Equity Beta

For simplicity, the chosen Beta for Corticeira Amorim is **0,65** according to the information provided by *Reuteurs*.

5.8.3. Market Risk Premium

The market risk premium estimate of Corticeira Amorim is based on the weighted equity risk premiums of the countries where the company has most of its operational assets, namely fixed assets, inventories and trade receivables.

The only available information presented in Corticeira Amorim annual reports in terms of operational values by country are related with revenues breakdown by region. In case of estimating the market risk premium of Corticeira Amorim based on revenue weights by country/region, the cost of equity would probably be inaccurate because it would not take into account the truthful level of risk exposure of the company derived from its operations. In this sense, Corticeira Amorim provided information regarding the net asset weights by country where it operates in order to be used as a proxy to estimate the market risk premium of the company. The information provided refers to the most important countries where Corticeira Amorim had its operational assets in 2012. All these countries represent important wine markets that support Corticeira Amorim cork business as well as raw materials markets (North Africa and Spain) to supply all its segments.

Taking in consideration the market risk premiums provided by Damodaran on his academic website (**Fig. 12**), the market risk premium of Corticeira Amorim is estimated based on the weighted country risk premiums where the company operates. It is assumed that the weights of operational assets by country are a consistent proxy for estimating the weighted equity risk premium of Corticeira Amorim once they represent a realistic level of risk exposure in each market. It is also assumed that net asset

weights in 2012 will remain stable over the forecasting period since it is expected no significant changes in the future, based on Corticeira Amorim overall strategy.

Net Assets (operational) - 2012	Thousand € (Prox.)	Weight in 2012 %	Market Risk Premium*	Weighted Mkt. Risk premium
USA	44.000	8%	6%	0,46%
France	23.000	4%	6%	0,24%
Italy	16.000	3%	8%	0,22%
Spain	68.000	12%	9%	1,08%
Morocos+Argelia+Tunisia	7.000	1%	9,5%	0,12%
Chile	17.000	3%	7%	0,21%
Australia	7.000	1%	6,5%	0,08%
Germany	12.000	2%	6%	0,13%
Total Net Assets (excluding Portugal & others)	194.000	34%		
Portugal & others	373.913	66%	10,9%	7,2%
Total Net Assets in 2012	567.913	100%	9,7%	

Fig. 13 – Forecasted Market Risk Premium

*Source: Damodaran's website
Source: Corticeira Amorim

According to the calculations, the total market risk premium of Corticeira Amorim is approximately **9,7%**. After estimating the risk free rate, beta and market risk premium for Corticeira Amorim it is possible to get the cost of equity of the company. According to the CAPM formula ($Re = \text{Risk Free} + \text{Market Risk Premium} \times \text{Beta}$), the cost of equity of Corticeira Amorim is **8,04%**. The cost of equity is assumed to be the same for all business units.

5.9. Cost of Debt

The cost of debt is calculated based on the default spread associated to the company investment rating plus the assumed riskless rate in order to get the pretax cost of debt. The investment rating of the company is usually given by the interest coverage ratio (EBIT/Interest expenses) which represents the financial capacity of the company in meeting interest-debt obligations through its earnings.

In the case of Corticeira Amorim, the interest coverage ratio has been increasing since 2009 which clearly demonstrates that the company is generating sufficient revenues to satisfy its interest expenses. Following the significant EBIT increase in 2010, the company tripled its capacity to meet interest expenses. According to the forecasts in this dissertation, the EBIT of Corticeira Amorim is expected to keep growing as the company continues to expand its business activity. Interest expenses are expected to remain at similar levels of 2012 once it is expected that interest-bearing loans will remain at steady values during the forecast period. In this sense, the assumed interest coverage ratio is the average of the last three years.

	2005	2006	2007	2008	2009	2010	2011	2012	Avg	Forecast Driver
EBIT (thousand €)	26.800	34.151	36.986	25.544	17.935	45.139	51.378	61.259		
Interest Expenses (thousand €)	-7.651	-9.280	-11.535	-13.753	-6.223	-5.171	-6.827	-7.360		
Interest costs - bank loans	-7.009	-6.355	-7.744	-8.826	-4.250	-3.174	-4.322	-5731		
Interest costs - delayed payments	-115	-1	-32	-1	-8	-3	-5	0		
Interest costs - commercial paper	-146	-2.201	-3.007	-3.560	-1.119	-	-	-574		
Stamp tax - interest	-20	-155	-180	-139	-115	-67	-80	-320		
Stamp tax - capital	-57	-70	-102	-67	-71	-147	-186	0		
Interest costs - others	-304	-498	-470	-1.160	-660	-1.780	-2.234	-735		
Interest Coverage Ratio	3,50	3,68	3,21	1,86	2,88	8,73	7,53	8,32	4,96	8,19

Fig. 14 – Historical Interest Coverage Ratios of Corticeira Amorim

Source: Corticeira Amorim

According to the chosen interest coverage ratio of **8,19**, the associated default spread is 0,85% (Rating A+) according to *Damodaran Online (For smaller non-financial service companies with < \$ 5 Billion)*. The pre-tax cost of debt is given by adding the assumed risk-free rate (1,72%) and the implied default spread of Corticeira Amorim (0,85%). Therefore, the pre-tax cost of debt is **2,58%** which is multiplied by the Portuguese corporate tax rate of 30%, giving the after-tax cost of debt of **1,81%**.

5.10. Weights of Equity and Debt

Corticeira Amorim considers a perfect autonomy ratio (Equity/Assets) of 40% and a range between 35% - 45% depending on actual economic conditions. Taking in consideration the capital structure values since 2005 and the targeted combination, it is expected that Corticeira Amorim will maintain similar financial mix values in the medium/long-term.

Although the perfect capital structure combination set by Corticeira Amorim is based on book values, the most accurate criteria to forecast the weights of debt and equity is to use market values as referred in **Chapter 1**. The calculations presented in this dissertation assume the market value of equity and the book value of debt to compute the expected weights of debt and equity in the future. The target weights of debt and equity assumed during the forecast period are based on the 8-year historical average Debt to Enterprise Value ratio. It is used the market value of equity taking into account the closing share price of Corticeira Amorim each year as well as the number of outstanding shares, since 2005. On the other hand, it is assumed that the book value of debt is a reasonable proxy

of its market value given that no significant fluctuations occurred in interest rates since the times of issuance and the company is not in financial distress. The book debt is presented in closing year terms.

	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
Equity/Assets ratio	40%	41%	41%	43%	48%	48%	47%	46%	44%	
Nº outstanding shares	130.140	130.461	137.368	130.915	131.051	126.759	126.370	126.240		
Stock Price per share (€)	1,13	1,73	1,94	1,35	0,84	0,97	1,14	1,6		
Market value of Equity (thousand €)	2.265	3.468	3.894	2.704	1.679	1.951	2.298	224.270		
Book value of Debt (thousand €)	227.348	229.328	238.173	227.558	146.353	135.735	139.105	160.596		
D/EV	61%	50%	47%	56%	57%	52%	49%	42%	52%	50%
E/EV	39%	50%	53%	44%	43%	48%	51%	58%	48%	50%

Fig. 15 – Historical weights of Debt and Equity of Corticeira Amorim

Source: Corticeira Amorim

According to the historical weights of debt and equity, the Debt to Enterprise Value of Corticeira Amorim is 53%. The recent years show an increasing tendency of Corticeira Amorim in reducing debt from its capital structure. Bearing this in mind and considering the average historical values of the autonomy ratio, it is assumed a **50%** target Debt to Enterprise Value during the forecast period in order to compute the WACC of Corticeira Amorim.

5.11. Corporate Tax Rate

The assumed corporate tax rate is the standard Portuguese legal income tax rate of 25% (2012) plus all the tax effects resulting from Corticeira Amorim business activity (extraordinary costs, derrama, different tax rates, etc.). Hence, the assumed corporate tax rate is **30%** which was the effective income tax rate of Corticeira Amorim in 2012 (29,9%). It is assumed this tax rate will remain steady during the forecast period given the current and future macroeconomic context of the Portuguese economy. Differed tax income from activity is assumed to remain equal to 2012 during the forecast period.

5.12. Terminal Value

For the last year of the forecasting period (2022), it is assumed that consolidated revenues will grow at 3% in perpetuity. The free cash flow to the firm (FCFF) is assumed to grow at 2% in perpetuity. This perpetual growth rate is slightly higher compared to the last year's IMF estimates for inflation in Portugal (2018 – 1,53%)(Appendix 5). In order to eliminate possible inconsistencies, it is assumed that CAPEX and year depreciation are equal in perpetuity.

6. Enterprise Values of Corticeira Amorim Business Units

According to the estimated values of each WACC variable and taking in consideration the assumptions described above, the estimated WACC of the five business units is **4,9%**.

Raw Materials	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	7.295	9.388	10.327	11.050	11.824	12.415	13.035	13.427	13.829	14.244	14.672
EBITDA	14.200	15.158	16.198	17.069	17.944	18.637	19.199	19.706	20.227	20.763	21.312
(-) D&A	1.750	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
EBIT	12.450	11.458	12.420	13.212	14.007	14.617	15.096	15.517	15.950	16.395	16.853
(-) Taxes	4.367	3.437	3.726	3.964	4.202	4.385	4.529	4.655	4.785	4.919	5.056
(+) D&A	1.750	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
(=) OCF	9.833	11.721	12.472	13.105	13.742	14.252	14.671	15.051	15.442	15.844	16.256
(-) Δ NWC	0	4.204	3.998	3.350	3.368	2.664	2.164	1.950	2.004	2.058	2.115
(-) CAPEX	1.994	5.073	4.517	4.612	4.709	4.809	4.910	5.014	5.120	5.228	4.459
(=) FCFF	7.839	2.444	3.956	5.143	5.665	6.778	7.596	8.087	8.319	8.557	9.682
WACC	4,9%										
PV FCFF		2.329	3.594	4.452	4.674	5.330	5.693	5.776	5.663	5.552	5.987
Terminal Value	208.809										
PV Terminal Value	129.115										
Raw Materials Value	178.165										

Fig. 16 – Estimated Enterprise Value of Raw Materials BU (Thousand €)

Cork Stoppers	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	317.490	347.343	375.131	397.639	421.497	438.357	451.507	465.053	479.004	493.374	508.176
EBITDA	45.791	45.475	48.593	51.206	53.832	55.910	57.598	59.119	60.682	62.288	63.937
(-) D&A	10.934	10.607	10.829	11.055	11.286	11.522	11.764	12.010	12.263	12.520	12.784
EBIT	34.857	34.867	37.765	40.151	42.546	44.388	45.834	47.109	48.420	49.767	51.153
(-) Taxes	12.227	10.460	11.329	12.045	12.764	13.316	13.750	14.133	14.526	14.930	15.346
(+) D&A	10.934	10.607	10.829	11.055	11.286	11.522	11.764	12.010	12.263	12.520	12.784
(=) OCF	33.564	35.014	37.264	39.160	41.068	42.594	43.848	44.987	46.156	47.357	48.591
(-) Δ NWC	0	9.159	8.711	7.297	7.337	5.805	4.714	4.249	4.365	4.484	4.607
(-) CAPEX	13.152	16.142	12.873	13.144	13.421	13.705	13.994	14.290	14.592	14.901	12.784
(=) FCFF	20.412	9.713	15.680	18.719	20.310	23.085	25.140	26.448	27.199	27.973	31.200
WACC	4,9%										
PV FCFF		9.257	15.680	18.719	20.310	23.085	25.140	26.448	27.199	27.973	31.200
Terminal Value	1.088.175										
PV Terminal Value	672.864										
Cork Stoppers Value	897.875										

Fig. 17 – Estimated Enterprise Value of Cork Stoppers BU (Thousand €)

Floor&Wall Coverings	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	123.058	129.786	136.102	141.546	147.208	153.096	157.689	160.843	164.060	167.341	170.688
EBITDA	14.436	14.316	15.298	16.120	16.947	17.601	18.133	18.612	19.104	19.609	20.128

(-) D&A	4.793	5.674	5.792	5.913	6.037	6.163	6.292	6.424	6.559	6.697	6.838
EBIT	9.643	8.642	9.506	10.207	10.910	11.438	11.841	12.187	12.545	12.912	13.291
(-) Taxes	3383	2593	2852	3062	3273	3432	3552	3656	3763	3874	3987
(+) D&A	4.793	5.674	5.792	5.913	6.037	6.163	6.292	6.424	6.559	6.697	6.838
(=) OCF	11.053	11.723	12.446	13.058	13.674	14.170	14.581	14.955	15.340	15.735	16.141
(-) Δ NWC	0	2.552	2.428	2.034	2.045	1.618	1.314	1.184	1.217	1.250	1.284
(-) CAPEX	1.267	18.023	6.662	6.802	6.945	7.092	7.241	7.394	7.550	7.710	6.838
(=) FCFF	9.786	-8.852	3.356	4.222	4.684	5.460	6.026	6.377	6.574	6.776	8.019
WACC	4,9%										
PV FCFF		-8.436	3.049	3.655	3.865	4.294	4.516	4.555	4.475	4.396	4.959
Terminal Value	172.947										
PV Terminal Value	106.940										
Floor&Wall Covering Value	136.267										

Fig. 18 – Estimated Enterprise Value of Floor and Wall Coverings BU (Thousand €)

Composite Cork	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	77.350	74.395	78.114	82.020	84.481	87.015	89.626	91.418	93.247	95.111	97.014
EBITDA	8.877	9.263	9.899	10.431	10.966	11.389	11.733	12.043	12.361	12.688	13.024
(-) D&A	3.117	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
EBIT	5.760	5.563	6.121	6.574	7.029	7.370	7.629	7.853	8.084	8.321	8.565
(-) Taxes	2.020	1.669	1.836	1.972	2.109	2.211	2.289	2.356	2.425	2.496	2.569
(+) D&A	3.117	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
(=) OCF	6.857	7.594	8.062	8.458	8.857	9.178	9.444	9.687	9.936	10.192	10.455
(-) Δ NWC	0	2.552	2.428	2.034	2.045	1.618	1.314	1.184	1.217	1.250	1.284
(-) CAPEX	4.118	6.292	4.343	4.434	4.528	4.623	4.720	4.820	4.922	5.026	4.459
(=) FCFF	2.739	-1.250	1.292	1.990	2.285	2.937	3.410	3.683	3.798	3.916	4.711
WACC	4,9%										
PV FCFF		-1191	1173	1723	1885	2310	2555	2630	2585	2541	2913
Terminal Value	101.606										
PV Terminal Value	62.827										
Composite Cork Value	81.953										

Fig. 19 – Estimated Enterprise Value of Composite Cork BU (Thousand €)

Insulation Cork	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	8.291	8.538	8.880	9.057	9.239	9.423	9.612	9.804	10.000	10.200	10.404
EBITDA	1.759	2.526	2.700	2.845	2.991	3.106	3.200	3.284	3.371	3.460	3.552
(-) D&A	566	740	755	771	787	804	821	838	856	874	892
EBIT	1.193	1.786	1.944	2.073	2.203	2.302	2.379	2.446	2.516	2.587	2.660
(-) Taxes	418	536	583	622	661	691	714	734	755	776	798
(+) D&A	566	740	755	771	787	804	821	838	856	874	892
(=) OCF	1.341	1.990	2.116	2.223	2.330	2.415	2.486	2.550	2.617	2.684	2.754
(-) Δ NWC	0	526	500	419	421	333	270	244	250	257	264
(-) CAPEX	775	986	842	860	878	897	916	935	955	975	892
(=) FCFF	566	479	774	944	1.030	1.186	1.300	1.372	1.411	1.452	1.598
WACC	4,9%										
PV FCFF		457	703	817	850	932	974	980	961	942	988
Terminal Value	34.458										
PV Terminal Value	21.307										
Insulation Cork Value	29.911										

Fig. 20 – Estimated Enterprise Value of Insulation Cork BU (Thousand €)

The holding represents a non-operational BU of Corticeira Amorim. Nonetheless, its enterprise value estimation is presented in **Appendix 10**.

7. Dividends to Shareholders of Corticeira Amorim

According to recent historical information, Corticeira Amorim does not have a steady dividend payment policy to its shareholders. In this sense, it is assumed that payout ratio until 2014 will be 57% which is the 8-year historical average since 2005. The payout ratio is expected to keep increasing and keep at 75% from 2017 on. The reason behind this assumption is related with the perfect autonomy ratio of 40% targeted by the company, with a range between 35-45% depending on current economic conditions. In this sense, the assumed dividend distribution policy is based on the historical autonomy ratio values since 2005 as well as the current and expected difficult economic conditions in the short/medium term. Hereupon, autonomy ratio is expected to vary between 44-48% during the forecast period. Historical dividend payments and autonomy ratios are presented in **Appendix 11**.

Regarding the portion of shares attributable to Corticeira Amorim own shares, it is assumed that it will remain at the same levels of 2011 and 2012 (5%) since no significant changes are expected according to the company. Historical values can also be seen in **Appendix 11**.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dividends (attributable to CA shareholders)	18.161	19.900	26.283	28.302	31.962	33.235	34.389	35.602	36.853	38.142
Net income	31.623	34.651	37.548	40.431	42.616	44.314	45.852	47.470	49.137	50.856
Payout ratio	57%	57%	70%	70%	75%	75%	75%	75%	75%	75%
Total Dividends	19.138	20.970	27.697	29.824	33.681	35.023	36.239	37.518	38.836	40.194
Portion attributable to own shares	977	1.071	1.414	1.523	1.720	1.788	1.850	1.915	1.983	2.052
%Portion attributable to own shares	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Autonomy ratio	44%	45%	45%	45%	46%	46%	47%	47%	48%	48%

Fig. 21 – Estimated dividends paid of Corticeira Amorim (Thousand €)

8. Debt and Net Financial Costs

According to the estimates, the book value of debt of Corticeira Amorim is expected to keep increasing during the forecast period as the company continues to reinforce its business global leadership. Given the strategic guidelines of the company, it is critical that Corticeira Amorim continues to have a significant level of debt to keep investing and improving its business activity. Regarding the non-current debt, it is assumed that Corticeira Amorim will repay it according to its amortization schedule presented in the annual report of the company. The fully repayment of non-current debt during the

forecast period is pretty unlikely, therefore it is assumed that it will remain a steady value from 2017 on. Current debt estimate works out as “the plug” to make the balance sheet balance. It is assumed that existing current debt remains at the same level of 2013 in the future whereas newly issued value represents the difference between assets and liabilities plus shareholder’s equity. In this sense, the estimates for total current debt are composed by the current existing debt (2013) plus newly issued debt. According to the dissertation estimates, the expected level of debt in 2022 is around 198 Million €. In order to avoid circularity problems, net financial costs are presented as the percentage of previous year’s book value of debt. The estimates of debt and net financial costs are detailed in **Appendix 12**.

9. Retained Earnings and Non-Controlling Interests

Taking into account the historical retained earnings since 2005, it is expected that Corticeira Amorim will continue to accumulate reserves as net income keeps increasing during the forecast period. Despite higher payout ratios during the last years of the forecast period, it is expected that retained earnings will continue to grow. According to Corticeira Amorim, it is not expected relevant changes in treasury stock (own shares) in the future.

Retained Earnings	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Initial ret. earnings	123.696	137.519	152.631	164.256	176.746	187.761	199.201	211.025	223.253	235.898
Net income	31.623	34.651	37.548	40.431	42.616	44.314	45.852	47.470	49.137	50.856
Dividends paid	-18.161	-19.900	-26.283	-28.302	-31.962	-33.235	-34.389	-35.602	-36.853	-38.142
Change in Treasury Stock	0	0	0	0	0	0	0	0	0	0
Change in Minority interests	361	361	361	361	361	361	361	361	361	361
Ending ret. earnings	137.519	152.631	164.256	176.746	185.630	194.841	199.773	204.846	210.063	215.428

Fig. 22 – Estimated Retained Earnings (Other Reserves) of Corticeira Amorim (Thousand €)

Changes in minority interests are expected to remain constant during the forecast period. It is assumed that the dividend/results ratio of 47% in 2012 will remain the same in the future. Both dividend and results from non-controlling interests are assumed to be equal to 2012 values given the lack of information presented in the company annual reports. Historical values of retained earnings and non-controlling interests are presented in **Appendix 13**.

Non-controlling interests	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Initial minority interests	14.665	15.026	15.387	15.748	16.109	16.470	16.831	17.192	17.553	17.914
Results	678	678	678	678	678	678	678	678	678	678

Dividens paid	-317	-317	-317	-317	-317	-317	-317	-317	-317	-317
Ending minority interests	15.026	15.387	15.748	16.109	16.470	16.831	17.192	17.553	17.914	18.275
Dividends	317	317	317	317	317	317	317	317	317	317
Results	678	678	678	678	678	678	678	678	678	678
Dividends/Results	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%

Fig. 23 – Estimated Non-Controlling Interests of Corticeira Amorim

10. Equity Valuation of Corticeira Amorim

VALUATION SUMMARY - DISSERTATION			
Business	EV Attrib. (Thousand €)	% EV	Method
Cork Stoppers	897.875	73%	DCF
Floor&Wall Coverings	136.267	11%	DCF
Composite Cork	81.953	7%	DCF
Insulation Cork	29.911	2%	DCF
Raw Materials	178.165	14%	DCF
Holding	-93.671	-8%	DCF
Property Investments	7.460	1%	Book Value
Total EV adjusted	1.237.961		
(-) YE13 Net Debt	-181.751		
(-) Provisions	-21.038		Income tax+ Guarantees+ Others(BV)
(-) Derivatives	-26.774		Foward and Option contracts (BV)
(-) Minorities	-15.026		
(+) Treasury Stocks	7.169		
(+) Financial Investments	8.018		Equity Companies (BV)
(-) Dividend Payment	-18.161		
Equity Value	990.397		
# Shares (thousand)	126.240		
YE13 Fair Value (€)	7,85		
Small Cap. Discount	10%		
YE13 Price Target (€)	7,06		

Fig. 24 – Equity Valuation of Corticeira Amorim

11. Relative Valuation

Although many authors consider DCF as the best valuation approach, it is very useful to use in valuations an alternative approach to test the consistency of the estimates. DCF method might be subject to possible misvaluations related to cost of capital, reinvestment needs and growth rates estimates. In this sense, relative valuation is considered to be a good complement to the DCF approach in order to test the consistency of values obtained by this method. The relative valuation is based on the comparison of the evaluated company's performance multiples with comparable companies of the same industry. The objective is to estimate a price range of values using two multiples in order to test the plausibility of the price per share obtained using the DCF approach.

The two chosen multiples are the Price/Earnings ratio (PER) which is an equity-based multiple and the EV/EBITDA ratio which is an enterprise value multiple. The PER is pretty useful to compare different

growth expectations of companies in the same industry whereas the EV/EBITDA is very simple to use once it is not dependent on different capital structures of the companies. Both multiples are based on the inter-relation between growth, cost of capital and return on invested capital. Therefore, the criteria to select comparable companies of the industry for Corticeira Amorim peer group is based on three topics: growth, profitability and management effectiveness. The chosen companies have similar ratios at least, in two of the three mentioned topics. The different ratios used in each topic are:

1. GROWTH (%)	Sales Gr (TTM)	Sales Gr (5YR)		
2. PROFITABILITY (%)	EBITDA Mrgn (TTM)	EBITDA Mrgn (5YR)	Net Profit mrgn (TTM)	Net Profit mrgn (5YR)
3. MANAGEMENT EFFECTIVENESS (%)	ROIC (TTM)	ROIC (5YR)	ROE (TTM)	ROE (5YR)

Fig.25 – Ratios used to select comparable companies of Corticeira Amorim peer group

The fundamentals used in the Relative Valuation to select the companies for Corticeira Amorim peer group are detailed in **Appendix 14**.

Since Corticeira Amorim has a wide diversity of business activities, it is difficult to define clearly which industry the company belongs to. Therefore, the chosen companies were selected from the Wood Building Products Industry pool according to *Bloomberg* and *Reuters*. Hence, the selected companies for the peer group are the following:

RELATIVE VALUATION		
Selected Companies	EV/EBITDA 2013	P/E ratio (TTM)
CORTICEIRA AMORIM SA (Bloomberg estimate)	N.A.	8,00
EUCATEX SA INDUSTRIA-PREF	2,60	5,85
VANACHAI GROUP PUB CO LTD	9,89	44,72
GREENPLY INDUSTRIES LTD	6,09	9,83
MASISA SA	8,06	10,32
WESTERN FOREST PRODUCTS INC	11,75	13,00
NORBORD INC	6,77	10,53
LEUCADIA NATIONAL CORP	8,23	10,61
OENEO	5,38	16,00
Peer Group Average	6,72	14,32
Corticeira Amorim Price per Share (€)	4,48	3,52
EPS 2013 (est.) of Corticeira Amorim		0,25
EBITDA 2013 (est.) of Corticeira Amorim	84.212	

Fig. 26 – Equity Valuation of Corticeira Amorim

Source: Bloomberg and Reuters

According to the relative valuation performed by the PER and EV/EBITDA multiples, the price range of Corticeira Amorim shares vary from 3,52 € to 4,48 €. Although the estimated price per share in the DCF approach is not in this range of values (7,06 €), these range of prices clearly reflect the upward trend

of Corticeira Amorim price per share in 2013 in relation to the current market price. Both DCF and relative valuation estimates point out to a potential upside of the price per share of Corticeira Amorim in relation to the current price of 2€ (approximately). Although the PER of Corticeira Amorim is undervalued in relation to the peer group's (8 vs. 14,32), this higher PER may represent optimistic perspectives regarding the industry growth in the future. This is a potential indicator of the expected target price per share increase of Corticeira Amorim in 2013.

12. Sensitivity Analysis

Equity Valuation results rely on different assumptions in an attempt to translate the reality of the company depending on exogenous and endogenous factors. All the fundamentals behind the estimates of equity value and price per share are based on mere assumptions which may not correspond to reality. In this sense, the sensitivity analysis is very useful to understand how different assumptions affect the price per share of Corticeira Amorim and respective investment recommendations. The two presented sensitivity analyzes help to understand how variations in different variables of the FCF model affect the valuation results. Both analyzes are explained in detail in **Appendix 15**.

		Growth in perpetuity (g)								
Price per Share (€)		0,0%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%	3,5%	4,0%
WACC	2,92%	8,86	10,63	13,32	17,91	27,48	59,84	-312,33	-42,83	-22,86
	3,92%	5,96	6,79	7,91	9,48	11,88	15,96	24,48	53,29	-278,01
	4,92%	4,31	4,76	5,34	6,08	7,06	8,48	10,62	14,27	21,87
	5,92%	3,26	3,54	3,87	4,28	4,79	5,46	6,35	7,61	9,52
	6,92%	2,55	2,73	2,94	3,19	3,49	3,85	4,32	4,91	5,71
	7,92%	2,04	2,16	2,30	2,47	2,65	2,88	3,15	3,48	3,89
	8,92%	1,67	1,75	1,85	1,96	2,09	2,23	2,40	2,61	2,85
	9,92%	1,38	1,44	1,51	1,56	1,68	1,78	1,89	2,03	2,18
	10,92%	1,16	1,20	1,26	1,31	1,38	1,45	1,53	1,62	1,72

Fig. 27 – Sensitivity Analysis of Corticeira Amorim Valuation

Scenarios		Price per Share (€)
Bull Case	2% COGS decrease	9,04
	3% CAPEX decrease	8,44
	2% Revenue increase in Cork Stoppers BU	7,52
	3% NWC decrease	7,3
Dissertation		7,06
Bear Case	3% CAPEX increase	7,01
	(-3%) Revenue growth in Cork Stoppers BU	4,58
	3% COGS increase	4,18
	(-3%) Revenue growth	2,55

Fig. 28 – Sensitivity Analysis of Corticeira Amorim Valuation

13. Dissertation vs. Investment Bank (BPI) Analysis

The portuguese bank BPI is the only investment bank that provides detailed investment reports of Corticeira Amorim. In this sense, it is important to compare the assumptions used in both analyzes to understand the reasons behind each investment recommendation. From the comparison between the

	BPI	Dissertation
Cork Stoppers	242.000	897.875
Floor&Wall Coverings	76.000	136.267
Composite Cork	46.000	81.953
Insulation Cork	10.000	29.911
Raw Materials	25.000	178.165
Holding	n.a	93.671
Property Investments	n.a	7.460
Total EV adjusted	399.000	1.237.961
YE13 Net Debt	170.000	181.751
Financial Investments	17.000	8.018
Dividend Payment	12.000	18.161
Equity Value	246.000	990.397
YE13 Price Target (€)	1,76	7,06
WACC	10,9%	4,92%

key performance indicators of BPI and this dissertation, it is evident that the dissertation estimates are more optimistic than the ones presented by BPI. The major differences are related to revenue and WACC estimates, as well as the forecast length period used in both valuations. A detailed comparison between both analyzes is presented in **Appendix 16**.

Fig. 1 – Key Indicators Comparison (Thousand €)

BPI	2010	2011	2012	2013	2014	2015
Revenues	457	495	530	553	573	590
EBITDA	66	72	79	78	78	77
EBITDA margin	14,4%	14,6%	14,9%	14,2%	13,6%	13,0%
EBIT	40	46	54	56	55	54
EBIT margin	8,8%	9,2%	10,2%	10,1%	9,6%	9,2%
CAPEX	11	22	33	18	18	18
CAPEX (% Revenues)	2,4%	4,4%	6,2%	3,3%	3,1%	3,1%
NWC	186	225	237	247	254	260
NWC (% Revenues)	40,7%	45,5%	44,7%	44,7%	44,3%	44,1%
EPS (€)	0,15	0,19	0,25	0,25	0,25	0,25
Dividends	0	13	21	12	12	13

Fig. 2 – BPI Key Performance Indicators (€ Mn)

Dissertation	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	456.790	494.842	534.240	570.206	609.310	642.068	675.004	701.062	722.226	741.300	760.896	781.027	801.709
EBITDA	66.006	72.437	82.465	84.212	89.987	94.825	99.689	103.538	106.663	109.480	112.374	115.348	118.402
EBITDA mrg	14,4%	14,6%	15,4%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%
EBIT	45.139	51.378	61.259	59.544	64.804	69.116	73.443	76.742	79.306	81.549	83.857	86.231	88.673
EBIT mrg	9,9%	10,4%	11,5%	10,4%	10,6%	10,8%	10,9%	10,9%	11,0%	11,0%	11,0%	11,0%	11,1%
CAPEX	16.684	13.494	21.373	39.536	29.533	30.155	30.790	31.439	32.103	32.780	33.473	34.181	34.905
CAPEX (% Revenues)	3,7%	2,7%	4,0%	6,9%	4,8%	4,7%	4,6%	4,5%	4,4%	4,4%	4,4%	4,4%	4,4%
NWC	185.694	225.174	244.415	263.408	281.472	296.605	311.820	323.858	333.634	342.446	351.498	360.797	370.351
NWC (% Revenues)	40,7%	45,5%	45,8%	46,2%	46,2%	46,2%	46,2%	46,2%	46,2%	46,2%	46,2%	46,2%	46,2%
EPS (€)	0,16	0,20	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25
Dividends	0	13.300	21.280	19.138	20.970	27.697	29.824	33.681	35.023	36.239	37.518	38.836	40.194
ROIC	15%	7%	5%	8%	11%	9%	9%	8%	9%	9%	9%	10%	10%

Fig. 3 – Corticeira Amorim Key Performance Indicators (Thousand €)

14. Conclusion

The goal of this dissertation is to evaluate Corticeira Amorim, the world's leading player in the cork industry and one of the most international Portuguese companies. The discussion of different valuation theories on the Literature Review, highlight the importance of understanding the most appropriate methodology to perform a valuation considering the characteristics of the evaluated company. The choice of the valuation methodology is determinant to the final outcome of the valuation. Considering the steady capital structure of Corticeira Amorim, the most suitable approach is the DCF method to value the company.

When performing the DCF method, the obtained price target of Corticeira Amorim was 7,06 €. According the performed valuation, this estimated price target represents the very optimistic perspectives of Corticeira Amorim global business and a desirable investment target for the markets. Despite the recent financial and economic crisis, Corticeira Amorim has been one of the fastest-growing and diversified companies on the Portuguese market. The recent core strategy based on cost-cutting measures and increasing position in higher value-added segments combined with the declining competition of alternative related products, have been the key success factors for the sustained growth over the past few years.

Also the range of results given by the Relative Valuation, point out to a potential strong upside of the price target in 2013. The obtained results reflect the high growing perspectives of the Wood Building Industry. The inconsistency of results between the two performed valuations might be related with the specificity of Corticeira Amorim business and industry, which can especially bias the results obtained from the multiples valuation.

However, Corticeira Amorim still has to face some upcoming challenges in the future regarding the higher price pressure on Raw Materials and the US market slowdown, one of the most important wine markets in the world. Nonetheless, it is expected that the outlined strategy will cover up these side effects of the world economic crisis.

In a nutshell, the investment recommendation is to "BUY". Despite the current economic context and lack of visibility, Corticeira Amorim continues to represent a very attractive investment based on its wide diversification and fast-growing perspectives.

Appendix 1: Literature Review – Alternative Valuation Methods

1.1. Discount Cash Flow Models

1.1.1. Dividend Discount Model

The Dividend Discount model also represents a methodology used in discounted cash flow valuations. In this particular discounted cash flow methodology, dividends are considered to be the only cash flows to equity. According to Mullins (1982), “the Dividend Discount model consists in estimating a company’s stock price by discounting the expected future dividends per share at the company’s cost of equity capital”. The underlying assumptions of the model are related to the expected future growth rates in earnings and payout ratios, in order to estimate the expected dividends (Damodaran, 2006). The cost of equity is usually determined by the market beta of CAPM, already discussed.

The simplest version of the Dividend Discount model (DDM) is based on the Gordon growth model, intended for stable-growth companies with steady dividend payout ratios (Damodaran, 2006). Therefore, this model is not appropriate to value *Corticeira Amorim SGPS SA* since its recent historical payout ratio contradicts one of the requirements demanded by the model. Despite its unsuitability for evaluating *Corticeira Amorim SGPS SA*, the DDM is extremely useful for evaluating companies that fit into the model’s requirements.

According to Damodaran (2006), there are three scenarios where the use of DDM is very effective: in companies with cash flows to equity exceeding dividends, assuming that cash not distributed is wasted in several investments and acquisitions, in companies that pay out all their free cash flow to equity in dividends or in sectors where the cash flow estimation is really difficult, where only dividends can be estimated. The author argues that “the DDM presents some advantages in relation to other discounted cash flow methods, especially due to its simplicity and fewer forecast assumptions needed regarding FCF models, namely CAPEX, depreciation and working capital”.

On the other hand, the narrow model focuses on dividends calls forth several critics regarding its inflexibility in valuing companies with unsteady growth rates and dividend payments. One critic derives from the underlying assumption of DDM that all free cash flows to equity are assumed to be paid out in dividends to the stockholders (Damodaran, 2006). According to Damodaran, the problem is that most companies often choose not to distribute the totality of their free cash flows in dividends and

sometimes their dividend payment exceeds the available free cash flow, enabled by new bet and equity issues. Damodaran (2006) argues that in both situations, the DDM will misvalue the company. Notwithstanding, the same author presents possible complex extensions of the model in order to capture cash build-up values and values derived from capital structure changes. The other major critic of the model relates to the narrow applicability of the DDM to companies with unstable dividend patterns and high growth rates (Mullins, 1982). According to Mullins (1982), the assumption of a constant, perpetual growth rate in dividends per share, which cannot be higher than the company's cost of equity, constrains the model applicability. Alternative extensions of the model have been tested, like multiple stage-growth models, still proving to be limited in addressing this problem properly (Damodaran, 2006).

Regarding the ability of the model in explaining different stock prices across time and its relation with dividends, Shiller (1981) argues that market prices are much more volatile than dividends to be explained by them. Fama and French (1988) defend that dividend yields are much more volatile than dividends whereas Foerster and Sapp (2005) consider that the Dividend Discount model works "reasonably" in explaining aggregate market variations.

1.1.2. Free Cash Flow to Equity (FCFE) Model

The Free Cash Flow to Equity model is an extension of the generic Dividend Discount model. The model's major breakthrough regarding the dividend discount approach is the assumption that equity ownership claims are valued by discounting the potential dividends rather than actual dividends, as it was suggested in the traditional model. As Damodaran (2006) states, "the FCFE model represents a measure that captures the cash flow left over after all reinvestment needs and debt payments". It is considered a very useful method to value the different ownership claims of a company and to understand how changes in ownership structures impact cash flow and risk, in each period, for equity holders (Luherman, 1997). The FCFE formula is given by:

$$\text{FCFE} = \text{Net Income} + (\text{Depreciation} - \text{CAPEX}) - \Delta \text{ Non-Cash Working Capital} - (\text{Debt repayments} - \text{New Debt Issued})$$

The model has two intrinsic assumptions (Damodaran, 2006): firstly, the company has strong corporate governance and distributes all the available free cash flows to stockholders, restricting potential cash build-ups in the company. Secondly, the expected growth in free cash flows includes

exclusively the growth from operating assets and it has to be less or equal to the expected nominal growth rate in the economy where the company operates. Likewise the FCFF, also the FCFE model is preferably designated to value companies in a steady state, with stable capital structures. The generic version of the FCFE, assumes a constant growth similar to the Gordon growth model used in the FCFF model (Damodaran, 2006):

$$\text{Price of stock (0)} = \frac{\text{Expected FCFE(1)}}{\text{Ke} - \text{g}}$$

Where the cost of equity Ke is the cost of equity, usually determined by the CAPM model and FCFE₁ is the free cash flow to equity in the next period. Damodaran (2002) also explored extensions of the model for “multi-stages of growth” companies arguing that the model is appropriate for high growing companies, since it captures the dilution effect of equity issue funding.

Being an extension of the Dividend Discount model, the FCFE models does not always reflect the same results given by the traditional DDM. Most of the times, the FCFE value is superior to the DDM value, reflecting the value of controlling the firm’s dividend policy (Damodaran, 2006).

Other alternative approach to value the equity claims of the firm, already mentioned, is “to value the entire business of the company with the WACC-based DCF and then subtract the value of any debt claims and other equity minority interests” (Luherman, 1997). Theoretically, if the assumptions about financial leverage are consistent in both models, the values obtained will be same regardless the used model (**Fig.1**). Damodaran (2006) highlights the main advantage of using the FCFF in relation to the FCFE model, especially in cases where the financial leverage is predicted to change across time. According to the author, the fact that FCFF are pre-debt cash flows makes the WACC-based approach simpler to use since it does not have to consider specifically cash flows relating to debt.

Notwithstanding, the FCFE seems to be an appropriate model to value *Corticeira Amorim SGPS SA* under the constant growth model approach.

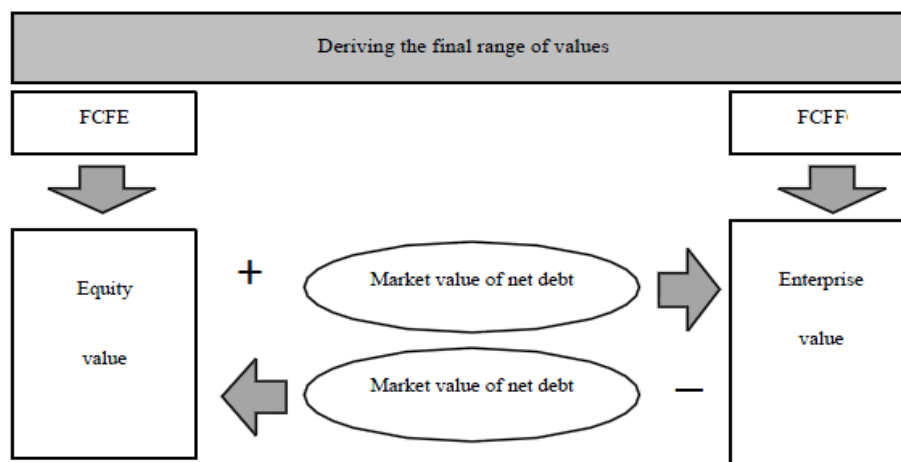


Fig.1 - The conversion of valuation results using either FCFE or FCFF approach

Source: Janiszewski S. 2011

1.1.3. Adjusted Present Value (APV) Model

The Adjusted Present Value model represents an alternative DCF methodology to the WACC-based approach, especially useful to value companies with complex capital structures or expected to have significant capital structure fluctuations over time. Unlike the WACC-based approach that requires a constant capital structure over time to work reasonably, many authors consider the APV model the best approach to handle with problems that might be created by companies with complex and unsteady capital structures. Other of the main differences regarding the WACC-based approach, is that the APV model estimates the expected value of debt financing separately from the value of the operating assets and then add up their present values (Damodaran, 2006).

As Myers (1974) states, “the APV approach focus on two main categories of cash flows: the real cash flows such as revenues, cash operating costs and CAPEX associated with the business operations; and the side effects of its financing activities, such as the values of interest tax shield, subsidized financing, issue costs and hedges”. This particular feature of the model, “not only helps to determine the value of operating assets such as businesses, products or market positions, but also to understand where the value of those assets comes from” (Luherman, 1997). These two categories of cash flows referred by Myers are expressed in the APV formula:

$$\text{Value of the Firm} = V_u + PV_{tx} + PV_{bc}$$

Where the first component represents the value of the unlevered firm, i.e. the value related to business operations whereas the other two are related with the company debt financing, the present

value of interest tax shields and bankruptcy costs. Therefore, the value of the firm can be estimated in three steps. The first one is to calculate the value of the business as if it was 100% equity financed, in order to separate the operating from the financing part. Thus, the value of the unlevered firm is equal to the expected cash flows discounted at the unlevered cost of equity. In case of constant growth in perpetuity, “the current after-operating cash flows should be discount at the unlevered cost of capital assuming the constant growth rate” (Damodaran, 2006).

The second step consists in the evaluation of the tax benefits derived from the level of corporate leverage, the interest tax shields. The simplified formula of the present value of interest tax shields is equal to the tax rate times the debt level. However, this simplification arises some issues from some authors about the most correct discount rate to be used. Fernandez (2004) and Luherman (1997) suggest that the discount rate should be higher than the average cost of debt in order to compensate potential tax shield fluctuations. On the other hand, Cooper and Nyborg (2006) defend that the appropriate discount rate is the cost of debt, despite possible tax rate and debt level variations over the years.

Finally, the last step is to calculate the present value of the expected bankruptcy costs. This component of the total firm value represents the financial distress costs associated to the level of corporate leverage, depending on the probability of the company to go bankrupt. The difficulty to estimate these types of cost represent in fact, one of the major drawbacks of the APV model, since neither the bankruptcy costs nor the probability of bankruptcy can be directly estimated (Damodaran, 2006). According to the author, probabilities of bankruptcy are usually estimated through bond ratings or statistical scenarios whereas bankruptcy costs are estimated through previous study researches, which may lead to significant estimation errors. In fact, these costs are ignored most of the time in the APV analysis, representing one of the model’s drawbacks.

1.1.3.1. APV model vs. FCF model

The discussion about which is the most appropriate approach to evaluate companies is one of the most debated issues in corporate finance. The cost of capital and APV are usually in the two approaches in the center of the debate given the capacity both have in addressing the three fundamental valuation factors – cash flows, timing and risk – in their respective analysis.

The cost of capital approach continues to be the standard valuation practice used by most companies to value their corporate assets due to its simplicity and intuitiveness. The simplicity of this particular DCF approach is expressed in the risk used, which is supposed to be a tax-adjustment discount rate, intended to handle the financial side effects from debt financing. Although it is seen by many as the best valuation approach, the WACC is only suitable for companies with simple and stable capital structures (Luherman, 1997). Although it might be questionable for many critics, the WACC-based DCF model presumes a fixed capital structure and constant WACC, under the principle that managers aim for specific target weights in their capital structures, in order to minimize costs and maximize the enterprise value – the trade-off theory.

In cases where companies are expected to have significant capital structure fluctuations over time, the use of WACC might be more complex, since the cost of capital is predicted to change each year reflecting the capital structure at the time (Koller et al, 2005). The costs of debt and equity have to be recalculated each year according to changes in default risks and betas, which makes the cost of capital approach impractical and susceptible to perform misvaluation estimates in these situations.

Other critic of the model is the incoherence market-value debt ratios sometimes have when computing the cost of capital. According to Luherman (1997), the model assumes the use of market-debt ratios which in turn, are commonly estimated through book values. The problem occurs in situations where the estimated market value debt ratios do not correspond to the reality, since the true market values are also subject to change every year. Also the single adjusted-for-everything discount rate of the model is criticized for being too generic to account for all the business related risks. Hereupon, using the model might estimate fallacious values, especially in the situations described above.

Given the problems the cost of capital approach has in performing reliable estimations for companies with unsteady and complex capital structures, some authors present the APV approach as the best valuation practice. According to Koller et al (2005) and Luherman (1997), the APV is the best approach to value these types of companies. The more complex are the funding strategies and capital structures of the companies being valued, the more likely is for the APV to outperform the cost of capital approach (Luherman, 1997). The major advantage APV in relation to the WACC approach is the fact that it not only helps to calculate the value of the assets but also to identify where the value is coming from. In companies with significant capital structure fluctuations, the APV approach proves to be very

useful, since it handles separately all financing side effects of financial maneuvers from operational cash flows and then add them back up. However, there is some disagreement regarding which should be the discount rate to compute the present value of interest tax shields. Luherman (1997) defend the use of the cost of debt as discount rate, under the theory that “tax shields are about as uncertain as principal and interest payments”. On the other hand, Ruback (2000) defends the use of the unlevered cost of equity to discount interest tax shields, when dollar debt changes are expectable over time. The latter argument is based on a variation of the conventional APV, which assumes that tax benefits are discounted back at the unlevered cost of equity because “it is easier to reflect the effect of changing leverage in cash flows than it is in debt ratios” (Kaplan and Ruback, 1995).

Damodaran (2006) refers other limitation of the model, regarding the bankruptcy costs. According to these alternative APV variant, these costs are ignored leading to the unrealistic assumption that companies always worth more with higher debt. Also potential overestimation of cash flows from using different taxation for income stocks is a problem barely handled by the model (Luherman, 1997).

Although the conventional APV and the cost of capital approach have distinctive assumptions and suitability according to the company being valued, some authors (Inselbag and Kaufold, 1997) argue that the alternative APV approach is identical to the WACC approach when the dollar debt increase allows for a constant debt ratio. The same authors proved that similar results can be obtained by inferring the cost of equity for APV to use in the WACC approach.

In a nutshell, the main decision criteria of which of both approaches to use in a valuation, should be the type of funding strategy of the company and how complex it is. Although the APV approach proves to be fairly appropriate in cases of cross-border valuation like the *Corticeira Amorim SGPS SA*'s case, it will not be used due to the lack of information. The only available balance sheets and income statements are the consolidated ones, being impossible to make an extensive valuation by geographical areas of business.

1.1.4. Excess Return Models

The excess return models are variations to the models present in the DCF approach. The purpose of excess return models is to measure the value of business taking in consideration the earned excess returns over the required rate of return, either the cost of capital or equity (Damodaran, 2006). Thus,

Damodaran (2006) presents the value of business “as the invested capital today plus the present value of excess return cash flows from both existing and future projects” assuming that the book value of capital is a consistent proxy for the invested capital today.

The most common used excess return model is the Economic Value Added (EVA), which basically measures the “extra” value generated by one or more investments. The EVA formula is a function of three variables: the invested capital today and the difference between the return on that invested capital (ROIC) and the cost of capital, which represents the earned excess return over the minimum required rate:

$$\text{EVA} = \text{Invested Capital today} * (\text{ROIC} - \text{WACC})$$

As Damodaran (2006) refers, the EVA is simply an extension of the net present value. The author states that “the net present value is no more than the economic value added discounted back at the cost of capital over the company/project valuation life horizon”. Hence, the firm value can be given by the sum of three components: the capital invested in assets-in-place, the NPV of those assets and the sum of NPV’s from future projects.

Given that the variables of EVA are estimated under similar assumptions of those used in common DCF valuations, especially reinvestment and growth adjustments, many authors argue both approaches ought to perform identical results. According to authors like Fernandez (2002) and Hartman (2000), if those input assumptions are made consistently, both valuation approaches should yield very similar values.

Damodaran argues that the major insight of excess return models in relation to DCF valuation approaches is the “link” between reinvestment and growth (Damodaran, 2006). According to Damodaran, these models help managers to understand the importance of reinvesting funds in order to generate growth and the dynamics of this relationship. On the other hand since these models share the same inputs of DCF models, it is logical they suffer from the same limitations related to difficulties in estimating market values. Other limitation of this approach is the lack of information its analysis gives in terms of specific areas/components of the business. Despite being a useful measure, excess return models should be used as complements to DCF valuation analysis.

1.2. Asset Based Valuation

The Asset Based Valuation approach consists in valuing the business of a company based on the assets in place, estimating their value separately. According to Damodaran (2006), this type of valuation approach is not suitable for companies with high growth perspectives and future investment opportunities. Bearing in mind *Corticeira Amorim SGPS SA*, the biggest world producer of cork products with operations in all continents, with a large diversity of projects on the horizon and high growth perspectives, it is natural that this type of valuation approach is not the most appropriate for the company. The problem in this case, is reflected on the growth assets' expected value that will be generated by future investments, value that is not captured by the Asset Based Valuation approach.

The primary focus in an asset-based valuation method are the assets in place of the company, traduced in the cash flows generated by the existing investments, the investments already made (Damodaran, 2006). Therefore, the right valuation to do for a company like *Corticeira Amorim SGPS SA* is a going concern valuation, taking in consideration not only the value of the assets in place but also their underlying expected value generated by future investment opportunities. Unlike the Asset Based Valuation, the Discounted Cash Flow models are good examples of valuation tools tailored for this type of companies, valuing the assets according to their present and expected cash flows.

Among the most commonly used models in the Asset Based Valuation approach the **Book Value Based** and the **Liquidation Value** methods are the most relevant. In the context of the company business value, the Book Value Based method encompasses the book value of the assets (Damodaran, 2006) and sometimes the book equity values and its excess expected returns (Ohlson and Feltham, 1995 and Ohlson, 1995). According to Damodaran (2006), the book value is not a reasonable proxy for the true value of a business in firms with significant growth opportunities in businesses where they can generate excess returns.

Other authors like Lang, Stulz and Walking (1989) defended the use of the book value method as a proxy for the replacement cost of the company assets and not the their true value. In the Liquidation Value method, the value of the company business is expressed in the current value of the assets in case they are liquidated in the market today. The theory states that this liquidation value should have the same value estimated by the discounted cash flow methods. The problem is that sometimes, the urgency associated to the asset selling may cause a discount on this exact same value, depending on

the number of potential buyers, asset characteristics and the state of the economy (Damodaran, 2006). Once again, this is not a tailored method to estimate the value of healthy, growing firms (Damodaran, 2006), such as *Corticeira Amorim SGPS SA*.

1.3. Contingent Claim Valuation - Options Theory

The objective of this method consists in valuing investment opportunities companies may have in real markets, based on the application of real options, an adjusted model of financial options. In the context of day to day business (resource-allocation) decisions companies have to make, this method represents an useful strategic tool for managers in the sense that “it helps them to make sensible investment choices by considering the value of keeping their options open” (Dixit and Pindyck, 1995).

In this specific method, the traditional financial option-pricing models are adjusted to real-options valuation models of corporate assets and investments opportunities, as Leslie and Michaels (1997) explain. According to both authors, “real options suggest that the thinking behind financial options may be extended to opportunities in real markets that offer, for a fixed cost, the right to realize future payoffs in return for further fixed investments, but without imposing any obligation to invest”. In fact, every business opportunity can be analogous to an option because there are always underlying cash flows associated to the decision the company takes, whatever the decision is. The advantage of this valuation approach is that it captures the contingent nature of business opportunities, like investments in R&D or marketing expenditures, especially in companies in fast-growing markets with valuable opportunities prospects (Luherman, 1997). Usually, the two used models in Contingent Claim Valuation are the Black-Scholes and the Binomial model.

In parallel with the financial option-pricing definition, the real-options valuation foresees that a company as the right, not the obligation, to invest (call option) or to divest (put option) in an underlying asset for a fixed price, at or before the maturity date of the option. Under the real-option valuation paradigm defended by authors like Leslie and Michaels (1997), the Contingent Claim approach encompasses six variables that have direct impact on the option value:

- The present value of expected cash flows, representing the value of the underlying asset (equivalent to stock price in financial options)

- The uncertainty of future expected cash flows, regarding the future value of the underlying asset (equivalent to the risk in financial options)
- The option maturity, representing the period which the option can be exercised
- The present value of fixed costs, regarding the exercise price of the option
- The risk-free rate, which is the yield of a riskless security with the same maturity as the duration of the option
- The value lost over duration of the option, representing the value drained away over the duration of the option (equivalent to dividends in financial options)

The first four variables have a positive correlation with the option value, meaning that increments in these variables increase the value of the option. The last two variables have a negative correlation.

As mentioned before, this valuation approach has the advantage of capturing the value of opportunities reflected in the firm's growth assets. Leslie and Michaels (1997) argue that standard valuation methods like the DCF, do not take into account the value of flexibility within the business context of the company, creating a static picture of existing investments and opportunities. Luherman (1997) also defends the use of this approach in valuing investment opportunities due to the capacity of the model in capturing the potential value derived from the firm's technological progress and the long-lived opportunities in volatile business environments it may have.

Although it overcomes some of the problems associated with uncertainty better than the DCF-based approaches, there are critics regarding the unsuitability of this approach to the real business context. The application of the financial option theory to real corporate problems is not always simple, given the difficulties managers have sometimes in identifying a simple correspondence between project characteristics and option characteristics (Luherman, 1997). According to Luherman (1997), "real businesses are much more complicated than simple puts and calls", this reflects the major shortcoming of the Contingent Claim approach. Some relevant variables inherent to the competitors' dynamics and other uncertainties are not addressed by this methodology, which may result sometimes in an incomplete valuation analysis.

The analogy between corporate investment opportunities and real options is the ultimate challenge of managers when using this specific approach. Luherman (1997) proposes the use of this approach as a

supplement, not a replacement, for the valuation methodology traditionally used, in the sense that it may provide an extra insight to the decision criteria when using DCF analyses, for example.

In the case of *Corticeira Amorim SGPS SA* valuation, the use of this approach turns to be impractical when looking to the company profile. Being the world's biggest cork producer and one of the most international Portuguese companies, the company has innumerable projects in-hands and future projects in perspective along with its business units and subsidiaries. This traduces a vast number of variables and factors that need to be included in the model, implying the use of complex mathematical computations and sophisticated models, frequently handled by specific software.

1.4. Valuation in Emerging Markets

When performing valuations in emerging markets, it is vital for managers to understand how macroeconomic, political or social factors might influence their forecast assumptions, risk adjustments and ultimately, the value of companies. There is no general consensus among the financial academia about which is the best approach to account properly the level of risk companies operating in emerging markets are exposed to.

According to Koller (2000), DCF analysis together with probability-weighted scenarios is the best model to account for the extra level of risk most of the emerging markets entail. High levels of inflation, macroeconomic volatility, political changes, wars, corruption and capital controls are some of the examples Koller (2000) refers as causes of higher expected risks in these markets. An international company like *Corticeira Amorim SGPS SA*, operating globally and present in several emerging markets like Tunisia, Brazil or Argentina, is a great example of the influence these factors have in its future prospects, strategies and ultimately, the value of its assets.

The same author argues that valuations based on the DCF approach “there are two options to incorporating the additional risks of emerging markets: either directly on cash flows or in extra risk premiums added to the discounted rate used to calculate future cash flows.” Koller (2000) recommends the first option as the best approach giving three main reasons. The first reason is the fact that diversifiable risk is better handled in the cash flows than in the discount rate, taking into account the CAPM which postulates that discount rates should only reflect nondiversifiable risk. Secondly, the fact that risks vary differently in these markets given the type of industry the company is

in, is not considered by the common approach of applying a specific country risk premium. Finally, situations where investments in certain companies are less risky than investing in government bonds, are not considered when applying the credit risk as a proxy for the real risk.

According to Koller (2000), the construction of macroeconomic scenarios followed by the alignment between the industry and economy where the company operates, represent the guidelines for managers to base their forecast assumptions on. Variables like inflation rates, GDP growth, interest rates and foreign-exchange rates must be considered and linked directly to the company cash flows. According to the author, “linking these variables and scenarios to corporate cash flows help managers to understand the influence specific risks have on the company operating, financial and investment items, and ultimately on its value”. Not only helps managers to understand the risks associated to these variables but also in developing strategic decisions in order to mitigate them (Koller, 2000).

On the other hand, Damodaran (2008) argues that adjusting the level of risk using country risk premiums is logical, “since diversifiable risk always exists in emerging markets because global markets are not totally correlated among them”. In this dissertation, the valuation of *Corticeira Amorim SGPS SA* will be done using the two approaches combined. Macroeconomic, political and social and specific-industry factors will support my cash flows forecast assumptions, combined with the discount rate adjusted for the different countries/areas where the company operates. A single market risk premium and discount rate will be used, based on the sales weight of each geographical area in the company consolidated sales.

1.5. Cross-Border Valuation

Nowadays, cross-border valuation is assuming an increasing relevant role in corporate business strategies. In an increasingly globalized world, cross-border investments, corporate acquisitions and mergers of foreign companies, extrapolate domestic markets to a single globalized marketplace. In this sense, cross-border valuation is becoming a significant part of firm valuation, helping managers and investors to identify global opportunities.

Although traditional valuation methodologies used in domestic markets can also be applicable to cross-border investments, Froot (1997) alerts to several issues needed to be considered in order to have reliable valuations. According to the author, “the choice of currency, discounted cash flow

timings, tax rates, costs of capital and different treatments for specific foreign risks, represent the major variables that will influence significantly the outcome of valuations". Froot (1997) recognizes conventional valuation methods like WACC or APV to be the best approaches in cross-border valuation depending on how stable long-term capital structures are. Under the DCF approach, Froot (1997) presents two possible methods to perform cross-border valuation, either discounting foreign-currency cash flows or discounting foreign currency cash flows converted to home currency in cases where exchange rate significant fluctuations are more likely to occur.

In the specific case of *Corticeira Amorim SGPS SA*, all the available financial data of the group is consolidated so the valuation estimates in this dissertation will be presented in euro-based currency. Although it is recommendable to apply specific country/region special adjustments directly into cash flows whenever is possible (Froot, 1997), they will be reflected mainly in the discount rate. The group's balance sheets and income statements are not discriminated by country/geographic area which does not facilitate using the first option. Instead, most cross-border adjustments will be considered in a single discount rate, incorporating the weighted market risk premiums of countries/areas where the company operates.

Appendix 2: History of Corticeira Amorim

Corticeira Amorim's activity began in 1870 by the hand of Amorim family in a small factory in Aveiro, Portugal. Initially, the family business activity consisted in the production of handmade Port Wine cork stoppers. In 1922, Amorim family founded the company *Amorim & Irmãos, Lda* which was responsible for the constitution of companies that represent *Corticeira Amorim SGPS SA* today.

The company continued to grow and by the early 1930's it was the biggest cork stopper factory in the north of Portugal. At that time, Portugal was already the world market leader in cork production but not in its transformation because most of the raw materials were processed in other countries. Bearing this in mind, *Corticeira Amorim Lda* outlined an industrial verticalisation strategy so that Portugal could also be worldwide leader in cork transformation. In the mid 1960's, the company started to diversify the uses and application of cork by widening its portfolio of companies, in order to have total control over downstream activities. In the following decade, the business began to diversify to geographical supply zones and presence in cork-producing countries with several acquisitions in companies situated in North Africa and Spain. The main objective was to reduce costs, having direct access to raw materials in cork-producing countries that allowed for integrated management of the value chain.

Meanwhile, Amorim family continued to expand the business abroad through several acquisitions, mainly in countries of Northern and Central Europe. The strong investment in countries like France or Spain reflected the expansion strategy of the company, intended to supply important wine and champagne markets with cork stoppers.

The early 1990's marked the redefinition of *Corticeira Amorim's* strategy once it had established a vertical integrated and international business, producing all cork derived products. The new strategy consisted in differentiation by quality and the focus on competencies in research and quality control. Over the next years, Amorim family continued to expand the company through several partnerships and acquisitions promoting research and development activities in order to reinforce its position worldwide. The beginning of the millennium represented a strong effort of *Corticeira Amorim* to associate its business to sustainable and ecofriendly practices. In 2007, the company announced a restructuration of the business according to the outlined strategy, creating three main divisions: Amorim Natural Cork (raw materials and cork stopper activities), Amorim Cork Composites (agglomerated cork technical applications – products and solutions) and Amorim Cork Research.

Appendix 3: Corticeira Amorim detailed business structure and International Presence

AMORIM NATURAL CORK		
MATÉRIAS-PRIMAS/ RAW MATERIALS	ROLHAS/ CORK STOPPERS	
Amorim Natural Cork, S.A.	Amorim & Irmãos, S.G.P.S., S.A.	
Aprovisionamento/Raw Materials	Produção/Production	Distribuição/Distribution
Amorim Natural Cork, S.A. Ponte de Sôr – PORTUGAL	Amorim & Irmãos, S.A. Santa Maria de Lamas – PORTUGAL	Amorim Distribuição Santa Maria de Lamas – PORTUGAL
Amorim Natural Cork, S.A. Coruche – PORTUGAL	Amorim & Irmãos, S.A. Paços de Brandão – PORTUGAL	Amorim Australasia Adelaide – AUSTRALIA
Amorim Natural Cork, S.A. Abrantes – PORTUGAL	Amorim & Irmãos, S.A. Vergada – PORTUGAL	Amorim Cork Italia, S.p.A. Conegliano – ITALY
Amorim Florestal España, S.L. Algeciras – SPAIN	Amorim & Irmãos, S.A. Valada – PORTUGAL	Amorim Cork Deutschland, GmbH Bingen am Rhein – GERMANY
Amorim Florestal España, S.L. San Vicente de Alcántara – SPAIN	Amorim & Irmãos, S.A. – Rolhas de Champanhe Santa Maria de Lamas – PORTUGAL	Amorim Cork Bulgaria, EOOD Sofia – BULGARIA
Comatral – Compagnie Marocaine de Transformation du Liège, S.A. Skhirat – MOROCCO	Portocork Internacional, S.A. Santa Maria de Lamas – PORTUGAL	Amorim Cork America, Inc. Napa Valley, CA – USA
S.N.L. – Societé Nouvelle du Liège Tabarka – TUNISIA	Equipar, S.A. Coruche – PORTUGAL	Amorim France, S.A. Eysines, Bordeaux – FRANCE
F.L.T. – Societé Fabrique de Liège de Tabarka, S.A. Tabarka – TUNISIA	Francisco Oller, S.A. Girona – SPAIN	Victor & Amorim, S.L. Navarrete (La Rioja) – SPAIN
S.I.B.L. – S.A.R.L. Jijel – ALGERIA		Hungarokork Amorim, Rt. Veresegyház – HUNGARY
		Korken Schiesser, GmbH Wien – AUSTRIA
		Amorim Argentina, S.A. Buenos Aires – ARGENTINA
		Portocork America, Inc. Napa Valley, CA – USA
		Amorim Cork South Africa (PTY) Ltd. Cape Town – SOUTH AFRICA
		Industria Corchera, S.A. Santiago – CHILE
		Société Nouvelle des Bouchons Trescases, S.A. Le Boulon – FRANCE
		I.M. «Moldamorim», S.A. Chisinau – REPUBLIC OF MOLDOVA
		Amorim Cork Beijing, Ltd. Beijing – CHINA
		S.A. Oller et Cie Reims – FRANCE

AMORIM CORK COMPOSITES		
AGLOMERADOS COMPOSITOS/ COMPOSITE CORK	REVESTIMENTOS/ FLOOR & WALL COVERINGS	ISOLAMENTOS/ INSULATION CORK
Amorim Cork Composites, S.A.	Amorim Revestimentos, S.A.	
	Produção/Production	Distribuição/Distribution
Amorim Cork Composites, S.A. Mozelos – PORTUGAL	Amorim Revestimentos, S.A. S. Paio de Oleiros – PORTUGAL	Amorim Benelux B.V. Tholen – NETHERLANDS
Drauville Europe, S.L. San Vicente de Alcántara – SPAIN	Amorim Revestimentos, S.A. Lousosa – PORTUGAL	Amorim Deutschland GmbH & Co. KG Delmenhorst – GERMANY
Corticeira Amorim France, SAS Lavaurac – FRANCE		Amorim Flooring Austria GmbH Wien – AUSTRIA
Chinamate (Xi'an) Natural Products Co. Ltd. Xi'an – CHINA		Amorim Flooring Nordic A/S Copenhagen – DENMARK
Amorim Cork Composites, Inc. Trevor, WI – USA		Amorim Flooring (Switzerland) AG Zug – SWITZERLAND
Amorim Industrial Solutions I, S.A. Corroios – PORTUGAL		Amorim Revestimentos, S.A. Barcelona – SPAIN
Amorim (UK) Limited London – UNITED KINGDOM		Dom Korkowy, Sp. Zo.o Krakow – POLAND
Samorim Kinel, Samara – RUSSIA		Amorim Flooring North America Hanover, MD – USA
		Amorim Isolamentos, S.A. Mozelos – PORTUGAL
		Amorim Isolamentos, S.A. Silves – PORTUGAL
		Amorim Isolamentos, S.A. Vendas Novas – PORTUGAL

Fig. 1 – Corticeira Amorim consolidated EBITDA by BU

Source: Corticeira Amorim website

Appendix 4: Recent performance of Corticeira Amorim by Business Unit (BU)

EBITDA: BU contribution (thousand euros)

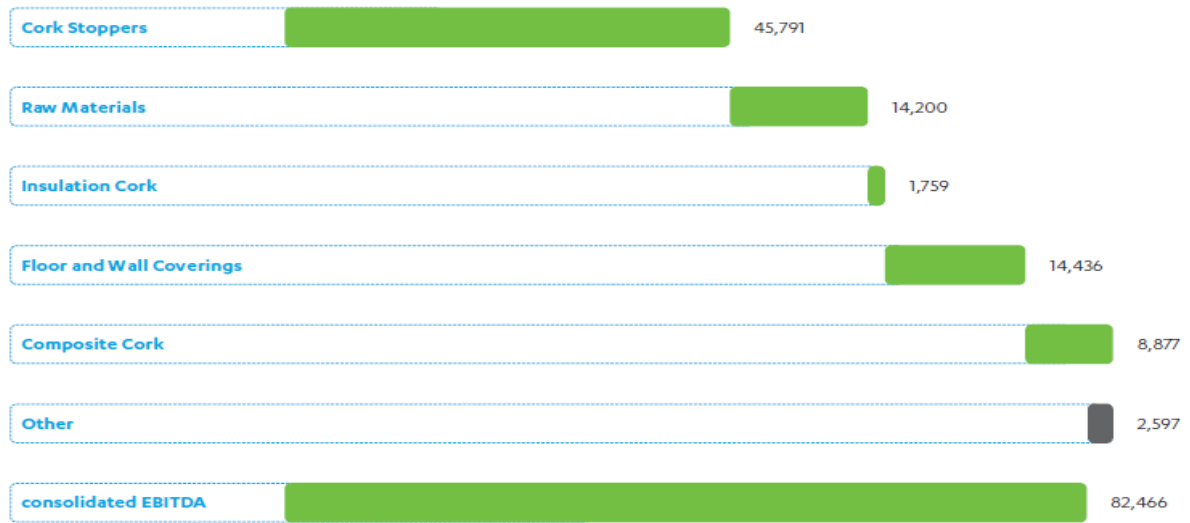


Fig. 1 – Consolidated EBITDA and Business Unit contribution

Source: Corticeira Amorim Annual Report 2012

Raw Materials — Sales & EBITDA (thousand euros)

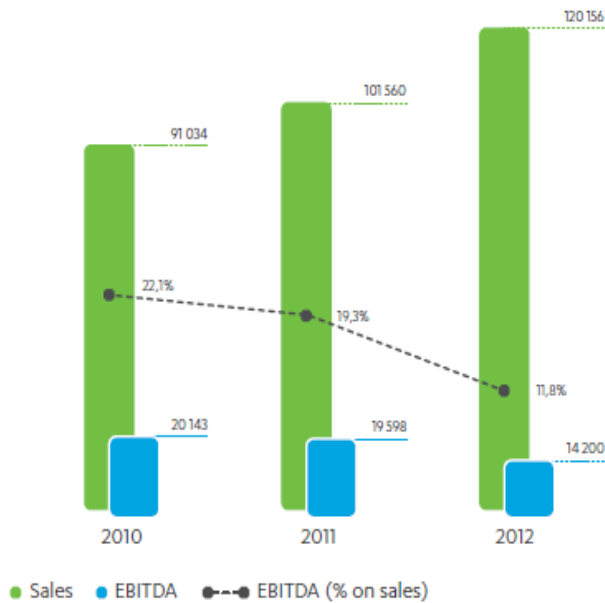


Fig. 2 – Raw Materials BU Sales & EBITDA
Source: Corticeira Amorim Annual Report 2012

Insulation Cork — Sales & EBITDA (thousand euros)

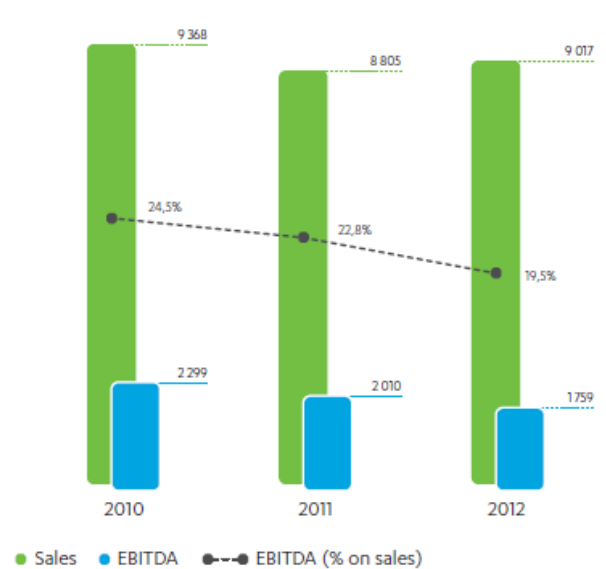


Fig. 3 – Insulation Cork BU Sales & EBITDA
Source: Corticeira Amorim Annual Report 2012

Floor and Wall Coverings — Sales & EBITDA (thousand euros)

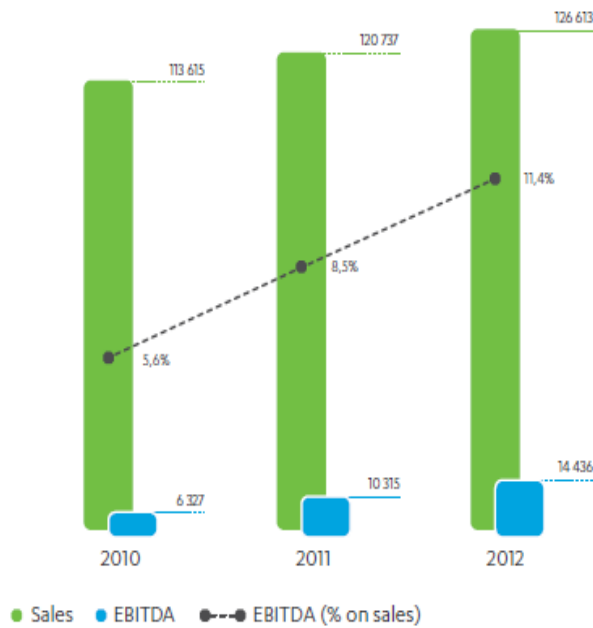


Fig.4 - Floor and Wall Coverings BU Sales & EBITDA

Source: Corticeira Amorim Annual Report 2012

Cork Stoppers — Sales & EBITDA (thousand euros)

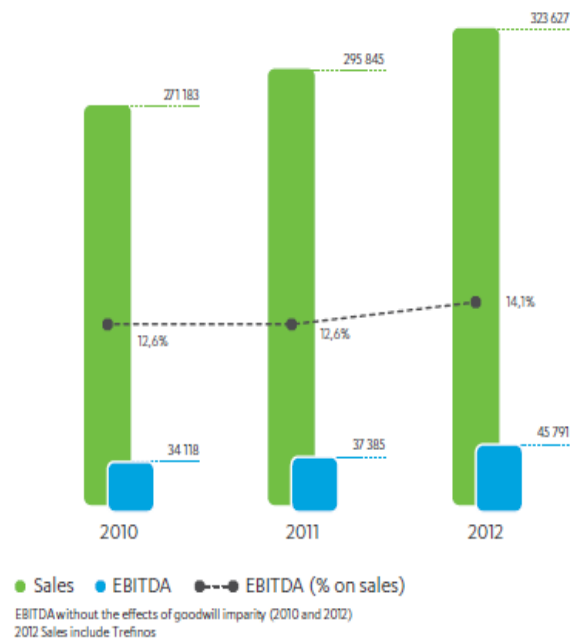


Fig. 5 – Cork Stoppers BU Sales & EBITDA

Source: Corticeira Amorim Annual Report 2012

Composite Cork — Sales & EBITDA (thousand euros)

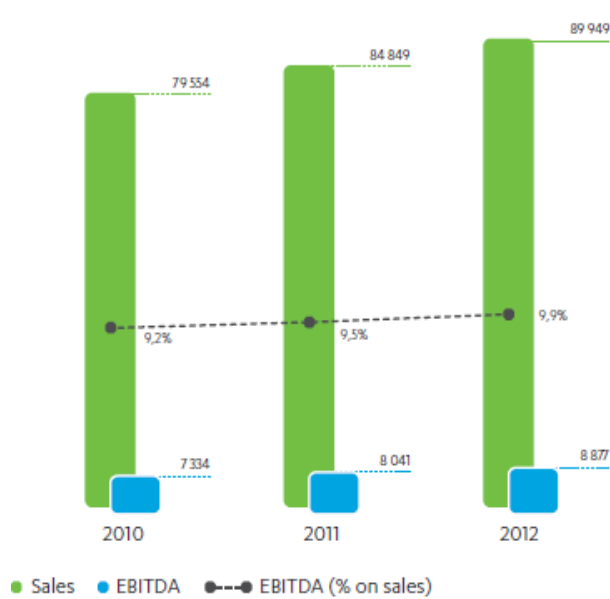


Fig. 6 – Composite Cork BU sales & EBITDA

Source: Corticeira Amorim Annual Report 2011

Appendix 5: Macroeconomic Framework

5.1. Global Overview

After a significant slowdown period between 2008 and 2009, coinciding with the beginning and escalation of the world economic crisis, the world economy has been in recovery since then at a moderate pace. The beginning of the *subprime* in the US market in 2007 triggered a global financial and economic crisis worsened by the European sovereign debt crisis which had its peak between 2008 and 2009. The Euro Zone sovereign debt crisis negative side effects quickly spread to other world markets, impacting several developing economies and other important world economies like the USA, Japan and China. This world economic crisis development was traduced in the global consumption and investment downfall, increased fear and distrust on financial markets and inflationary prices in commodity (crude oil especially) and equity markets.

Currently, the effects of the economic and financial crisis are still present in the world economy which has been recovering since the global market downturn in 2008. The Euro Zone continues to struggle with the sovereign debt problem in several countries like Portugal, hoping that the Economic and Financial Adjustment Programme (EFAP) applied to these countries has results in terms of indebtedness reduction and credit liquidity in the financial markets. In 2011, countries like Portugal, Greece, Ireland, Spain and Italy, saw their credit rating being downgraded by rating agencies, which clearly expresses the overall pessimistic panorama of financial markets. Also the US had its credit rating downgraded, helped by the downward trend in its real estate sector, usually seen as a feasible indicator for economic growth. Additionally, the recent natural disasters in Japan and Thailand in 2011 had a significant negative impact on the global supply chain, especially in terms of increased costs and margin reductions.

Despite a global economic deceleration, the Euro Zone and the US managed to have positive economic growths in 2011 (1,4% and 1,8% respectively), according to the International Monetary Fund (IMF). The same source registered a recessive year of 2011 in Japan (-0,6%), mostly due to the earthquake and tsunami events occurred in March. The economic growth deceleration in relation to 2010 was also observable in some relevant developing economies like China (9,3%), Brazil (2,7%) and India (7,9%). Russia was the only exception (4,3%), having a marginal growth of 0,1% in comparison to 2010.

Countries like the US, Japan and the UK, maintained low interest rates following expansionist monetary policies whereas the Euro Zone continued to suffer from financial market instability and fear, traduced in higher rates and tighter monetary policies from the European Central Bank (ECB). Also developing economies like Brazil and China suffered from higher interest rates during 2011.

In the European sovereign debt crisis context, the Portuguese economy was one of the most damaged economies among the Euro Zone states in 2011. According to the IMF, the Portuguese economy contracted about 1,5% in 2011. Structural problems, increasing needs of external financing and high fiscal deficits, led Portugal to a financial breakdown point where it had to require for external financial support, following the examples of Ireland and Greece.

The solution came in form of the Economic and Financial and Financial Adjustment Programme (EFAP), created by the European Central Bank, the Euro Zone state members and the International Monetary Fund (IMF). The beginning of the program in May 2011 marked the implementation of a wide range of structural measures in an attempt to consolidate these Portuguese structural problems. A deleveraging process of the Portuguese economy both in the private and public sector took place since then, traduced in tight fiscal policies implemented by the Portuguese government. Since then, Portuguese economy has been facing a domestic demand and investment drop allied to the continuous increase of unemployment, expressing the severe recessive period the country is facing currently.

5.2. Future Outlook

Despite global economic improvements during 2012, the world economic growth decelerated in comparison to 2011 and it is expected to be gradual over the short term taking in consideration potential downside crisis risks (Source: World Economic Outlook Update 2012 - IMF). Whereas most emerging and developing economies seem to be growing at a moderate pace, the Euro area continues to struggle with sovereign debt problem as significant results from the Economic and Financial and Financial Adjustment Programme (EFAP) adjustments tend to be delayed. According to IMF forecasts, a contraction of -0,4% is expected to the Euro Area in 2012.

The climate of uncertainty and instability continue to haunt international markets as most developed economies are entering in a stagnation cycle. On the other hand, emerging and developing economies

are experiencing higher growth while they manage to address external demand slowdown from developed economies.

According to IMF forecasts (Source: WEO update 2013 - IMF), it is expected a contraction of 0,2% growth for the Euro area in 2013, taking into account the effects of lower sovereign spreads and improved bank liquidity in relation to 2012. It is expected that financial conditions improvements will appear as fiscal consolidation continues in European periphery countries like Portugal, Greece, Ireland, Spain and Italy. The ability of these countries to cope with current fiscal consolidation and the capacity to have liquidity and access to external debt markets will drive the Euro Zone growth in the next 2/3 years.

The same IMF report (Source: WEO update 2013) forecasts a 2,3% growth in the US economy for 2012. In 2013, IMF forecasts a deceleration on growth by 0,3% (2,0%) as the US economy will continue to be influenced by the real estate market correction, high rate of unemployment and general distrust from financial markets. The heavy public debt issue continues to be a significant challenge for the economy while monetary policies are expected to remain expansionist as interest rates decrease. Given these measures, the US economy is expected to growth at a moderate pace as consumption and world trade tend to increase after a slowdown in 2012.

The Japanese economy experienced a 2,0% growth at the end of 2012, showing clear signs of recovering from the recession period followed by the earthquake in 2011. According to IMF, the fiscal stimulus packages and monetary easing are expected to boost the Japanese economy in the near future as exports continue recovering. On the other hand, China continues to be the fastest growing economy in the world and it is expected to remain on the same path in the near future while moving from an oriented external demand to a private consumption growth sustainable model.

Emerging and developing economies are predicted to remain growing consistently, despite its deceleration during 2012. The biggest challenge continues to be the dependence on developed economies external demand which is expected to grow as global economic conditions improve in the next few years. Northern African economies where Corticeira Amorim has most of its raw material business units, experienced a robust growth (5,2% in 2012) despite recent social and political instability related to the “Arab Spring” revolution in peripheral regions. The sustained growth of these economies will strongly depend on the future evolution of the global financial system consolidation.

Finally, the Portuguese economy is expected to continue in contraction during 2013 given the structural measures implemented by the Economic and Financial Assistance Programme. During this period, the economy will be on deleveraging process in order to reduce its deficit and gain access to external financing markets. The bank system is adopting tight credit policies and domestic demand is expected to drop as financial consolidation adjustments continue to be implemented.

In a nutshell, the short term challenges of Corticeira Amorim competitiveness are related to the price pressure of raw materials, subsidiary materials and energy given the current global economic context. Higher interest rates and increased taxation are other challenges to Corticeira Amorim growth.

Country	Subject Descriptor	2012	2013	2014	2015	2016	2017	2018
Algeria	GDP, constant prices	2.530	3.328	3.426	3.607	3.758	3.831	3.873
Algeria	Inflation, end of period consumer prices	9.030	5.000	3.968	4.218	4.270	4.411	4.411
Argentina	GDP, constant prices	1.899	2.773	3.463	3.000	3.000	3.002	3.001
Argentina	Inflation, end of period consumer prices	10.842	10.053	10.053	10.053	10.053	10.053	10.053
Australia	GDP, constant prices	3.579	2.961	3.306	3.051	3.062	3.231	3.242
Australia	Inflation, end of period consumer prices	2.204	2.320	2.901	2.340	2.513	2.422	2.422
Austria	GDP, constant prices	0.792	0.774	1.646	1.572	1.572	1.401	1.345
Austria	Inflation, end of period consumer prices	2.921	2.200	1.900	1.900	1.900	1.900	1.900
Brazil	GDP, constant prices	0.872	3.017	4.043	4.129	4.159	4.159	4.159
Brazil	Inflation, end of period consumer prices	5.839	5.503	4.500	4.500	4.500	4.500	4.500
Bulgaria	GDP, constant prices	0.775	1.200	2.300	3.500	3.500	3.500	3.500
Bulgaria	Inflation, end of period consumer prices	2.765	1.800	2.000	2.500	3.000	3.000	3.000
Chile	GDP, constant prices	5.472	4.943	4.621	4.600	4.600	4.600	4.600
Chile	Inflation, end of period consumer prices	1.486	3.005	3.000	3.000	3.000	3.000	3.000
China	GDP, constant prices	7.800	8.038	8.241	8.509	8.525	8.503	8.464
China	Inflation, end of period consumer prices	2.500	3.100	3.000	3.000	3.000	3.000	3.000
Denmark	GDP, constant prices	-0.570	0.836	1.344	1.541	1.526	1.526	1.525
Denmark	Inflation, end of period consumer prices	1.964	2.000	2.000	2.000	2.000	2.000	2.000
France	GDP, constant prices	0.030	-0.066	0.882	1.457	1.746	1.848	1.902
France	Inflation, end of period consumer prices	1.327	1.571	1.456	1.471	1.602	1.731	1.832
Germany	GDP, constant prices	0.865	0.613	1.455	1.319	1.317	1.279	1.237
Germany	Inflation, end of period consumer prices	2.044	1.611	1.700	1.700	1.800	1.900	1.900
Hungary	GDP, constant prices	-1.659	-0.012	1.186	1.520	1.643	1.644	1.613
Hungary	Inflation, end of period consumer prices	5.000	4.000	3.300	3.000	3.000	3.000	3.000
Italy	GDP, constant prices	-2.369	-1.471	0.516	1.203	1.400	1.401	1.200
Italy	Inflation, end of period consumer prices	2.436	1.986	0.810	1.150	1.300	1.410	1.510
Moldova	GDP, constant prices	-0.820	4.000	4.000	5.000	5.000	5.000	5.000
Moldova	Inflation, end of period consumer prices	4.100	5.000	5.000	5.000	5.000	5.000	5.000
Morocco	GDP, constant prices	2.992	4.524	4.775	5.032	5.373	5.714	5.790
Morocco	Inflation, end of period consumer prices	2.596	2.530	2.530	2.530	2.530	2.600	2.600
Netherlands	GDP, constant prices	-0.884	-0.534	1.079	1.590	1.758	1.893	2.057
Netherlands	Inflation, end of period consumer prices	2.819	2.276	1.555	1.374	1.411	1.447	1.447
Poland	GDP, constant prices	2.045	1.312	2.223	2.691	3.322	3.527	3.679
Poland	Inflation, end of period consumer prices	2.400	2.000	2.000	2.500	2.500	2.500	2.500
Portugal	GDP, constant prices	-3.168	-2.322	0.639	1.535	1.820	1.820	1.820
Portugal	Inflation, end of period consumer prices	2.088	0.697	1.509	1.394	1.475	1.505	1.533
Russia	GDP, constant prices	3.400	3.371	3.781	3.700	3.600	3.600	3.600
Russia	Inflation, end of period consumer prices	6.570	6.400	6.000	6.000	6.000	6.000	6.000
South Africa	GDP, constant prices	2.548	2.844	3.349	3.432	3.299	3.106	3.082

South Africa	Inflation, end of period consumer prices	5.648	5.600	5.400	5.100	5.000	5.000	5.000
Spain	GDP, constant prices	-1.419	-1.558	0.738	1.352	1.460	1.506	1.573
Spain	Inflation, end of period consumer prices	2.998	1.303	1.409	1.340	1.442	1.492	1.525
Switzerland	GDP, constant prices	0.980	1.276	1.788	1.890	1.890	1.940	1.940
Switzerland	Inflation, end of period consumer prices	-0.426	0.500	1.000	1.000	1.000	1.000	1.000
Tunisia	GDP, constant prices	3.600	4.000	4.501	5.001	4.801	4.803	4.797
Tunisia	Inflation, end of period consumer prices	5.928	5.300	5.000	4.500	4.000	4.000	4.000
United Kingdom	GDP, constant prices	0.166	0.688	1.539	1.839	1.938	2.080	2.472
United Kingdom	Inflation, end of period consumer prices	2.638	2.550	2.400	2.200	2.000	1.900	2.000
United States	GDP, constant prices	2.211	1.851	2.950	3.562	3.444	3.340	2.916
United States	Inflation, end of period consumer prices	1.845	1.680	1.813	1.937	2.107	2.259	2.272

Fig. 1 – Forecast estimates of Inflation and GDP (% change)

Source: IMF

Appendix 6: Cork-related Industry Trends and Market Outlooks

6.1. Wine and Spirits Market

According to *Vinexpo*, the world wine consumption is expected to keep increasing in the future. The following table, points out the world major trends expected in the wine and spirits industry:

Major trends of the world wine and spirits industry between 2011-2016

- Worldwide consumption of wine and sparkling wine is expected to grow by 5,3% between 2011-2016. By 2016, world consumption is expected to reach 34481 billion bottles.
- The USA will remain the world leading wine consumer and it is expected to increase its consumption by 12,6% between 2011 and 2016.
- Worldwide consumption of sparkling wines is expected to increase by 8,52% between 2011 and 2016, due to the expected rises in several leading markets like Germany, France, Russia or the USA.
- China, the USA, Russia and Australia will drive growth in the world consumption of wine during the next few years.
- Worldwide consumption of rosé wines is expected to increase by 7,58% between 2011 and 2016, reaching a global market share of 9,2%.
- Worldwide consumption of wines priced higher than US\$10 per bottle is expected to increase by 29,93%.
- Consumption of wines priced between US\$5-US\$10 per bottles is expected to grow 10% between 2011 and 2016.
- Consumption of wines priced below US\$5 is expected to grow 2,77% over the same period.
- The Asia-Pacific region will continue to be the world leading consumer of spirits and it is expected to grow by 13,63% between 2011 and 2016.

Fig. 1 – The World Wine and Spirits Market Outlook to 2016 report

Source: Vinexpo

6.2. Construction and Building Materials Industry

The following tables demonstrate the expected growth in the construction industry for the time period between 2009 and 2019 (Source: IHS Global Construction Overview Report). The growth is segmented by region and segment. It is also presented the world construction spending forecast according to IHS.

Fig. 2 – Global Construction Forecasts by Segment

Source: IHS Global Insight

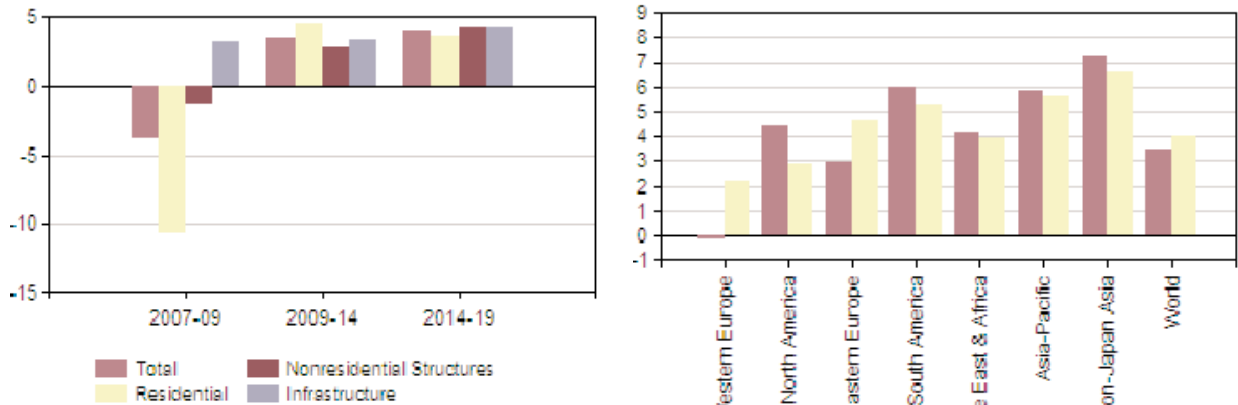


Fig. 3 – Growth by Sector (Percentage)

Source: IHS Global Insight

Fig. 4 – Growth by Region (Percentage)

Source: IHS Global Insight

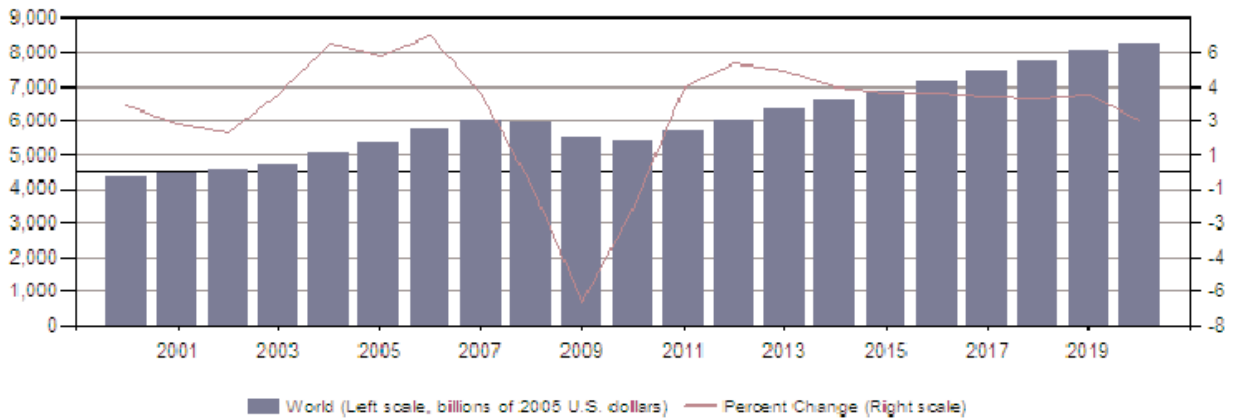


Fig. 5 – World Construction Spending (billions of 2005 US\$)

Source: IHS Global Insight

Appendix 7: Corticeira Amorim Business Units Overview

7.1. Raw Materials

The Raw Materials business unit (BU) is responsible for the management of purchasing, storage and preparation of cork, the core raw material of Corticeira Amorim business activity. The Raw Materials BU is present in most of the world cork-producing countries, namely Portugal, Spain, Morocco, Algeria, Tunisia and Sardinia. The geographical presence represents the critical role this specific BU has in Corticeira Amorim overall business strategy. The direct presence in most important cork-producing countries enables the company to reduce/optimize costs and to be continuously improving every activity of the value chain. Although Corticeira Amorim does not own the forests in these regions, it works “side by side” with these cork producers. This cooperation is particularly evident in the R&D partnerships Corticeira Amorim has with regional cork producers in order to be constantly promoting innovation and improving the technical quality of cork. The BU has been investing significantly in technology and forestry projects as part of the group’s overall strategy to increase the customer value. The CORK.IN program is one of the examples of the outlined strategy across the group, to stimulate and promote this kind of business initiatives.

In recent years, the Raw Materials BU has been increasing its activity reflecting one of Corticeira Amorim’s strategic objectives: to reinforce its leadership in raw materials procurement and acquisitions (**Appendix 4 – Fig.2**). This increased Raw Materials BU activity (including sales to other BU’s) reflects the company recent focus on diversifying its sources of supply in all the cork producing regions in two ways: to improve the harvesting cork activity and to respond to the potential raw materials consumption in the future. Part of this increase was due to the increasing demand needs of the other BU’s, demonstrating the importance Raw Materials BU has on the group’s value chain.

Regarding the business operations, the BU has been struggling to maintain the efficiency ratios it registered in the last few years, especially after the world economic crisis peak in 2008. The world economic crisis inflated the price of several variables of the business, namely energy and transportation costs which lead Corticeira Amorim to improve the efficiency of its operations, particularly operational costs.

According to Corticeira Amorim strategic guidelines, the Raw Materials BU is expected to continue growing in the future at a moderate pace as part of the strategy to strength the company's leadership in raw materials acquisition/procurement. The BU will continue to focus on R&D activities in order to balance three factors of its business: quantity, quality and price. Other initiatives regarding the CORK.IN program are expected to continuing taking place in order to increase added value products to Corticeira Amorim product mix.

In the near future, the biggest challenges of Raw Materials BU will continue to be the high pressure on the price of raw materials, energy and transportation. Despite recent social-political turmoil in some countries of North Africa where the company operates, it is expected that this situation will not disturb the operations of the BU given the good relation between employees and official bodies in these regions.

7.1.1. Macroeconomic and Industry Outlook

Since 2009, the Raw Materials BU has been recovering in terms of revenues (value). After the world economic crisis peak in 2008/2009, the total sales of this business unit have been growing at a double-digit pace since then. The world economic crisis had a natural negative effect on every business unit of Corticeira Amorim, but especially in the Raw Materials BU given the higher costs associated to raw materials procurement. The rise of energy and transportation costs forced Corticeira Amorim to acquire more expensive raw materials and sell them at higher prices to its clients (including companies inside the group) in order to maintain the same margin levels.

In the Portuguese industry context, cork exports have been decreasing in the last years giving signs of recovery in 2011 with a 6,7% annual growth in value (**Chapter 3.2.1**). Despite representing a small percentage of the total exports, raw materials have been following the same downward trend in the last few years. Nonetheless, in 2011 the annual growth of Portuguese raw material exports registered a 34% annual growth which reflects optimistic recovery perspectives in the future.

7.2. Cork Stoppers

The Cork Stoppers BU is the most important one among the five business units of Corticeira Amorim Group. Amorim & Irmãos is the world leading supplier of cork stoppers, having a wide portfolio of products and producing more than three billion units annually. Currently, the company is

unquestionable leader with 25% share of the world stoppers market. The companies and subsidiaries part of Cork Stoppers BU, operate in the world's most important wine producing countries such as South Africa, Australia, Brazil, Chile, Argentina, US, and European countries like France, Italy or Spain.

Along the years, the world wine market has been suffering significant developments and the globalization spurred the world wine consumption and the emergency of new trends/needs requiring highly sophisticated and technological advanced products. In that sense, the Cork Stoppers BU is constantly innovating through R&D initiatives and seeking to expand its product portfolio in order to serve the market needs. According to Corticeira Amorim Annual Report 2012, the world wine consumption increased by 4,8% between 2005 and 2011, revealing the increasing worldwide demand for stoppers and the significant role of Corticeira Amorim as the world market leader.

Although the Cork Stoppers BU has been growing and expanding its activity, Corticeira Amorim main priorities remain the same according to the group's overall strategy: to reduce costs and minimize capital investments, given the current economic crisis. The world wine industry primarily demand for cork stoppers, which gives Corticeira Amorim a substantial comparative advantage in relation to other alternatives, nonetheless the company is also aware that it has to maintain the same level of quality and competitiveness to continue leading the market.

Currently, Amorim & Irmãos holds a wide portfolio of cork stopper products tailored to different types of products, from wine to champagne bottles:

Amorim & Irmãos Cork Stopper Product Portfolio

Natural Cork Stopper: Used in reserve wines. It allows the wine to age in the best possible conditions, fulfilling the needs of sophisticated winemakers and wine lovers.

Twin Top® Stopper: technical cork stopper ideal for fruity wines, and wines not intended for long bottle ageing. Usually used on the same bottling wines as natural cork stoppers.

Spark® Stopper: Used in Champagnes and sparkling wines. It has the highest levels of physical, chemical and enological performance.

Neutrocork® Stopper: Latest generation of technical stoppers, great stability. Used for early consumption wines.

T-Cork® Stopper: It is a natural cork stopper with range of different caps in plastic, wood and other materials, designated for bottling fortified wines and spirits.

Colmated Cork Stopper: More porous natural cork. Designed to improve appearance, mechanical behavior and performance.

Agglomerated Cork Stopper: Ideal for wines intended for early consumption. Price and sealing properties are critical factors.

Advantec®: Innovative technical cork, featuring all preventive and corrective anti-TCA measures. Designated to be the benchmark closure for high-rotation wines. Excellent quality/price ratio.

SparkOne*: Used for sparkling and carbonated wines. Excellent mechanical performance and extremely easy to use.

Acquamark®: First rat sealant with water-based coating. Attributes such as sealing capability and preservation of wine. Lower price than natural cork stopper.

Fig. 1 – Amorim & Irmãos Cork Stopper Product Portfolio

Source: Corticeira Amorim Website

The Cork Stoppers BU has been recovering since 2008 (**Appendix 4 – Fig.5**), registering a sales growth of 9% in 2012 compared to 2011. Part of this growth is explained by the increasing consumption in important wine markets like the US, France, Argentina, Italy and Spain. Also the quality, operational leadership and sustainability of the cork stoppers have been differential factors in terms of business performance.

Among all products, the Natural Cork Stoppers and the Neutrocork Stoppers are the ones that most grew (around 20,2%) in 2012 comparing to the previous year. The last one represents a solution to the increasing high standard quality requirements by wine markets like the US, France and Italy, where the cost/quality ratio is very important. Currently it is one of the most important products of the Cork Stoppers BU and it is expected to keep growing in the future. Also the Twin Top Cork Stoppers and Champagne Cork Stoppers registered interesting growth rates in 2012.

According to the latest report of the International Wine and Spirits Record (Source: Vinexpo – World Wine and Spirits Market Outlook until 2016), the world wine consumption is expected to continue increasing in the next few years. Important markets like the US, Brazil, China and Russia will continue to grow, predicting a potential upward pressure on the wine price if supply does not keep up with demand. Since it is expectable that customers will press to reduce the sales price, Corticeira Amorim's upcoming challenges will be continuing to improve operating efficiency and to adopt cost cutting measures in order to maintain the same margin levels.

7.2.1. Macroeconomic and Industry Outlook

According to *Vinexpo* (**Appendix 6.1**) the world wine consumption is expected to grow by 5,3% until 2016 given the forecasted growth in important wine markets like the US, Brazil, China and Russia. Also the global consumption of sparkling wines (8,5%) and spirits (14%) is expected to growth at interesting rates, resulting in good growth opportunities for this BU in terms of highly valued products. The same

source forecasts very high growth rates (30%) for highly priced wines over the same period, reinforcing the strategic importance of focusing on high growth potential products in order to adjust to the new market needs of the wine industry.

Focusing on the Portuguese cork market, cork stoppers exports have been recovering since 2009 (value), registering 15% and 7% in 2011 and 2010 respectively. The cork stoppers represent 70% of Portuguese cork production and the natural cork stoppers represent the major exported product in this category. Since 2009 the exports of natural cork stoppers and champagne cork stoppers, the most important categories, have been recovering in value terms and growing consistently. Countries like France, Spain, Italy and the USA, represent a strategic priority to Corticeira Amorim in line with the new increasing market demand for highly valued products.

The main focus of this BU in the near future will be on highly value added products and highly valued customers, giving priority to important markets like France and Spain. Corticeira Amorim will also continue to favor higher growth potential products in the balance mix of volume and sales, as a solution given the expected future world wine industry context. Instead of planning to increase its invested capital in the Cork Stoppers BU, the company is planning to improve its profitability through cost reduction and improved supply chain management in the future.

7.3. Floor and Wall Coverings

The Floor and Wall Covering BU is responsible for producing innovative and ecological floor/wall solutions. Due to its distinctive and high technological cork covering solutions, this BU is the world market leader providing the best performance, comfort and design in the market. The company that operates in this business unit, Amorim Revestimentos, has exclusive manufacturing technology and a global distribution network which allows it to meet the needs of its customers in the most demanding markets. The company produces two types of solution: cork or wood floor coverings and non-cork floorings such as laminates and wooden parquets.

Regarding its recent performance, the Floor and Wall Coverings BU has been growing in terms of sales and results since 2009, especially due to the introduction of new value added products aimed to increase margins. Despite the downward pressure on sales prices the BU has been able to increase its sales in value by increasing its capacity and extending the supply of its flooring solutions. The BU

registered a 5% sales growth in 2012 in comparison to 2011 (**Appendix 4 – Fig. 4**) and it is expected to keep increasing during the following years given its focus on high valued market segments. The introduction of this new innovation range of products combining cork with other materials, are expected to differentiate the company from its competitors in high competitive markets like the US and Canada.

Currently, the company is planning to undertake several R&D projects and partnerships aimed to extend even more its range of flooring and covering solutions. *Corkcomfort FastConnect*, *Collection 2012* and *Vinilcomfort glued down* are some of the examples of product solutions being developed and commercialized. With these recent initiatives, Corticeira Amorim is expecting to achieve sustainable growth in the Floor and Wall Coverings BU for the next few years, focusing on high added value products to increase. Taking this in consideration, the company expects to increase customer value in order to resist to the current sales prices downward pressure.

7.3.1. Macroeconomic and Industry Outlook

The global construction industry outlook (**Appendix 6.2**), construction spending is expected to growth at a steady pace until 2020 with the residential segment being the major driver until 2014 (average of 4%). The residential construction segment represents the major driver of the “green materials and solutions” market where this BU operates. In the second part of the decade, all the construction segments are predicted to growth at similar levels with important markets such as the North and South American and Asian driving growth.

7.4. Composite Cork

The Composite Cork BU is operated by Amorim Cork Composites and it is specialized in the commercialization of industrial cork applications like sealing, thermal and noise insulation. The cork composites are also used in home decoration and some functional products made by the company. According to Corticeira Amorim, the business areas served by this BU are:

- Noise reduction solutions to flooring and wood panels
- Gaskets and materials for automotive, electrical and natural gas applications
- Thermal projection shields
- Expansion and contraction joints

- Home and office accessories
- Footwear components

Composite cork is one of the group's most important products totaling 23% of the group's consolidated sales in 2012 (**Chapter 2.4 – Fig.5**). Following the same upward trend of the other BU's, the Composite Cork BU has been growing since 2009, registering a 6% sales increase in 2012 compared to 2011. Most of the application market segments served by Amorim Cork Composites contributed for the sales increase with the exception of the home& office area which had residual weight on the BU's consolidated turnover. In global terms, the sales to industrial areas also increased with the composite and vibration control segments leveraging the results in 2012. The exceptions were the acoustic materials and friction applications that dropped in relation to 2011. In other remaining business areas like sealing, civil construction and flooring, the average sales also increased in 2012 bucking the upward price trend on the raw material and energy prices.

The Composite Cork BU is continuously focusing on developing segments with great growth potential and it is constantly expanding its solutions portfolio. Through several R&D projects and initiatives, Amorim Cork Composites is able to develop new, innovative and high technological solutions which helped the company to maintain the same competitiveness and profitability during the last few years. The introduction of new ranges of technical solutions and the expansion to new markets reflect the unit strategic guideline to achieve sustainable goal in the following years. Projects like *TEKGREEN* (new combinations of cork with other materials) and *MATERIA*® (new products for the home & office sector) represent some examples of initiatives being developed by the company bearing this strategic goal in mind. The recent joint venture made in Russia for the manufacture of automobile gaskets and the construction of new installations in China, are other examples of Amorim Cork Composites expansion strategy.

7.4.1. Macroeconomic and Industry Outlook

For the next two years, Amorim Composite Cork is planning to engage on several project focused on enhancing technological networking and stimulating the development of new ecological products through partnerships with other industrial/technological companies. The areas of these investments are mainly related with transportation, construction and composite material solutions based on cork. The company is expecting to build high levels of profitability given the capital invested on the planned

investments during the next years. Through the strategic repositioning of its products in the market, Amorim Composite Cork plans to increase the average customer value of its clients by developing new added value products and improving the existing ones. Regarding the traditional products, the company plans to focus on markets with greater growth potential retaining new customers through its wide range of product portfolio.

7.5. Insulation Cork

Amorim Isolamentos is the group's company responsible for the Insulation Cork BU which produces insulation materials based on cork and coconut. The company develops and produces acoustic, thermal insulation and anti-vibratic environmental solutions for several industries. Through two types of materials, expanded corkboards and coconut fibers, Amorim Isolamentos holds a wide range of products designed for several applications like construction of oil pipelines, buildings, airports, wine cellars and refrigeration appliances. Amorim Isolamentos' brands are present in several international markets like Italy, Austria, German, France and Swiss where the construction industry favors sophisticated and technological advanced materials like Cork/Coconut fiber. The company also has several partnerships with universities and specialized centers in order to ensure the quality, safety, and environmental control of its products.

Regarding the Insulation Cork BU's recent performance, its sales rose by 2,4% in 2012 compared to 2011 (**Appendix 4 – Fig. 3**). The raw materials purchasing prices continued to increase, nonetheless, the company was able to maintain the same margins and develop several projects aimed to strength Amorim Isolamentos leadership in supplying high performance and ecological insulation solutions. In 2012, the most important projects/initiatives undertaken by the company were:

- *Gypcork*: development of an expanded cork chipboard attached to laminated plasterboard, improving energy efficiency and acoustic comfort of buildings in terms of insulation
- *Serpentine Pavillion 2012*: participation in the annual showcase of the best international architecture in order to present the sophistication and versatility of cork to some of the most prestigious architects/artists in the world
- Consolidated position of *CorkSorb* brand resulting in 12 new partnerships
- *WaterCork*: research the application of cork industry materials as absorbent for pesticides
- *BioCork*: development of construction brick using expanded cork regranulate as raw material

These projects are aligned with the strategic guidelines adopted across every business units of Corticeira Amorim, focusing on the introduction of new added value products in the market to improve profitability and optimize the capital invested given the unfavorable economic context.

7.5.1. Macroeconomic and Industry Outlook

Since 2009, the BU has been struggling with the global economic adversity which led to the postponement of several projects it had in hands. Given the economic crisis, most industries this BU activity depends on (building, aeronautical, wine and appliances) were significantly affected by the demand downfall. Despite registering negative growth in revenues recently, the company is still involved in several R&D projects and partnerships following the same strategic course of the other units of the group. The objective in the future is to expand the product portfolio through the incorporation of new value added products in order to improve profitability.

Appendix 8: Operating Expenses and Other Operating Income

The forecasts for operating expenses and other operating income are based on the historical average of each one of these items as a percentage of the total revenues (trade sales). The change in manufactured inventories is the unique item which is forecasted based on its historical values as percentage of Costs of goods sold and materials consumed (COGS).

In order to maintain a relative steady EBITDA margin taking into account the overall strategy of the company, it is assumed that the forecast ratios for each item are equal to the 8-year historical average, excluding changes in manufactured inventories. Given the little variation of these ratios over the last few years, it is assumed that Corticeira Amorim would be able to maintain these margins despite the expected unfavorable context. The change in manufactured inventories forecast ratio as percentage of COGS is assumed to be equal to the value in 2012 (1,5%) despite its negative 8-year historical average (-0,2%) given the recent recovery trend in the last three years (0,8%, 1,4% and 1,5%). Also the forecast ratio for staff costs is expected to remain at the same level of 2012 (18,3%) in the future.

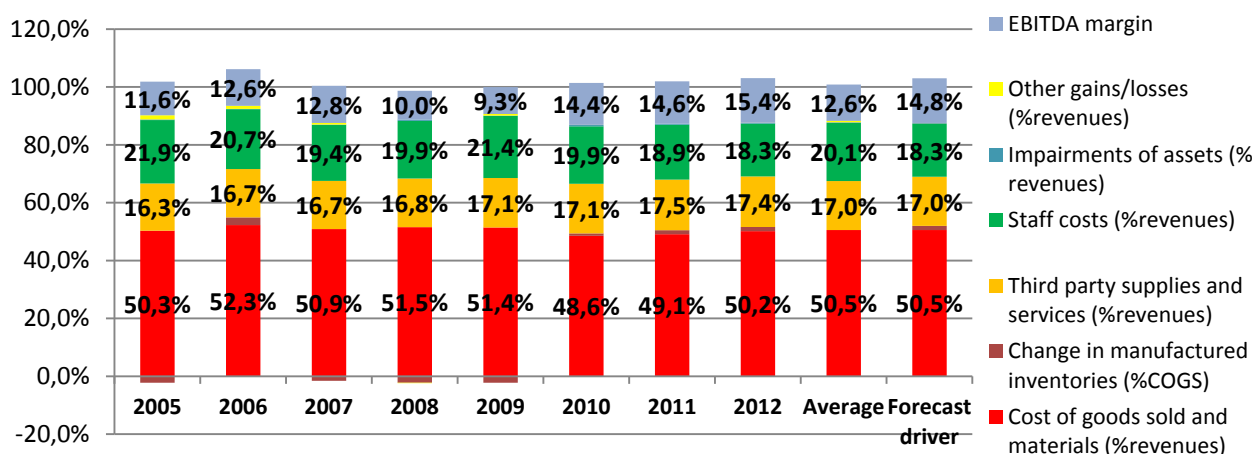


Fig. 1 – Operating expenses and other operating income historical ratios of Corticeira Amorim

$$\text{EBITDA} = \text{Revenues (trade sales)} - (\text{COGS} + \text{Change in manufactured inventories}) - \text{Third party supplies and services} - \text{Staff costs} - \text{Impairments of assets} +/- \text{Other gains/losses}$$

Assuming the referred forecast ratios for each item of operating expenses and other income, the consolidated EBITDA margin will have a slightly decrease in relation to 2012 (15,4% vs. 14,8%), which is expectable mainly due to macroeconomic conditions. Nonetheless, it will keep at steady values during the forecasting period taking in consideration the efforts of Corticeira Amorim in maintaining the same margin levels in the future, based on its strategic improved efficiency and cost-cutting policy.

RAW MATERIALS	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	51.868	55.426	58.405	61.401	63.772	65.697	67.432	69.214	71.046	72.927
Change in manufactured inventories	753	805	848	891	926	954	979	1.005	1.031	1.059
Third party supplies and services	17.407	18.601	19.601	20.607	21.402	22.048	22.630	23.229	23.843	24.475
Staff Costs	18.766	20.053	21.131	22.215	23.072	23.769	24.396	25.041	25.704	26.385
Impairments of Assets	266	285	300	315	328	338	346	356	365	375
Other gains/losses	76	81	86	90	94	96	99	102	104	107

CORK STOPPERS	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	155.605	166.277	175.216	184.204	191.315	197.090	202.296	207.643	213.137	218.781
Change in manufactured inventories	2.259	2.414	2.543	2.674	2.777	2.861	2.937	3.014	3.094	3.176
Third party supplies and services	52.222	55.803	58.803	61.820	64.206	66.145	67.891	69.686	71.530	73.424
Staff Costs	56.297	60.158	63.392	66.644	69.217	71.306	73.189	75.124	77.112	79.154
Impairments of Assets	799	854	900	946	983	1.013	1.039	1.067	1.095	1.124
Other gains/losses	228	244	257	270	281	289	297	305	313	321

FLOOR&WALL COVERINGS	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	48.987	52.346	55.161	57.990	60.229	62.047	63.686	65.369	67.099	68.875
Change in manufactured inventories	711	760	801	842	874	901	924	949	974	1.000
Third party supplies and services	16.440	17.568	18.512	19.462	20.213	20.823	21.373	21.938	22.519	23.115
Staff Costs	17.723	18.939	19.957	20.980	21.790	22.448	23.041	23.650	24.276	24.919
Impairments of Assets	252	269	283	298	309	319	327	336	345	354
Other gains/losses	72	77	81	85	88	91	93	96	98	101

COMPOSITE CORK	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	31.697	33.871	35.692	37.523	38.972	40.148	41.208	42.298	43.417	44.566
Change in manufactured inventories	460	492	518	545	566	583	598	614	630	647
Third party supplies and services	10.638	11.367	11.978	12.593	13.079	13.474	13.830	14.195	14.571	14.957
Staff Costs	11.468	12.254	12.913	13.576	14.100	14.525	14.909	15.303	15.708	16.124
Impairments of Assets	163	174	183	193	200	206	212	217	223	229
Other gains/losses	46	50	52	55	57	59	60	62	64	65

INSULATION CORK	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	8.645	9.238	9.734	10.234	10.629	10.949	11.239	11.536	11.841	12.154
Change in manufactured inventories	125	134	141	149	154	159	163	167	172	176
Third party supplies and services	2.901	3.100	3.267	3.434	3.567	3.675	3.772	3.871	3.974	4.079
Staff Costs	3.128	3.342	3.522	3.702	3.845	3.961	4.066	4.174	4.284	4.397
Impairments of Assets	44	47	50	53	55	56	58	59	61	62
Other gains/losses	13	14	14	15	16	16	16	17	17	18

HOLDING	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COGS	-8.645	-9.238	-9.734	-10.234	-10.629	-10.949	-11.239	-11.536	-11.841	-12.154
Change in manufactured inventories	-125	-134	-141	-149	-154	-159	-163	-167	-172	-176
Third party supplies and services	-2.901	-3.100	-3.267	-3.434	-3.567	-3.675	-3.772	-3.871	-3.974	-4.079
Staff Costs	-3.128	-3.342	-3.522	-3.702	-3.845	-3.961	-4.066	-4.174	-4.284	-4.397
Impairments of Assets	-44	-47	-50	-53	-55	-56	-58	-59	-61	-62
Other gains/losses	-13	-14	-14	-15	-16	-16	-16	-17	-17	-18

Fig. 2 – Forecasted Operating Expenses and Other Income of Corticeira Amorim by BU (Thousand €)

Third Party Supplies and Services

The forecasts for third party supplies and services expenses until 2022 are based on the specific weight each item had over the total expenses in 2012. Given that the total expenses of this category are driven by the total revenues of Corticeira Amorim, each item is also linked to this forecast driver. The forecast criteria are based on the considerable amount of variables of the category and the upward historical trend most expenses had in the past few years. Therefore, it is assumed that all these expenses will grow as the revenues of the company continue to grow during the forecasting period.

Third Party Supplies & Services	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Weight 2012
Subcontracts	5.878	6.099	6.517	6.868	7.220	7.498	7.725	7.929	8.138	8.354	8.575	6%
Special services	6.746	6.999	7.480	7.882	8.286	8.606	8.866	9.100	9.340	9.587	9.841	7%
Advertising	6.150	6.381	6.819	7.185	7.554	7.845	8.082	8.296	8.515	8.740	8.972	7%
Security	1.111	1.153	1.232	1.298	1.365	1.417	1.460	1.499	1.538	1.579	1.621	1%
Professional fees	600	623	665	701	737	765	789	809	831	853	875	1%
Commissions	5.221	5.417	5.789	6.100	6.413	6.660	6.861	7.043	7.229	7.420	7.617	6%
Maintenance	7.222	7.493	8.007	8.438	8.871	9.213	9.491	9.742	9.999	10.264	10.536	8%
Tools	1.523	1.580	1.689	1.779	1.871	1.943	2.002	2.054	2.109	2.164	2.222	2%
Power	11.244	11.667	12.467	13.137	13.811	14.344	14.777	15.167	15.568	15.980	16.403	12%
Oil and Gas	1.765	1.831	1.957	2.062	2.168	2.252	2.320	2.381	2.444	2.508	2.575	2%
Travel	3.440	3.569	3.814	4.019	4.225	4.388	4.521	4.640	4.763	4.889	5.018	4%
Transports	20.376	21.142	22.592	23.806	25.027	25.993	26.778	27.485	28.212	28.958	29.725	22%
Rentals	4.764	4.943	5.282	5.566	5.851	6.077	6.261	6.426	6.596	6.771	6.950	5%
Communications	1.295	1.344	1.436	1.513	1.591	1.652	1.702	1.747	1.793	1.840	1.889	1%
Insurance	3.153	3.271	3.496	3.684	3.873	4.022	4.144	4.253	4.366	4.481	4.600	3%
Representation expenses	834	865	925	974	1.024	1.064	1.096	1.125	1.155	1.185	1.217	1%
Data systems	4.206	4.364	4.663	4.914	5.166	5.366	5.528	5.674	5.823	5.978	6.136	5%
Others	7.677	7.965	8.512	8.969	9.429	9.793	10.089	10.356	10.629	10.911	11.199	8%
TOTAL	93.205	96.707	103.339	108.895	114.481	118.901	122.490	125.725	129.048	132.463	135.970	100%

Fig. 3 – Forecasted Third Party Supplies and Services Expenses of Corticeira Amorim (Thousand €)

Staff Costs

Likewise third party supplies and services expenses, also staff costs are forecasted as a percentage of the total revenues of Corticeira Amorim. The strong correlation between total revenues (trade sales) and staff costs expenses makes it a good forecast driver. Despite recent increases in staff costs, it is expected these costs will remain at steady state in the future given the cost-cutting measure policy of the company in last recent years, taking into account its strategic guidelines. Each item of the category is also forecasted based on the weight it had in 2012. It is also assumed the same weights during the

forecasting period taking in consideration the steady historical values since 2005. In this sense, expenses related with employee remuneration and social security will continue to be the major costs of this category in the future. The two items are expected to keep growing as the company expands its business and hire more employees.

Staff Costs	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Wgt. 2012
Board Remun.	775	827	884	931	979	1.017	1.048	1.075	1.104	1.133	1.163	1%
Employee remun.	75.344	80.416	85.931	90.551	95.196	98.871	101.856	104.546	107.309	110.148	113.065	77%
Social security & other	15.248	16.275	17.391	18.326	19.266	20.009	20.613	21.158	21.717	22.292	22.882	16%
Severance costs	1.505	1.606	1.716	1.809	1.902	1.975	2.035	2.088	2.144	2.200	2.258	2%
Other	4.806	5.130	5.481	5.776	6.072	6.307	6.497	6.669	6.845	7.026	7.212	5%
TOTAL	97.678	104.254	111.403	117.393	123.415	128.179	132.048	135.536	139.119	142.799	146.581	100%

Fig. 4 – Forecasted Staff Costs of Corticeira Amorim (Thousand €)

Impairments of Assets

The forecast for impairments of assets is not easy due to the unexpected market values in the future. It is quite complex to predict future market values for certain assets to compute the difference between their book and market value. The historical values of this category are not linear, therefore it is assumed that total revenues are the forecast driver for future impairments. Although it is not the most appropriate forecast driver, the total revenues of the company allow impairments to follow a linear trend in the future. In this sense, the same assumption used in third supplies and services and staff costs is applied. It is assumed a constant weight for each item according to the values registered in 2012.

Impairments of Assets	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Weight 2012
Receivables	568	835	892	940	989	1.027	1.058	1.086	1.114	1.144	1.174	56%
Inventories	-333	-490	-523	-551	-580	-602	-620	-636	-653	-671	-688	-33%
Goodwill	640	941	1.005	1.059	1.114	1.157	1.192	1.223	1.256	1.289	1.323	64%
Tangible assets	132	194	207	219	230	239	246	252	259	266	273	13%
Others	0	0	0	0	0	0	0	0	0	0	0	0%
TOTAL	1.007	1.480	1.582	1.667	1.753	1.820	1.875	1.925	1.976	2.028	2.081	100%

Fig. 5 – Forecasted Impairments of Assets of Corticeira Amorim (Thousand €)

Other operating gains and losses

Due to the lack of detailed historical information of other operating gains/losses, the assumed forecast driver for this category is also the total revenues of the consolidated group. The values of other operating gains/losses are partly related with occasional and lumpy subsidies, supplementary incomes as well as other taxes and exchange rate hedging effects which affects the accuracy of forecasts in a certain way.

Appendix 9: Historical values of Gross and Net Fixed Assets, Depreciation, CAPEX and Net Working Capital

9.1. Gross Fixed Assets

The forecast assumptions for PP&E are based on the historical average growth rate since 2005. Each item of PP&E is assumed to maintain the same weight on total value during the forecasting period given the smooth linear trend of the last years. Due to the lack of information and the reasons explained in **Chapter 5.3** (Gross Fixed Assets), investment property is assumed to remain at similar levels of 2012 in the future. Finally, intangible fixed assets are expected to growth at the same annual rate of PP&E since they have been registering lumpy values since 2005. Given that intangible fixed assets have little significant on total gross fixed assets, it is assumed they will growth at the same pace as PP&E in order minimize estimation errors.

Gross Assets	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
PP&E	499.729	509.968	516.752	514.907	525.758	520.580	535.737	580.225		
<i>(% Annual Growth)</i>	-	2,0%	1,3%	-0,4%	2,1%	-1,0%	2,9%	8,3%	2,2%	2,2%
<i>Land and buildings</i>	216.257	223.392	213.510	215.568	217.006	206.169	209.776	218624		
<i>(% Total weight)</i>	43,3%	43,8%	41,3%	41,9%	41,3%	39,6%	39,2%	37,7%	41,0%	41,0%
<i>Machinery</i>	235.828	240.624	250.323	248.109	264.889	277.480	286.731	320142		
<i>(% Total weight)</i>	47,2%	47,2%	48,4%	48,2%	50,4%	53,3%	53,5%	55,2%	50,4%	50,4%
<i>Others</i>	40.469	39.118	39.036	34.035	33.714	36.931	39.230	41459		
<i>(% Total weight)</i>	8,1%	7,7%	7,6%	6,6%	6,4%	7,1%	7,3%	7,1%	7,2%	7,2%
<i>Advances in-progress</i>	7.176	6.834	13.883	17.196	10.149	0	0	0		
<i>(% Total weight)</i>	1,4%	1,3%	2,7%	3,3%	1,9%	0,0%	0,0%	0,0%	1,3%	1,3%
Investment property	-	-	-	-	-	14.320	15.078	15641		
<i>(% Annual Growth)</i>	-	-	-	-	-	-	5,3%	3,7%	4,5%	0,0%
Intangible Fixed Assets	114	114	784	1.059	1.257	4.214	3.168	3822		
<i>(% Annual Growth)</i>	-	0,0%	587,7%	35,1%	18,7%	235,2%	-24,8%	20,6%	124,7%	2,2%

Fig. 1 – Historical values of Gross Fixed Assets (Thousand €)

Source: Corticeira Amorim

9.2. Depreciation

Depreciation forecasts are based on the average historical percentage of gross fixed assets since 2005. All the categories of gross fixed assets are expected to maintain steady values of depreciation during the forecast period as Corticeira Amorim continues to grow. In order to maintain proportional values in the future, it is assumed that impairments will grow based on the 5-year historical average weight on total depreciation + impairments given the positive recent trend since 2008. Hereupon, total year depreciation is separated from annual impairments. Total year depreciation allocation by BU is based on weights consistent with the 8-year historical average values to have 100% of the value allocated.

Year Depreciation	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
PP&E	20.361	21.856	20.939	21.149	20.322	20.615	20.395	20444		
<i>(% Gross Assets)</i>	4,1%	4,3%	4,1%	4,1%	3,9%	4,0%	3,8%	3,5%	4,0%	4,0%
<i>Land and buildings</i>	6.751	6.674	5.681	5.913	5.266	4.813	4.734	4575		
<i>(% Gross Assets)</i>	3%	3%	3%	3%	2%	2%	2%	2,1%	2,6%	2,6%
<i>Machinery</i>	13.397	13.134	13.280	13.615	13.334	14.548	14.200	14393		
<i>(% Gross Assets)</i>	6%	5%	5%	5%	5%	5%	5%	4,5%	5,2%	5,2%
<i>Others</i>	213	2.048	1.978	1.621	1.722	1.254	1.461	1476		
<i>(% Gross Assets)</i>	0,5%	5,2%	5,1%	4,8%	5,1%	3,4%	3,7%	3,6%	3,9%	3,9%
<i>Advances in-progress</i>	0	0	0	0	0	0	0	0		
<i>(% Gross Assets)</i>	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Investment property	0	0	0	0	0	700	700	2231		
<i>(% Gross Assets)</i>	-	-	-	-	-	5%	5%	14,3%	7,9%	7,9%
Intangible Fixed Assets	29	31	152	99	255	239	158	394		
<i>(% Gross Assets)</i>	25,4%	27,2%	19,4%	9,3%	20,3%	5,7%	5,0%	10,3%	15,3%	15,3%
Total Year Depreciation + Impairments	20.390	21.887	21.091	21.248	20.577	21.554	21.253	23069		
Impairments	-2308	89	-48	139	-10	687	194	1863		
<i>(% Year Depreciation + Impairments)</i>	-10,2%	0,4%	-0,2%	0,7%	0,0%	3,3%	0,9%	8,8%	0,5%	2,7%
Total Year Depreciation	22.698	21.798	21.139	21.109	20.587	20.867	21.059	21206		

Fig. 2 – Historical Depreciation as % of Gross Fixed Assets (Thousand €)

Source: Corticeira Amorim

Year Depreciation	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
Total Year Depreciation	22.698	21798	21139	21.110	20.586	20.868	21059	21.206		
<i>Raw Materials</i>	3.810	3.742	3.180	3.108	2.762	2.822	1.608	1750		
<i>(% Year Depreciation)</i>	18,4%	18,7%	16,3%	14,7%	13,4%	13,5%	14,2%	8,3%	14,7%	15,0%
<i>Cork Stoppers</i>	8.817	8.397	8.266	9.052	8.659	8.622	4.771	10.934		
<i>(% Year Depreciation)</i>	42,6%	40,6%	39,9%	43,7%	41,8%	41,7%	23,1%	52,8%	40,8%	43%
<i>Floor and Wall Coverings</i>	4.749	4.641	4.764	4.878	5.203	5.527	2.919	4.793		
<i>(% Year Depreciation)</i>	23,0%	22,4%	23,0%	23,6%	25,1%	26,7%	14,1%	23,2%	22,6%	23%
<i>Composite Cork</i>	2.907	2.837	2.601	3.422	3.276	3.235	1.669	3.117		
<i>(% Year Depreciation)</i>	14,0%	13,7%	12,6%	16,5%	15,8%	15,6%	8,1%	15,1%	13,9%	15,0%
<i>Insulation Cork</i>	349	356	622	601	623	618	296	566		

(% Year Depreciation)	1,7%	1,7%	3,0%	2,9%	3,0%	3,0%	1,4%	2,7%	2,4%	3,0%
Holding	60	65	62	49	63	44	22	47		
(% Year Depreciation)	0,3%	0,3%	0,3%	0,2%	0,3%	0,2%	0,2%	0,2%	0,3%	1,0%

Fig. 3 – Historical Depreciation by BU (Thousand €)

Source: Corticeira Amorim

Year Depreciation	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Raw Materials	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
Cork Stoppers	10.607	10.829	11.055	11.286	11.522	11.764	12.010	12.263	12.520	12.784
Floor&Wall Coverings	5.674	5.792	5.913	6.037	6.163	6.292	6.424	6.559	6.697	6.838
Composite Cork	3.700	3.777	3.856	3.937	4.019	4.104	4.190	4.278	4.368	4.459
Insulation Cork	740	755	771	787	804	821	838	856	874	892
Holding	247	252	257	262	268	274	279	285	291	297
TOTAL	24.668	25.183	25.709	26.247	26.796	27.357	27.931	28.518	29.117	29.729

Fig. 4 – Forecasted Year Depreciation by BU (Thousand €)

9.3. Net PP&E, Intangible Fixed Assets and Investment Property

The forecast driver for net fixed assets is the 8-year average historical ratio of net fixed assets as percentage of gross assets. It is expected that net fixed assets will continue to hold the same values in relation to gross fixed assets during the forecast period. The exception regarding forecast assumptions is related to intangible fixed assets which focus on 2010,2011 and 2012 given the most recent trend.

Net Fixed Assets	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
PP&E	170.387	175.719	176.130	179.777	174.872	168.430	172.372	182172		
(% Gross Assets)	34,1%	34,5%	34,1%	34,9%	33,3%	32,4%	32,2%	31,4%	33,3%	33,3%
Land and buildings	93.568	96.041	89.465	87.416	83.667	79.426	80.136	83120		
(% Gross Assets)	43,3%	43,0%	41,9%	40,6%	38,6%	38,5%	38,2%	38,0%	40,3%	40,3%
Machinery	64.981	68.518	68.361	70.198	76.563	76.267	75.085	82757		
(% Gross Assets)	27,6%	28,5%	27,3%	28,3%	28,9%	27,5%	26,2%	25,9%	27,5%	27,5%
Others	4.662	4.326	4.420	4.967	4.493	12.737	17.151	16295		
(% Gross Assets)	11,5%	11,1%	11,3%	14,6%	13,3%	34,5%	43,7%	39,3%	22,4%	22,4%
Advances in-progress	7.176	6.834	13.883	17.196	10.149	-	-	-		
(% Gross Assets)	100,0%	100,0%	100,0%	100,0%	100,0%	-	-	-	100,0%	-
Investment property	2.282	2.519	9.709	9.349	9.308	7.733	7.576	6075		
(% Gross Assets)	-	-	-	-	-	54,0%	50,2%	38,8%	47,7%	47,7%
Intangible Fixed Assets	31	0	632	808	685	612	427	554		
(% Gross Assets)	27,2%	0,0%	80,6%	76,3%	54,5%	14,5%	13,5%	14,5%	35,1%	14,2%

Fig. 5 – Historical Net Fixed Assets as % of Gross Fixed Assets (Thousand €)

Source: Corticeira Amorim

The net fixed asset allocation by business unit is based on the 8-year historical average weight on total net assets. Due to the lack of information provided in Corticeira Amorim annual reports, the values of PP&E, intangible fixed assets and investment property are not available by business unit. The only available information concerns the total net assets (excluding deferred tax assets) segmented by

business unit. In this sense, the weights of each business unit on the total value of net assets is assumed to be the proxy to segment PP&E, intangible assets and investment property by business unit. The forecast weight drivers are based on the most recent values and assumed to remain constant over the forecasting period. For simplicity, adjustments related to inter-BU amounts are assumed to be null.

Net Assets (proxy for Intangible, Tangible & IP)	2005	2006	2007	2008	2009	2010	2011	2012	Avg.	Forecast driver
<i>Raw Materials</i>	29,1%	29,1%	26,4%	19,7%	18,7%	17,3%	17,6%	17,8%	22,0%	17,0%
<i>Cork Stoppers</i>	42,6%	43,7%	45,3%	43,5%	45,4%	47,1%	48,0%	48,3%	45,5%	47,0%
<i>Floor and Wall Coverings</i>	17,7%	17,9%	18,4%	21,0%	21,8%	19,5%	20,0%	15,3%	18,9%	20,0%
<i>Composite Cork</i>	9,9%	10,4%	10,4%	14,7%	12,8%	11,6%	12,7%	12,8%	11,9%	13,0%
<i>Insulation Cork</i>	1,9%	1,8%	1,8%	2,0%	2,3%	2,0%	2,0%	2,0%	2,0%	2,0%
<i>Holding</i>	0,0%	0,6%	0,5%	0,7%	0,6%	4,7%	0,5%	4,9%	1,6%	1,0%
<i>Adjustments</i>	-1,1%	-3,3%	-2,8%	-1,6%	-1,5%	-2,3%	-0,8%	-1,1%	-1,8%	0,0%

Fig. 6 – Historical Net Assets weights by BU (Thousand €)

Source: Corticeira Amorim

Net Assets by BU	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PP&E	184.377	186.545	188.739	190.959	193.205	195.477	197.776	200.102	202.455	240.358
<i>Raw Materials</i>	31.344	31.713	32.086	32.463	32.845	33.231	33.622	34.017	34.417	40.861
<i>Cork Stoppers</i>	86.657	87.676	88.707	89.751	90.806	91.874	92.955	94.048	95.154	112.968
<i>Floor& Wall Coverings</i>	36.875	37.309	37.748	38.192	38.641	39.095	39.555	40.020	40.491	48.072
<i>Composite Cork</i>	23.969	24.251	24.536	24.825	25.117	25.412	25.711	26.013	26.319	31.247
<i>Insulation Cork</i>	3.688	3.731	3.775	3.819	3.864	3.910	3.956	4.002	4.049	4.807
<i>Holding</i>	1.844	1.865	1.887	1.910	1.932	1.955	1.978	2.001	2.025	2.404
Investment Property	7.859	7.859	7.859	7.859	7.859	7.859	7.859	7.859	7.859	7.460
<i>Raw Materials</i>	1.336	1.336	1.336	1.336	1.336	1.336	1.336	1.336	1.336	1.268
<i>Cork Stoppers</i>	3.694	3.694	3.694	3.694	3.694	3.694	3.694	3.694	3.694	3.506
<i>Floor& Wall Coverings</i>	1.572	1.572	1.572	1.572	1.572	1.572	1.572	1.572	1.572	1.492
<i>Composite Cork</i>	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022	970
<i>Insulation Cork</i>	157	157	157	157	157	157	157	157	157	149
<i>Holding</i>	79	79	79	79	79	79	79	79	79	75
Intangible Fixed assets	454	459	465	470	476	481	487	493	499	673
<i>Raw Materials</i>	77	78	79	80	81	82	83	84	85	114
<i>Cork Stoppers</i>	213	216	218	221	224	226	229	232	234	316
<i>Floor& Wall Coverings</i>	91	92	93	94	95	96	97	99	100	135
<i>Composite Cork</i>	59	60	60	61	62	63	63	64	65	87
<i>Insulation Cork</i>	9	9	9	9	10	10	10	10	10	13
<i>Holding</i>	5	5	5	5	5	5	5	5	5	7

Fig. 7 – Forecasted Net Assets by BU (Thousand €)

9.4. CAPEX

CAPEX	2005	2006	2007	2008	2009	2010	2011	2012
<i>Raw Materials</i>	2.197	2.414	875	1.118	939	793	2.819	1.994
<i>Cork Stoppers</i>	6.091	15.835	9.620	8.875	7.144	9.463	6.134	13.152
<i>Floor&Wall Coverings</i>	4.778	4.518	8.392	12.430	5.367	3.798	1.808	1.267
<i>Composite Cork</i>	1.322	1.026	4.469	3.830	1.995	2.128	2.523	4.118
<i>Insulation Cork</i>	319	480	699	738	562	480	210	775
<i>Holding</i>	147	61	81	56	36	22	0	67
TOTAL	14.854	24.334	24.136	27.047	16.043	16.684	13.494	21.373

Fig. 8 – Historical CAPEX by BU (Thousand €)

Source: Corticeira Amorim

9.5. Net Working Capital

Working Capital	2005	2006	2007	2008	2009	2010	2011	2012
<i>Inventories</i>	205.346	212.139	227.415	205.659	174.789	184.798	224.922	231.211
<i>Trade receivables</i>	100.230	104.761	114.132	103.423	98.584	110.311	116.758	124.108
<i>Current tax assets</i>	23.550	21.311	20.981	20.322	16.570	16.595	23.662	4.852
<i>Other current assets</i>	11.173	13.094	12.922	16.148	7.693	9.777	10.160	31.414
<i>Trade payables</i>	41.418	43.965	48.155	33.267	74.601	97.787	105.939	99.240
<i>Other borrowings and creditors</i>	36.373	36.520	36.344	37.955	32.589	26.941	30.565	40.082
<i>Current tax liabilities</i>	9.474	9.449	10.402	11.756	9.375	11.059	13.824	7.848
NWC	253.034	261.371	280.549	262.574	181.071	185.694	225.174	244.415
NWC (% Revenues)	59%	59%	62%	56%	44%	41%	46%	46%
Δ NWC	-	8.337	19.178	-17.975	-81.503	4.623	39.480	19.241

Fig. 9 – Historical Net Working Capital (Thousand €)

Source: Corticeira Amorim

Current Assets (% revenues)	2005	2006	2007	2008	2009	2010	2011	2012	Average	Forecast driver
<i>Inventories</i>	48,0%	47,9%	50,1%	43,9%	42,1%	40,5%	45,5%	43,3%	45,2%	45,2%
<i>Trade receivables</i>	23,4%	23,7%	25,2%	22,1%	23,7%	24,1%	23,6%	23,2%	23,6%	23,6%
<i>Current tax assets</i>	5,5%	4,8%	4,6%	4,3%	4,0%	3,6%	4,8%	0,9%	4,1%	4,1%
<i>Other current assets</i>	2,6%	3,0%	2,8%	3,4%	1,9%	2,1%	2,1%	5,9%	3,0%	3,0%
Current Liabilities (% revenues)	2005	2006	2007	2008	2009	2010	2011	2012	Average	Forecast driver
<i>Trade payables</i>	9,7%	9,9%	10,6%	7,1%	18,0%	21,4%	21,4%	18,6%	14,0%	19,8%
<i>Other borrowings and creditors</i>	8,5%	8,3%	8,0%	8,1%	7,8%	5,9%	6,2%	7,5%	7,5%	7,5%
<i>Current tax liabilities</i>	2,2%	2,1%	2,3%	2,5%	2,3%	2,4%	2,8%	1,5%	2,3%	2,3%

Fig. 10 – Historical NWC (Thousand €)

Source: Corticeira Amorim

The available information needed to NWC calculations (inventories, trade receivables, trade payables, etc.) in Corticeira Amorim annual reports is not detailed by business unit. In this sense, the NWC allocation is based on the values provided by the company for the purpose of this dissertation. According to Corticeira Amorim, in 2012 Cork Stoppers was the BU which held the largest stake of total

NWC (48%), followed by Raw Materials (22%) and Floor & Wall Coverings (13%). The forecasts for future NWC are based on the assumption that these weights will remain stable during the forecast period.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	wght 2012
NWC	263.408	281.472	296.605	311.820	323.858	333.634	342.446	351.498	360.797	370.351	
% Revenues	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	
Δ NWC	18.993	18.064	15.133	15.215	12.038	9.776	8.812	9.052	9.300	9.554	
<i>Raw Materials</i>	4.204	3.998	3.350	3.368	2.664	2.164	1.950	2.004	2.058	2115	22%
<i>Stoppers</i>	9.159	8.711	7.297	7.337	5.805	4.714	4.249	4.365	4.484	4607	48%
<i>Floor& Wall Coverings</i>	2.552	2.428	2.034	2.045	1.618	1.314	1.184	1.217	1.250	1284	13%
<i>Composite Cork</i>	2.552	2.428	2.034	2.045	1.618	1.314	1.184	1.217	1.250	1284	13%
<i>Insulation Cork</i>	526	500	419	421	333	270	244	250	257	264	3%
<i>Holding</i>	0	0	0	0	0	0	0	0	0	0	0%

Fig. 11 – Forecasted NWC by BU (Thousand €)

Appendix 10: Enterprise Value of Holding (Non-operational BU)

Holding	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues	756	756	756	756	756	756	756	756	756	756	756
EBITDA	-2.379	-2.526	-2.700	-2.845	-2.991	-3.106	-3.200	-3.284	-3.371	-3.460	-3.552
(-) D&A	47	247	252	257	262	268	274	279	285	291	297
EBIT	-2.426	-2.773	-2.951	-3.102	-3.253	-3.374	-3.473	-3.564	-3.656	-3.752	-3.849
(-) Taxes	-851	-832	-885	-931	-976	-1012	-1042	-1069	-1097	-1125	-1155
(+) D&A	47	247	252	257	262	268	274	279	285	291	297
(=) OCF	-1.528	-3.358	-3.585	-3.775	-3.967	-4.118	-4.242	-4.354	-4.468	-4.586	-4.707
(-) Δ NWC	0	0	0	0	0	0	0	0	0	0	0
(-) CAPEX	67	-6.979	295	302	308	314	321	328	335	342	297
(=) FCFF	-1.595	3.621	-3.880	-4.077	-4.275	-4.433	-4.563	-4.681	-4.803	-4.928	-5.004
WACC	4,9%										
PV FCFF		3451	-3525	-3529	-3527	-3486	-3420	-3344	-3270	-3197	-3094
Terminal Value	-107.919										
PV Terminal Value	-66.731										
Holding Value	-93.671										

Fig. 1 – Estimated Enterprise Value of Holding (Thousand €)

Appendix 11: Historical Dividends to Shareholders of Corticeira Amorim

	2005	2006	2007	2008	2009	2010	2011	2012
Dividends (attributable to CA shareholders)	4.564	6.523	7.175	7.825	0	0	12.621	20.162
Net income	15.735	20.104	24.479	6.152	5.111	20.535	25.274	31.055
Payout ratio	29%	32%	29%	127%	0%	0%	50%	65%
Total Dividends	4.655	6.650	7.315	7.980	0	0	13.300	21.280
Portion attributable to own shares	91	127	140	155	0	0	679	1.118
%Portion attributable to own shares	2%	2%	2%	2%	0%	0%	5%	5%
Autonomy ratio	40%	41%	41%	43%	48%	48%	47%	46%

Fig. 1 – Historical Dividend payments to Shareholders of Corticeira Amorim (Thousand €)

Appendix 12: Debt and Financial Costs of Corticeira Amorim**Historical values of interest bearing debt**

Historical BV Debt	2005	2006	2007	2008	2009	2010	2011	2012
Non-Current Debt	122.324	153.115	162.993	118.266	93.472	14.239	62.464	52.365
Current Debt	105.024	76.213	75.180	109.292	52.881	121.496	76.641	108.231
Total Book Value of Debt	227.348	229.328	238.173	227.558	146.353	135.735	139.105	160.596

Fig. 1 – Historical Debt (Book Value) of Corticeira Amorim (Thousand €)

Source: Corticeira Amorim

Historical Non-Current Debt	2005	2006	2007	2008	2009	2010	2011	2012
<i>Bank loans</i>	-	68.327	70.708	29.981	28.636	2.683	1.936	36.963
<i>Reimbursable subsidies</i>	-	0	18.285	16.285	17.362	56	28	0
<i>Bond loans</i>	-	0	0	0	0	0	25.000	0
<i>Commercial Paper</i>	-	84.788	76.000	72.000	47.474	11.500	35.500	15.500
Total Non-Current Debt	122.324	153.115	162.993	118.266	93.472	14.239	62.464	52.365

Fig. 2 – Historical Non-current Debt (Book Value) of Corticeira Amorim (Thousand €)

Source: Corticeira Amorim

Historical Current Debt	2005	2006	2007	2008	2009	2010	2011	2012
<i>Overdrafts and bank loans</i>	72.324	61.378	63.952	107.292	50.385	66.901	54.802	63.308
<i>Reimbursable subsidies</i>	-	14.835	9.228	0	496	17.607	124	0
<i>Bonds</i>	-	-	0	0	0	0	0	24.923
<i>Commercial Paper</i>	50.000	-	2.000	2.000	2.000	36.988	21.715	20.000
Total Current Debt	105.024	76.213	75.180	109.292	52.881	121.496	76.641	108.231

Fig. 3 – Historical Current Debt (Book Value) of Corticeira Amorim (Thousand €)

Source: Corticeira Amorim

Interest bearing debt forecasts

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Non-Current Debt	52.363	10.634	2.640	1.924	1.923	1.923	1.923	1.923	1.923	1.923
Current Debt	129.388	175.032	187.722	192.461	195.583	196.605	196.542	196.343	196.034	195.607
Total Book Value of Debt	181.751	185.666	190.362	194.385	197.506	198.528	198.465	198.266	197.957	197.530

Fig. 4 – Forecasted Debt of Corticeira Amorim (Thousand €)

Non-Current Debt	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<i>Bank loans</i>	36.962	7.506	1.864	1.358	1.357	1.357	1.357	1.357	1.357	1.357
<i>Reimbursable subsidies</i>	0	0	0	0	0	0	0	0	0	0
<i>Bond loans</i>	0	0	0	0	0	0	0	0	0	0
<i>Commercial Paper</i>	15.499	3.148	781	570	569	569	569	569	569	569
Total Non-Current Debt	52.363	10.634	2.640	1.924	1.923	1.923	1.923	1.923	1.923	1.923

Fig. 5 – Forecasted Non-Current Debt of Corticeira Amorim (Thousand €)

Between 01/01/2014 and 31/12/2014	41.729
Between 01/01/2015 and 31/12/2015	7.994
Between 01/01/2016 and 31/12/2016	716
After 01/01/2017	1.923
Total Non-Current Debt (2012)	52.363

Fig. 6 – Non-Current Debt Amortization Schedule Source: Corticeira Amorim

It is assumed that non-current debt of Corticeira Amorim will be composed merely by bank loans and commercial paper during the forecast period. The values of bank loans and commercial paper are based on the weight each of them had on the total value of non-current debt in 2012 (70% and 30% respectively). Apart from 2011, Corticeira Amorim never contracted debt through bond loans since 2005. Therefore, it is assumed that the company will not use this form of debt during the forecast period.

Current Debt	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<i>Overdrafts and bank loans</i>	75.684	102.382	109.805	112.577	114.403	115.001	114.964	114.848	114.667	114.417
<i>Reimbursable subsidies</i>	0	0	0	0	0	0	0	0	0	0
<i>Bonds</i>	29.795	40.306	43.228	44.319	45.038	45.273	45.259	45.213	45.142	45.044
<i>Commercial Paper</i>	23.910	32.344	34.689	35.565	36.142	36.331	36.319	36.282	36.225	36.146
Total Current Debt	129.388	175.032	187.722	192.461	195.583	196.605	196.542	196.343	196.034	195.607
<i>Newly issued debt</i>	21.157	45.644	12.690	4.739	3.122	1.022	-63	-199	-309	-426

Fig. 7 – Forecasted Current Debt of Corticeira Amorim (Thousand €)

Current debt composition is based on the same assumptions used for non-current debt. It is assumed that Corticeira Amorim will use three forms of current debt: overdrafts/banks loans and commercial paper. Its weights are similar to the ones used in non-current debt (70% and 30% of total current debt, respectively). The value of newly issued debt, represents the amount new of debt every year. This item is simply the “plug” to balance the balance sheet. The total current debt increase during the forecast period is based on the newly issued debt given the company funding needs. Most of its value is expected to be invested according to the company’s main strategic guidelines. Total interest bearing

debt is assumed to remain steady in perpetuity as funding needs decrease over time. Non-interest bearing debt like “other borrowings and creditors” (non-current) are assumed to remain constant because they are mostly composed by deferred income and costs, which may affect the accuracy of forecasts due to their unpredictability every year. Current “Other borrowings and creditors” are forecasted as part of net working capital.

Net Financial Costs

	2005	2006	2007	2008	2009	2010	2011	2012
Interest costs - bank loans	-7.009	-6.355	-7.744	-8.826	-4.250	-3.174	-4.322	-5.731
Interest costs - delayed payments	-115	-1	-32	-1	-8	-3	-5	0
Interest costs - commercial paper	-146	-2.201	-3.007	-3.560	-1.119	0	0	-574
Stamp tax - interest	-20	-155	-180	-139	-115	-67	-80	-320
Stamp tax - capital	-57	-70	-102	-67	-71	-147	-186	0
Interest costs - others	-304	-498	-470	-1.160	-660	-1.780	-2.234	-735
Total financial costs	-7.651	-9.280	-11.535	-13.753	-6.223	-5.171	-6.827	-7.360
Interest gains - bank deposits	61	68	58	80	184	847	1.023	930
Interest gains - delayed payments	105	11	29	26	170	65	36	186
Interest gains – others	56	162	159	272	174	95	254	91
Total financial gains	222	241	246	378	528	1.007	1.313	1.207
Net financial gains/costs	-7.429	-9.039	-11.289	-13.375	-5.695	-4.164	-5.514	-6.153

Fig. 8 – Historical Net Financial Gains/Costs of Corticeira Amorim (Thousand €)

Source: Corticeira Amorim

As previously mentioned, the main source of debt financing comes from overdrafts and bank loans thus, part of the financial costs supported by the company are related to interest costs from this type of debt. Interest costs from commercial paper assume a secondary role in the overall financial costs. Financial gains are mostly related with interest gains from bank deposits.

In order to avoid circularity problems, the net financial costs of Corticeira Amorim are forecasted as a percentage of the previous year’s interest bearing debt value. Since there is not much available information about the historical interest rates of each type of debt, it is not possible to forecast each item of the financial gains/costs in detail. In this sense, it is assumed that financial costs are divided in interest costs from current and non-current debt.

Interests costs from non-current debt are based on the historical average cost of debt of the company. Given the current economic context, it is assumed that interest costs of non-current debt will be 1% higher than the average cost of debt in 2012 (5%). This interest rate is expected to remain constant over the forecast period. In relation to current debt, interest costs are calculated based on the estimated cost of debt of Corticeira Amorim (2,58%).

	2005	2006	2007	2008	2009	2010	2011	2012
Net financial costs (% book value Debt _{n-1})	-3,3%	-4,0%	-4,9%	-5,6%	-2,5%	-2,8%	-4,1%	-4,4%
Average Cost of Debt	-	3,90%	5%	5,31%	2,94%	2,30%	4,75%	5,09%

Fig. 8 – Net Financial Costs (% Debt _{n-1}) and Historical Avg.Cost of Debt of Corticeira Amorim

Other interest costs are given by the difference between total net financial costs and total financial costs from interest bearing debt (bank loans, delayed payments and commercial paper). Since interest bearing debt costs are higher than total net financial costs, it is assumed that no financial gains are expected during the forecast period.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Interest Costs - Current debt	-3.338	-4.516	-4.843	-4.965	-5.046	-5.072	-5.071	-5.066	-5.058	-5.047
Interest Costs - Non-Current debt	-3.142	-638	-158	-115	-115	-115	-115	-115	-115	-115
Total financial costs from debt	-6.480	-5.154	-5.002	-5.081	-5.161	-5.188	-5.186	-5.181	-5.173	-5.162
Interest costs - others	-624	-2.885	-3.211	-3.339	-3.437	-3.548	-3.595	-3.598	-3.597	-3.594
Net financial costs	-7.104	-8.039	-8.213	-8.420	-8.598	-8.736	-8.781	-8.779	-8.770	-8.756

Fig. 10 – Forecasted Net Financial Costs (Thousand €)

Appendix 13: Historical Values of Retained Earnings and Non-Controlling Interests

Retained Earnings	2005	2006	2007	2008	2009	2010	2011	2012
Ending retained earnings (Other Reserves)	62.085	69.433	82.036	100.480	103.851	109.126	117.827	123.696

Fig. 1 – Historical Retained Earnings of Corticeira Amorim

Source: Corticeira Amorim

Non-controlling interests	2005	2006	2007	2008	2009	2010	2011	2012
Ending non-controlling interests	11.753	10.648	9.573	9.593	10.684	12.131	12.439	14.665
Dividends (minority interests)	-	-	1.980	571	-	628	506	317
Results (minority interests)	772	1.293	0	968	791	1.218	1.141	678
Dividends/Results	-	-	0%	59%	-	52%	44%	47%

Fig. 2 – Historical Non-Controlling Interests of Corticeira Amorim

Source: Corticeira Amorim

The high increase of non-controlling interests in 2012 is related with the inclusion of Trefinos in the consolidation perimeter.

Appendix 14: Fundamentals of Relative Valuation

1. Test: Growth (%)

In order to validate a comparable company in the growth test to integrate the peer group, one of the two topics (at least) has to be similar to Corticeira Amorim's.

GROWTH (%)	Sales Gr (TTM)	Sales Gr (5YR)
CORTICEIRA AMORIM SA	6,09	3,32
JILIN FOREST INDUSTRY CO-A	-9,17	2,88
SICHUAN SHENGDA FORESTRY –A	-26,03	
PFLEIDERER GRAJEWOW SA	-5,33	
UNIVERSAL FOREST PRODUCTS	13,75	-3,95
DEHUA TB NEW DECORATION-A	1,21	
GUANGDONG WEIHUA CORP –A	-13,95	
DAIKEN CORP	4,59	-1,03
FUJIAN YONGAN FORESTRY GRP-A	8,92	
TA ANN HOLDINGS BERHAD	-14,05	3,26
EUCATEX SA INDUSTRIA-PREF	6,66	9,09
SICHUAN GUODONG CONSTRUCTI-A	82,64	-0,69
INTL FOREST PRODUCTS-CLASS A	18,1	
CENTURY PLYBOARDS INDIA LTD	-29,13	21,18
COSCO INTERNATIONAL HOLDINGS	-6,1	34,08
VANACHAI GROUP PUB CO LTD	-8,29	5,08
GREENPLY INDUSTRIES LTD	19,89	28,37
MASISA SA	5,86	
WESTERN FOREST PRODUCTS INC	4,41	0,77
SAMKO TIMBER LTD	11,12	3,58
CONIFEX TIMBER INC	56,54	
YUNNAN JINGGU FORESTRY CO-A	-46,79	-11,96
TREX COMPANY INC	8,59	-1,35
AINSWORTH LUMBER CO LTD	51,77	-2,36
DELTIC TIMBER CORP	23,35	1,9
BOISE CASCADE CO		
STELLA-JONES INC	16,05	21,61
NORBORD INC	30,67	0,8
CANFOR CORP	20,98	-3,69
LOUISIANA-PACIFIC CORP	36,42	0,13
WEST FRASER TIMBER CO LTD	15,46	-1,98
DURATEX SA	15,68	51,95
LEUCADIA NATIONAL CORP	154,09	51,42
OENEO	-11,98	

Fig. 1 – Growth of Companies in the Industry

Source: Bloomberg

2. Test: Profitability (%)

Companies must have at least, similar ratios in two of the four requirements to be validated in the profitability test.

PROFITABILITY (%)	EBITDA Mrgn (TTM)	EBITDA Mrgn (5YR)	Net Profit mrgn (TTM)	Net Profit mrgn (5YR)
CORTICEIRA AMORIM SA	15,62	13,57	5,81	3,92
JILIN FOREST INDUSTRY CO	0,47	7,89	3,06	3,18
SICHUAN SHENGDA FORESTRY	17,08		1,55	
PFLEIDERER GRAJEWO SA	13,29	12,50	2,78	
UNIVERSAL FOREST PRODUCTS	3,58	3,67	1,16	0,85
DEHUA NEW DECORATION	5,67	12,15	2,94	-0,12
GUANGDONG WEIHUA	3,08		-6,75	
DAIKEN CORP	5,57	5,33	0,83	0,77
FUJIAN YONGAN FORESTRY	11,16		2,39	
TA ANN HOLDINGS BERHAD	23,66	24,15	7,27	10,03
EUCATEX SA INDUSTRIA	28,31	24,20	9,17	13,79
SICHUAN GUODONG CONSTRUCTI-A	11,93	-1,45	0,93	4,77
INTL FOREST PRODUCTS	5,94		-1,03	
CENTURY PLYBOARDS INDIA	10,50	20,11	4,70	12,24
COSCO INTERNATIONAL HOLDINGS	3,09	3,96	3,63	10,70
VANACHAI GROUP PUB CO	12,59	16,59	2,97	4,76
GREENPLY INDUSTRIES LTD	13,67	11,65	5,84	4,11
MASISA SA	11,54	7,93	3,35	
WESTERN FOREST PRODUCTS INC	5,42		3,14	5,49
SAMKO TIMBER LTD	9,81	5,44	3,01	-15,47
CONIFEX TIMBER INC	-2,46	-7,59	-7,44	-12,57
YUNNAN JINGGU FORESTRY	-41,01	-13,47	-89,33	-29,00
TREX COMPANY INC	9,66	10,58	0,88	-2,04
AINSWORTH LUMBER CO	25,77	10,71	6,94	
DELTIC TIMBER CORP	19,71	15,01	6,55	5,01
BOISE CASCADE CO	3,61		1,49	
STELLA-JONES INC	16,72	15,31	10,18	8,17
NORBORD INC	16,36	5,57	6,27	-2,09
CANFOR CORP	10,44	7,76	1,18	-1,29
LOUISIANA-PACIFIC CORP	10,85	-0,60	1,68	-11,53
WEST FRASER TIMBER CO	9,30	8,30	2,90	-0,25
DURATEX SA	35,07	29,05	13,53	13,52
LEUCADIA NATIONAL CORP	13,37	15,60	9,29	1,74
OENEO	25,64		7,88	

Fig. 2 – Profitability of Companies in the Industry

Source: Bloomberg

3. Test: Management Effectiveness (%)

Companies must have at least, similar ratios in two of the four requirements to be validated in the management effectiveness test.

MANAGEMENT EFFECTIVENESS (%)	ROIC (TTM)	ROIC (5YR)	ROE (TTM)	ROE (5YR)
CORTICEIRA AMORIM SA	9,40	5,25	11,28	6,99
JILIN FOREST INDUSTRY CO-A	-3,19	3,58	2,94	3,57
SICHUAN SHENGDA FORESTRY –A			1,50	
PFLIEDERER GRAJEWO SA	6,70		9,74	
UNIVERSAL FOREST PRODUCTS	3,73	2,44	4,07	2,63
DEHUA TB NEW DECORATION-A	3,74		4,32	
GUANGDONG WEIHUA CORP –A			-7,21	
DAIKEN CORP	6,02	2,00	3,79	2,8
FUJIAN YONGAN FORESTRY GRP-A	1,21		3,08	
TA ANN HOLDINGS BERHAD	4,68	7,02	6,04	10,09
EUCATEX SA INDUSTRIA-PREF	10,75	9,26	8,56	13,61
SICHUAN GUODONG CONSTRUCTI-A	0,17	1,25	0,21	1,65
INTL FOREST PRODUCTS-CLASS A			-2,27	
CENTURY PLYBOARDS INDIA LTD	6,45	18,21	11,24	26,39
COSCO INTERNATIONAL HOLDINGS	2,67	10,87	5,03	10,34
VANACHAI GROUP PUB CO LTD	3,11	3,99	4,66	7,3
GREENPLY INDUSTRIES LTD	16,40	8,89	28,60	19,43
MASISA SA	4,06		3,25	
WESTERN FOREST PRODUCTS INC	6,71	-2,18	8,38	-3,41
SAMKO TIMBER LTD	10,60	-25,70	14,33	-46,16
CONIFEX TIMBER INC	-2,74	-17,98	-18,68	-21,76
YUNNAN JINGGU FORESTRY CO-A		-21,31	-112,41	-24,26
TREX COMPANY INC	7,18	-3,19	2,92	-5,49
AINSWORTH LUMBER CO LTD	8,72	-4,07	9,86	-16,53
DELTIC TIMBER CORP	4,44	1,97	4,02	2,89
STELLA-JONES INC	10,90	10,60	18,25	17,73
NORBORD INC	11,09	-2,25	20,99	-6,16
CANFOR CORP	3,98	-1,51	2,87	-5,36
LOUISIANA-PACIFIC CORP	4,98	-7,25	2,83	-13,96
WEST FRASER TIMBER CO LTD	4,70	-0,29	5,85	-0,42
DURATEX SA	9,26	7,75	11,91	11,92
LEUCADIA NATIONAL CORP	10,43	0,64	13,20	2,74
OENEO	8,36		8,09	

Fig. 3 – Management Effectiveness of Companies in the Industry

Source: Bloomberg

Given the selection criterias of Corticeira Amorim peer group, the selected companies are: *Eucatex Industria*, *Vanachai Group*, *Greenply Group*, *Masisa*, *Western Forest Products*, *Norbord*, *Leucadia National* and *Oeneo*. Apart from *Oeneo*, all the remaining companies' core business is related with the construction and building industry. *Oeneo's* core business is the cork stoppers segment.

Appendix 15: Sensitivity Analysis

The first sensitivity analysis reflects the impact of different WACCs and perpetual growths on Corticeira Amorim price per share under the FCFF model. The price per share of Corticeira Amorim increases as perpetual growth increases and vice-versa. The same happens with WACC variations.

The following table (Fig. 1) demonstrates this same impact on the price per share. Scenarios in light red represent a “Sell” recommendation to investors of Corticeira Amorim once the target price of 2013 is below the current market price of shares (approx.. 2€/share). All these prices aim to a potential downside of the price in 2013, so investors should sell their positions of Corticeira Amorim to prevent against the potential devaluation of the stock. The opposite happens for the light green scenarios. These scenarios translate a potential appreciation of the shares in 2013, therefore investors should “buy” positions in the company in order to increase their wealth. Scenarios in light orange represent neutral situations, where current investors of Corticeira Amorim should hold their stock positions of the company since is is not evident what will happened to the share price in 2013. The yellow scenario corresponds to the dissertation DCF estimates whereas the dark grey scenarios are invalid for this analysis.

		Growth in perpetuity (g)								
Price per Share 2013 (€)		0,0%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%	3,5%	4,0%
WACC	2,92%	8,86	10,63	13,32	17,91	27,48	59,84	-312,33	-42,83	-22,86
	3,92%	5,96	6,79	7,91	9,48	11,88	15,96	24,48	53,29	-278,01
	4,92%	4,31	4,76	5,34	6,08	7,06	8,48	10,62	14,27	21,87
	5,92%	3,26	3,54	3,87	4,28	4,79	5,46	6,35	7,61	9,52
	6,92%	2,55	2,73	2,94	3,19	3,49	3,85	4,32	4,91	5,71
	7,92%	2,04	2,16	2,30	2,47	2,65	2,88	3,15	3,48	3,89
	8,92%	1,67	1,75	1,85	1,96	2,09	2,23	2,40	2,61	2,85
	9,92%	1,38	1,44	1,51	1,56	1,68	1,78	1,89	2,03	2,18
	10,92%	1,16	1,20	1,26	1,31	1,38	1,45	1,53	1,62	1,72

Fig. 1 – Sensitivity Analysis of FCFF variables

Fig. 2 demonstrates the impact of other FCFF variables in the target price per share. There are presented the bull and bear case scenarios in relation to the dissertation estimate. It is evident that little variations in some of these variables lead to higher variations on the share price. It is interesting to notice that positive variations on CAPEX and COGS lead to higher price variations in the bull case scenario whereas negative variations on revenues have stronger impact in the bear case scenario.

Other interesting point is the importance of Cork Stoppers BU among all the business unit in Corticeira Amorim Group. An annual positive increase of 2% in revenues of this BU, increases the share price by 0,50 €. On the other hand, an annual negative revenue growth (-2%) during the forecast period results in the share price decrease by 2,5€.

Scenarios		Price per Share (€)
Bull Case	2% COGS decrease	9,04
	3% CAPEX decrease	8,44
	2% Revenue increase in Cork Stoppers BU	7,52
	3% NWC decrease	7,3
Dissertation		7,06
Bear Case	3% CAPEX increase	7,01
	(-3%) Revenue growth in Cork Stoppers BU	4,58
	3% COGS increase	4,18
	(-3%) Revenue growth	2,55

Fig. 2 – Sensitivity Analysis of FCF variables

Appendix 16: Dissertation vs Investment Bank (BPI) Analysis

Firstly, the major difference between both analysis is the chosen forecast period length. Whereas BPI investment analysis is based on a short-term horizon of 3 years, the dissertation analysis is based on a 10 year period length. It is assumed a long-term period based on the available information about the cork, wine and construction industry, which is fundamental to support the assumptions made. It is not logical to constrain Corticeira Amorim valuation to such a short period of time taking in consideration the optimistic growth perspectives of the company in the medium/long-term.

Other important issue is to understand how different forecast periods affect the estimated target share price under the DCF approach. Different forecast horizons not only affect the discounting rate (especially risk-free rates) but also the FCF and respective business unit values. A longer forecast period length demands a higher risk-free rate (using the 10Yr German Government Bond as proxy) and leads to more Free Cash Flows to the firm, as more periods are being discounted. Also each BU terminal value is higher since it is expected that the company will keep growing in the future. Finally, it is important to refer that BPI assumes forecasts for 2012. In the dissertation, all the historical data from 2012 is not part of the forecasts.

Regarding the revenues of Corticeira Amorim, the dissertation estimates are more optimistic than the ones presented by BPI. The optimistic revenue growth assumed in this dissertation takes into account the new strategic path of the company in reinforcing its position in higher value added segments. The

US wine market slowdown and the current economic context effects are expected to be offset by this new strategy allowing the company to keep growing consistently. Part of the projected growth is expected to come from high-valued segments and markets (eg: champagne stoppers). The reinforcement of raw materials procurement is other relevant factor to the estimated revenue growth, since Raw Materials BU is expecting to increase its supply to the other business units in the future. These two factors are the main boosters of estimated revenue growth during the forecast period. On the other hand, BPI estimates are more moderate than this dissertation's assuming a 5% revenue CAGR between 2011-2015.

The expected EBITDA margins are not very different in both valuations. Although BPI expects a slightly decrease in the EBITDA margin mainly due to the higher pressure on raw material prices and increased transportation costs, this dissertation assumes a constant margin during the forecast period. The reason behind this assumptions is the fact that Corticeira Amorim Group is focusing on cost-cutting and efficiency improvement measures as one of its main strategic guidelines to face the current economic context. Bearing this in mind, it is assumed that the Group will be able to maintain a constant EBITDA margin level in the future.

Depreciation is expected to be slightly higher in the dissertation analysis, assuming the company will continue to invest in tangible and intangible asstes (mostly PP&E) as part of its selective acquisitions strategy. Net profit forecasts are very similar in both analysis as net financials, taxes and minority interest are expected to have similar values.

Income Statement	2010	2011	2012	2013	2014	2015
Turnover	457	495	530	553	573	590
EBITDA	66	72	79	78	78	77
EBITDA Margin	14,4%	14,6%	14,9%	14,2%	13,6%	13,0%
Dep.+Prov.	-26	-27	-25	-23	-23	-22
EBIT	40	46	54	56	55	54
EBIT margin	8,8%	9,2%	10,2%	10,1%	9,6%	9,2%
Net Financials	-4	-5	-6	-7	-6	-5
Extraordinaries	0	0	0	0	0	0
Income Tax	-14	-14	-14	-15	-15	-15
Minority Interest	-1	-1	-1	-1	-1	-1
Net Profit	21	25	33	33	33	33

Fig. 1 – Income Statement Forecasts – BPI (€ Mn)

Source: BPI Equity Research

Income Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Turnover	456.790	494.842	534.240	570.206	609.310	642.068	675.004	701.062	722.226	741.300	760.896	781.027	801.709
EBITDA	66.006	72.437	82.465	84.413	90.202	95.051	99.927	103.785	106.918	109.742	112.643	115.623	118.685
EBITDA Margin	14,4%	14,6%	15,4%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%
Dep.+Prov.	-20.867	-21.059	-21.206	-24.668	-25.183	-25.709	-26.247	-26.796	-27.357	-27.931	-28.518	-29.117	-29.729
EBIT	45.139	51.378	61.259	59.745	65.019	69.343	73.681	76.989	79.560	81.810	84.125	86.506	88.955
EBIT margin	9,9%	10,4%	11,5%	10,5%	10,7%	10,8%	10,9%	11,0%	11,0%	11,0%	11,1%	11,1%	11,1%
Net Financials	-4.164	-5.515	-6.153	-7.104	-8.039	-8.213	-8.420	-8.598	-8.736	-8.781	-8.779	-8.770	-8.756
Extraordinary	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax	-14.462	-13.747	-16.203	-12.969	-14.267	-15.508	-16.744	-17.680	-18.408	-19.067	-19.760	-20.475	-21.212
Minority													
Interest	1.218	1.141	678	678	678	678	678	678	678	678	678	678	678
Net Profit	20.535	25.274	31.055	31.623	34.651	37.548	40.431	42.616	44.314	45.852	47.470	49.137	50.856

Fig. 2 – Income Statement Forecasts – Dissertation (Thousand €)

Balance Sheet	2010	2011	2012	2013	2014	2015
Net Intangibles	15	12	13	13	13	14
Net Fixed Assets	168	172	185	180	175	170
Net Financials	16	17	17	17	17	16
Inventories	185	225	225	240	250	260
ST Receivables	137	151	170	167	173	178
Other assets	8	6	8	8	9	9
Cash & Equivalents	33	22	14	10	15	18
Net Assets	562	605	632	634	651	664
Equity & Minorities	269	282	296	317	338	358
MLT Liabilities	30	90	77	77	77	67
o.w. Debt	14	62	50	50	50	40
ST Liabilities	257	227	253	234	228	232
o.w. Debt	121	77	90	70	55	50
o.w. Payables	109	120	131	131	139	146
Equity + Min. + Liab.	562	605	632	634	651	664

Fig. 3 – Balance Sheet Forecasts – BPI (€ Mn)

Source: BPI Equity Research

Balance Sheet	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net Intangibles	15.130	11.849	6.497	6.673	6.550	6.477	6.292	6.420	6.418	6.430	6.443	6.456	6.468
Net Fixed Assets	168.430	172.372	182.173	197.705	202.044	206.477	211.008	215.638	220.370	225.205	230.147	235.197	240.358
Net Financials	17.470	17.254	16.557	17.941	17.941	17.941	17.941	17.941	17.941	17.941	17.941	17.941	17.941
Inventories	184.798	224.922	231.211	257.471	275.128	289.919	304.791	316.557	326.114	334.727	343.575	352.665	362.003
ST Receivables	110.311	116.758	124.108	134.744	143.984	151.725	159.508	165.666	170.667	175.175	179.805	184.562	189.450
Other assets	7.742	6.105	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746
Cash & Equivalents	33.312	21.681	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015
Net Assets	561.766	605.054	643.768	701.502	735.506	764.794	794.313	818.717	839.511	858.825	878.641	898.971	919.830
Equity & Minorities	268.545	282.293	295.247	309.999	328.499	343.383	359.117	372.678	386.176	399.900	414.107	428.781	443.936
MLT Liabilities	35.938	95.792	93.120	93.118	51.389	43.395	42.679	42.678	42.678	42.678	42.678	42.678	42.678
o.w. Debt	14.239	62.464	52.365	52.363	10.634	2.640	1.924	1.923	1.923	1.923	1.923	1.923	1.923
ST Liabilities	257.283	226.969	255.401	298.385	355.618	378.016	392.517	403.362	410.656	416.247	421.856	427.513	433.216
o.w. Debt	121.496	76.641	108.231	129.388	175.032	187.722	192.461	195.583	196.605	196.542	196.343	196.034	195.607
o.w. Payables	97.787	105.939	99.240	113.128	120.886	127.385	133.919	139.089	143.288	147.072	150.960	154.954	159.057
Equity + Min. + Liab.	561.766	605.054	643.768	701.502	735.506	764.794	794.313	818.717	839.511	858.825	878.641	898.971	919.830

Fig. 4 – Balance Sheet Forecasts – Dissertation (Thousand €)

In this dissertation analysis, CAPEX forecasts are higher than the values estimated by BPI. It is expected that Corticeira Amorim will continue to have expansion CAPEX given the selective acquisition strategy regarding value added-value products and markets during the upcoming years. The company will continue to reinvest its funds to improve its existing assets and acquire new ones. On the other hand, BPI assumes that depreciation will continue to be higher than CAPEX which seems inappropriate to the company strategic vision. Also the Net Working Capital is expected to be higher according to the dissertation analysis since it is presented as percentage of total revenues. Thus, changes in net working capital are consequently higher than the values of BPI. Nonetheless, there is no significant differences of NWC as a percentage of the total revenues. Other difference is the fact that the presented NWC excludes cash and other reserves according to this dissertation.

Regarding the dividend payment, the dissertation assumes that Corticeira Amorim will have a high payout ratio in the future in order to balance the autonomy ratio targeted by the company (between 35-45%) in terms of capital risk. It is expected a gradual increase of dividends paid as the company accumulates excess earnings in order to have the targeted 45% autonomy ratio (approximately) during the forecast period taking in consideration the current economic environment. The payout ratio assumed by BPI is significantly lower.

In relation to the debt of Corticeira Amorim, the dissertation assumes a larger amount of debt hold by the company in relation to BPI analysis. Although it does not affect the valuation, it is assumed that Corticeira Amorim will continue to have a considerable amount of debt in order to keep funding its investments and paying dividends to its shareholders. Non-current debt is assumed to decrease gradually as the company repays it according to the amortization schedule whereas BPI expects no significant changes in the future.

Cash-Flow Statement	2010	2011	2012	2013	2014	2015
(+) EBITDA	66	72	79	78	78	77
(-)Chg. In NWC	5	33	12	10	7	6
(-)Income Taxes	13	18	10	15	15	15
(=) Operating Cash Flow	48	21	57	53	56	56
(-) Expansion CAPEX	0	4	15	0	0	0
(-) Maintenance CAPEX	11	18	18	18	18	18
(=)Cash Flow after inv.	37	-1	23	36	38	37
(-)Chg. Net Fin. Inv.	-2	1	0	0	0	0
(-) Net Fin. Exp.	4	5	6	7	6	5
(-) Dividends Paid	0	13	21	12	12	13
(+/-) Equity	0	0	0	0	0	0
Other	1	6	-4	-1	-1	-1
(=)Change in Net Debt	-37	15	8	-16	-19	-18
Net Debt (+) / Net Cash (-)	102	117	126	110	90	72

Fig. 5 – Cash-Flow Statement – BPI (€Mn)

Source: BPI Equity Research

Cash-Flow Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
(+) EBITDA	66.006	72.437	82.465	84.212	89.987	94.825	99.689	103.538	106.663	109.480	112.374	115.348	118.402
(-)Chg. In NWC	4.623	39.480	19.241	18.993	18.064	15.133	15.215	12.038	9.776	8.812	9.052	9.300	9.554
(-)Income Taxes	14.462	13.747	16.203	12.969	14.267	15.508	16.744	17.680	18.408	19.067	19.760	20.475	21.212
(=) Operat. Cash Flow	46.921	19.210	47.021	52.250	57.656	64.184	67.731	73.820	78.479	81.601	83.562	85.573	87.636
(-) Expansion CAPEX	0	0	167	14.868	4.350	4.446	4.543	4.643	4.745	4.849	4.956	5.064	5.175
(-) Maintenance CAPEX	16.684	13.494	21.206	24.668	25.183	25.709	26.247	26.796	27.357	27.931	28.518	29.117	29.729
(=)Cash Flow after inv.	30.237	5.716	25.648	12.713	28.123	34.030	36.941	42.381	46.376	48.821	50.088	51.391	52.731
(-)Chg. Net Fin. Inv.	0	0	0	0	0	0	0	0	0	0	0	0	0
(-) Net Fin. Exp.	4.164	5.515	6.153	7.104	8.039	8.213	8.420	8.598	8.736	8.781	8.779	8.770	8.756
(-) Dividends Paid	0	12.621	20.162	18.161	19.900	26.283	28.302	31.962	33.235	34.389	35.602	36.853	38.142
(+/-) Equity Other	0	0	0	0	0	0	0	0	0	0	0	0	0
(-)Change in Net Debt	-26.073	12.420	667	21.157	45.644	12.690	4.739	3.122	1.022	-63	-199	-309	-426
NetDebt(+)/Cash (-)*	135.735	139.105	160.596	181.751	185.666	190.362	194.385	197.506	198.528	198.465	198.266	197.957	197.530

Fig. 6 – Cash-Flow Statement – Dissertation (thousand €)

*Including Non-current debt variations

The WACC is the variable with more differences between BPI and the dissertation analysis. Firstly, the assumed risk-free rate of BPI includes the portuguese country risk premium given the current high risk involved in investing in portuguese companies. BPI treats country risk premium as a separate risk factor assuming that investors of Corticeira Amorim will charge a premium for being a portuguese company. This assumption leads to very high cost of equity and debt under the CAPM model which seems inappropriate according to the reality of Corticeira Amorim under the dissertation perspective. On the other hand, the dissertation assumes that the company's exposure to risk is similar to other market risk given the high diversification and financial health of Corticeira Amorim. The assumed risk-free rate in the dissertation is the 10 Year Government German Bond, since 2/3 of the company business is done in euro-currency and the forecast horizon is 10 years.

The estimated cost of equity in this dissertation assumes a weighted average market risk premium of the countries where Corticeira Amorim has its assets. In this sense, the market risk premium traduces the real exposure to risk of the company's operating assets. The high market risk premium is explained by the strong presence of Corticeira Amorim in Southern European Countries and Northern African Countries which imply higher market premiums demanded by investors. BPI uses the average US market premium as a proxy for the market risk premium.

Other important assumptions is the value of beta levered used in both analysis. In this dissertation it is assumed a lower beta according to Reuters in relation to the one used by BPI. Given the recent

historical data of the company's stock performance and the aggregated market, it is possible to see that there is not a strong correlation between both given the very positive appreciation of Corticeira Amorim stock in recent years in relation to the market. In this sense, it seems more plausible scenario than the perfect correlation of systematic risk assumed by BPI (0,65 vs 1). Thus, the estimated cost of equity is significantly lower compared to BPI estimates.

The cost of debt is also significantly lower in the dissertation due to the assumed risk-free (country risk premium not included). The estimated low cost of debt in this dissertation reflects the high liquidity and financial strength of Corticeira Amorim highly rated having a low default spread. Given the historical average cost of debt presented in the annual reports of the company (4% average since 2006), it is not appropriate to use such high cost of debt as the one estimated by BPI.

Regarding the weights of debt and equity used in the WACC computations, the dissertation assumes a 50% weight for both taking in consideration the recent historical autonomy ratios and market value weights. Considering the recent historical autonomy ratios around 45% and the fact that Corticeira Amorim targets this value, it is assumed a 50% ratio assuming the company will continue to hold a considerable amount of debt in the future. BPI assumes a 35% leverage which does not match the current and historical situation of Corticeira Amorim in recent years. The expansionist strategy of the company demands high amounts of debt in the future until the company reaches maturity.

WACC Assumptions - BPI	
Beta levered	1
Risk free (Rf)*	7,20%
Market Risk Premium	6,00%
Cost of Equity (Ke)	13,20%
E/(E+D)	65%
D/(E+D)	35%
Interest Coverage Ratio	-
Rating	BBB
Default Spread	2,00%
Cost of Debt (Kd)	9,20%
After-tax cost of Debt(Kd*(1-tc))	6,53%
Tax Rate	29%
WACC	10,87%
# Shares Outstanding	126.000
Perpetual Growth (g)	2%

Fig. 7 – WACC Assumptions – BPI
Source: BPI Equity Research

WACC Assumptions - DISSERTATION	
Beta levered	0,65
Risk free (Rf)	1,73%
Market Risk Premium	9,7%
Cost of Equity (Ke)	8,0%
E/(E+D)	50%
D/(E+D)	50%
Interest Coverage Ratio	8,19
Rating	A+
Default Spread	0,85%
Cost of Debt (Kd)	2,58%
After-tax cost of Debt(Kd*(1-tc))	1,81%
Tax Rate	30%
WACC	4,92%
# Shares Outstanding	126.240
Perpetual Growth (g)	2%

Fig. 8 – WACC Assumptions – Dissertation

A small cap discount is assumed on the estimated fair value price. This assumption considers the market price discount associated to some illiquidity Corticeira Amorim stock may have. Being a Portuguese company and not be listed in the main Portuguese stock market index *PSI-20* impacts the visibility of Corticeira Amorim. Despite representing a potential good investment, Corticeira Amorim is still “hidden” from the general investors’ radars. For simplicity, it is assumed a 10% discount to match the value assumed by BPI.

In a nutshell, the financial strength and highly diversification of products/markets of Corticeira Amorim allows the company to have a significant low cost of capital according to this dissertation analysis. The optimistic projections of total revenues, especially in Raw Materials and Cork Stoppers BU’s, combined with strategic cost-cutting measures allow the company to generate high amounts of earnings and accumulated reserves. Thus, the company is able to mitigate somehow the implied risk of the Portuguese market. The major differences on both valuation results derive mostly from the differences between the estimated WACC’s in each valuation analysis.

VALUATION SUMMARY - Dissertation		
Business	EV Attrib.	% EV
Cork Stoppers	897.875	73%
Floor&Wall Coverings	136.267	11%
Composite Cork	81.953	7%
Insulation Cork	29.911	2%
Raw Materials	178.165	14%
Holding	-93.671	-8%
Property Investments	7.460	1%
Total EV adjusted	1.237.961	
(-) YE13 Net Debt	-181.751	
(-) Provisions	-21.038	
(-) Derivatives	-26.774	
(-) Minorities	-15.026	
(+) Treasury Stocks	7.169	
(+) Financial Investments	8.018	
(-) Dividend Payment	-18.161	
Equity Value	990.397	
# Shares (mn)	126.240	
YE13 Fair Value (€)	7,85	
Small Cap. Discount	10%	
YE13 Price Target (€)	7,06	

Fig. 9 – Valuation Summary – Dissertation (Thousand €)

VALUATION SUMMARY - BPI		
Business	EV Attrib.	% EV
Cork Stoppers	242.000	61%
Floor&Wall Coverings	76.000	19%
Composite Cork	46.000	12%
Insulation Cork	10.000	3%
Raw Materials	25.000	6%
Total EV adjusted	399.000	100%
(-) YE13 Adj. Net Debt	170.000	
(+) Financial Investments	17.000	
Equity Value	246.000	
# Shares (mn)	126.000	
YE13 Fair Value (€)	2,0	
Small Cap. Discount	10%	
YE13 Price Target (€)	1,76	

Fig. 10 – Valuation Summary – BPI (Thousand €)

Source: BPI Equity Research

Appendix 17: Income Statement of Corticeira Amorim

Income Statement	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales	427.998	442.552	453.770	468.288	415.210	456.790	494.842	534.240	570.206	609.310	642.068	675.004	701.062	722.226	741.300	760.896	781.027	801.709
COGS	215.456	231.307	230.806	241.371	213.492	221.777	243.123	268.035	288.158	307.920	324.474	341.118	354.287	364.982	374.622	384.525	394.698	405.150
Change in manufactured inventories	-4.805	6.179	-3.588	-5.406	-4.811	1.817	3.288	7.755	4.183	4.470	4.710	4.952	5.143	5.298	5.438	5.582	5.729	5.881
Gross margin	48,5%	49,1%	48,3%	47,3%	47,4%	51,8%	51,5%	51,3%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%
3rd party supplies and services	69.764	73.783	75.637	78.804	71.078	78.320	86.602	93.205	96.707	103.339	108.895	114.481	118.901	122.490	125.725	129.048	132.463	135.970
Staff costs	93.808	91.627	87.806	93.296	88.991	90.712	93.751	97.678	104.254	111.403	117.393	123.415	128.179	132.048	135.536	139.119	142.799	146.581
Impairments of assets	936	620	441	2.051	613	2.140	1.872	1.008	1.480	1.582	1.667	1.753	1.820	1.875	1.925	1.976	2.028	2.081
Other gains/losses	6.269	4.555	2.633	-707	2.297	348	-345	396	423	452	476	500	520	535	549	564	579	594
Current EBITDA	49.498	55.949	58.125	46.653	38.522	66.006	72.437	82.465	84.212	89.987	94.825	99.689	103.538	106.663	109.480	112.374	115.348	118.402
EBITDA margin	11,57%	12,64%	12,81%	9,96%	9,28%	14,45%	14,64%	15,44%	14,77%	14,77%	14,77%	14,77%	14,77%	14,77%	14,77%	14,77%	14,77%	14,77%
Depreciation	22.698	21.798	21.139	21.109	20.587	20.867	21.059	21.206	24.668	25.183	25.709	26.247	26.796	27.357	27.931	28.518	29.117	29.729
Current EBIT	26.800	34.151	36.986	25.544	17.935	45.139	51.378	61.259	59.544	64.804	69.116	73.443	76.742	79.306	81.549	83.857	86.231	88.673
EBIT margin	6,3%	7,7%	8,2%	5,5%	4,3%	9,9%	10,4%	11,5%	10,4%	10,6%	10,8%	10,9%	10,9%	11,0%	11,0%	11,0%	11,0%	11,1%
Non-current costs	0	0	0	0	4.515	5.110	5.792	6.978	6.978	6.978	6.978	6.978	6.978	6.978	6.978	6.978	6.978	6.978
Net financial costs	-7.429	-9.039	-11.289	-13.376	-5.694	-4.164	-5.515	-6.153	-7.104	-8.039	-8.213	-8.420	-8.598	-8.736	-8.781	-8.779	-8.770	-8.756
Gains (losses) in associates	1	264	269	454	380	350	91	-192	-192	-192	-192	-192	-192	-192	-192	-192	-192	-192
Profits before tax	19.372	25.376	25.966	12.622	8.106	36.215	40.162	47.936	45.271	49.595	53.734	57.853	60.974	63.400	65.598	67.908	70.291	72.746
Tax income	2.865	3.979	1.487	5.502	2.204	14.462	13.747	16.203	12.969	14.267	15.508	16.744	17.680	18.408	19.067	19.760	20.475	21.212
Profits after tax	16.507	21.397	24.479	7.120	5.902	21.753	26.415	31.733	32.301	35.329	38.226	41.109	43.294	44.926	46.393	47.795	49.235	50.717
Non-controlling interests	772	1.293	0	968	791	1.218	1.141	678	678	678	678	678	678	678	678	678	678	678
Net income (att. CA Shareholders)	15.735	20.104	24.479	6.152	5.111	20.535	25.274	31.055	31.623	34.651	37.548	40.431	42.616	44.314	45.852	47.470	49.137	50.856
Earnings per share - basic and diluted	0,12	0,15	0,18	0,047	0,04	0,16	0,20	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25
# Shares outstanding	130.041	130.461	137.368	130.894	131.051	126.759	126.370	126.240	126.240	126.240	126.240	126.240	126.240	126.240	126.240	126.240	126.240	126.240

Fig. 1 – Income Statement of Corticeira Amorim (including Forecasts) (Thousand €)

Appendix 18: Balance Sheet of Corticeira Amorim

Assets	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PP&E	170.387	175.719	176.130	179.777	174.872	168.430	172.372	182.173	197.705	202.044	206.477	211.008	215.638	220.370	225.205	230.147	235.197	240.358
Investment property	2.282	2.519	9.709	9.349	9.308	7.733	7.576	6.076	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460	7.460
Goodwill	13.618	13.253	13.304	13.498	18.704	15.099	11.849	5.865	5.865	5.865	5.865	5.865	5.865	5.865	5.865	5.865	5.865	5.865
Investments in associates	296	2.717	2.906	10.427	5.231	5.362	5.967	8.018	8.018	8.018	8.018	8.018	8.018	8.018	8.018	8.018	8.018	8.018
Intangible Fixed assets	31	0	632	808	685	612	427	555	553	565	578	591	603	617	630	644	658	673
Other financial assets	937	2.053	2.265	2.490	2.453	1.995	3.573	3.735	3.735	3.735	3.735	3.735	3.735	3.735	3.735	3.735	3.735	3.735
Deferred tax assets	12.787	9.719	9.225	8.224	8.100	7.742	6.105	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746	6.746
Other assets	596	307	2	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0
Non-current assets	200.934	206.287	214.173	224.575	219.354	206.973	207.871	213.168	230.083	234.433	238.879	243.422	248.066	252.811	257.660	262.615	267.680	272.855
Inventories	205.346	212.139	227.415	205.659	174.789	184.798	224.922	231.211	257.471	275.128	289.919	304.791	316.557	326.114	334.727	343.575	352.665	362.003
Trade receivables	100.230	104.761	114.132	103.423	98.584	110.311	116.758	124.108	134.744	143.984	151.725	159.508	165.666	170.667	175.175	179.805	184.562	189.450
Current tax assets	23.550	21.311	20.981	20.322	16.570	16.595	23662	4.852	23.232	24.825	26.160	27.502	28.564	29.426	30.203	31.002	31.822	32.664
Other current assets	11.173	13.094	12.922	16.148	7.693	9.777	10.160	31.414	16.958	18.121	19.095	20.074	20.849	21.479	22.046	22.629	23.228	23.843
Cash and cash equivalents	8.666	3.997	6.393	4.596	7.740	33.312	21.681	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015	39.015
Current assets	348.965	355.302	381.843	350.148	305.376	354.793	397.183	430.600	471.420	501.073	525.915	550.891	570.652	586.700	601.165	616.025	631.291	646.975
Total Assets	549.899	561.589	596.016	574.723	524.730	561.766	605.054	643.768	701.502	735.506	764.794	794.313	818.717	839.511	858.825	878.641	898.971	919.830
Equity																		
Shares capital	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000	133.000
Own shares (Treasury Stock)	-2.402	-2.425	-2.463	-2.501	-2.800	-6.247	-6.247	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169	-7.169
Other reserves	62.085	69.433	82.036	100.480	103.851	109.126	117.827	123.696	137.519	152.631	164.256	176.746	187.761	199.201	211.025	223.253	235.898	248.974
Net Income	15.735	20.104	24.479	6.152	5.111	20.535	25.274	31.055	31.623	34.651	37.548	40.431	42.616	44.314	45.852	47.470	49.137	50.856
Non-controlling interests	11.753	10.648	9.573	9.593	10.684	12.131	12.439	14.665	15.026	15.387	15.748	16.109	16.470	16.831	17.192	17.553	17.914	18.275
Total Equity	220.171	230.760	246.625	246.724	249.846	268.545	282.293	295.247	309.999	328.499	343.383	359.117	372.678	386.176	399.900	414.107	428.781	443.936
Liabilities																		
Interest-bearing loans	122.324	153.115	162.993	118.266	93.472	14.239	62.464	52.365	52.363	10.634	2.640	1.924	1.923	1.923	1.923	1.923	1.923	1.923
Other borrowings & creditors	5.734	3.172	6.521	7.728	2.131	1.160	10.525	13.227	13.227	13.227	13.227	13.227	13.227	13.227	13.227	13.227	13.227	13.227
Provisions	4.836	4.386	5.202	4.732	4.581	14.557	16.700	21.038	21.038	21.038	21.038	21.038	21.038	21.038	21.038	21.038	21.038	21.038
Deferred tax liabilities	4.532	4.009	4.827	5.002	5.254	5.982	6.103	6.490	6.490	6.490	6.490	6.490	6.490	6.490	6.490	6.490	6.490	6.490
Non-current liabilities	137.426	164.682	179.543	135.728	105.438	35.938	95.792	93.120	93.118	51.389	43.395	42.679	42.678	42.678	42.678	42.678	42.678	42.678
Interest-bearing loans	105.024	76.213	75.180	109.292	52.881	121.496	76.641	108.231	129.388	175.032	187.722	192.461	195.583	196.605	196.542	196.343	196.034	195.607
Trade payables	41.418	43.965	48.155	33.267	74.601	97.787	105.939	99.240	113.128	120.886	127.385	133.919	139.089	143.288	147.072	150.960	154.954	159.057
Other borrowings & creditors	36.373	36.520	36.344	37.955	32.589	26.941	30.565	40.082	42.973	45.920	48.389	50.871	52.835	54.430	55.867	57.344	58.861	60.420
Current tax liabilities	9.474	9.449	10.402	11.756	9.375	11.059	13.824	7.848	12.896	13.780	14.521	15.266	15.855	16.334	16.765	17.209	17.664	18.132
Current liabilities	192.289	166.147	170.081	192.270	169.446	257.283	226.969	255.401	298.385	355.618	378.016	392.517	405.492	415.082	427.636	440.616	453.929	467.580
Total Liabilities	329.715	330.829	349.624	327.998	274.884	293.221	322.761	348.521	391.503	407.007	421.411	435.196	448.170	457.760	470.314	483.294	496.607	510.258
Total Liabilities and Equity	549.899	561.589	596.016	574.723	524.730	561.766	605.054	643.768	701.502	735.506	764.794	794.313	818.717	839.511	858.826	878.641	898.971	919.830

Fig. 2 – Balance Sheet of Corticeira Amorim (including Forecasts) (Thousand €)

Appendix 19: Cash-Flow Statement of Corticeira Amorim

Cash-Flow Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
(+) EBITDA	66.006	72.437	82.465	84.212	89.987	94.825	99.689	103.538	106.663	109.480	112.374	115.348	118.402
(-)Chg. In NWC	4.623	39.480	19.241	18.993	18.064	15.133	15.215	12.038	9.776	8.812	9.052	9.300	9.554
(-)Income Taxes	14.462	13.747	16.203	12.969	14.267	15.508	16.744	17.680	18.408	19.067	19.760	20.475	21.212
(=) Operating Cash Flow	46.921	19.210	47.021	52.250	57.656	64.184	67.731	73.820	78.507	81.660	83.713	85.822	87.987
(-) Expansion CAPEX	0	0	167	14.868	4.350	4.446	4.543	4.643	4.745	4.849	4.956	5.064	5.175
(-) Maintenance CAPEX	16.684	13.494	21.206	24.668	25.183	25.709	26.247	26.796	27.357	27.931	28.518	29.117	29.729
(=)Cash Flow after inv.	30.237	5.716	25.648	12.713	28.123	34.030	36.941	42.381	46.376	48.821	50.088	51.391	52.731
(-)Chg. Net Fin. Inv.	0	0	0	0	0	0	0	0	0	0	0	0	0
(-) Net Fin. Exp.	4.164	5.515	6.153	7.104	8.039	8.213	8.420	8.598	8.736	8.781	8.779	8.770	8.756
(-) Dividends Paid	0	12.621	20.162	18.161	19.900	26.283	28.302	31.962	33.235	34.389	35.602	36.853	38.142
(+/-) Equity	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
(=)Change in Net Debt	-26.073	12.420	667	21.157	45.644	12.690	4.739	3.122	1.022	-63	-199	-309	-426
Net Debt (+) / Net Cash (-)*	135.735	139.105	160.596	181.751	185.666	190.362	194.385	197.506	198.528	198.465	198.266	197.957	197.530

Fig. 3 – Cash-Flow Statement of Corticeira Amorim (including Forecasts) (Thousand €)

*Including Non-current debt variations

Appendix 20: BPI Investment Report of Corticeira Amorim - Information

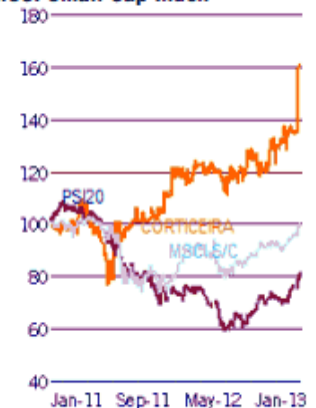
Stock Data

Price (11 th Jan.):	1.85	Price Target:	1.80
No. of shares (mn):	133.0	Market Cap (€ mn):	246
Reuters/Bloomberg:	CORA.LS/COR PL	Free-Float:	12%
NET DEBT/EBITDA '13:	1.4	ROE '13:	11%
EPS Growth ('11-'14):	9.7%	Avg. Daily Vol. [€'000]:	24
Major Shareholders:	Amorim Family (83%), Treasury Stock (5.1%)		

Estimates

	2010	2011	2012 ^f	2013 ^f	2014 ^f	2015 ^f
EPS Adj. (€)	0.15	0.19	0.25	0.25	0.25	0.25
PE Adj.	12.0	9.7	7.5	7.4	7.4	7.4
Dividend yield	0.0%	5.4%	8.6%	4.9%	4.9%	5.4%
FCF yield	6.2%	-0.1%	8.2%	9.6%	10.5%	10.4%
EV/EBITDA	5.3	4.8	4.4	4.4	4.5	4.5

Corticeira Amorim vs. PSI20 vs. MSCI Small Cap Index



Source: Bloomberg.

Income Statement

(€ mn)	2010	2011	2012 ^f	2013 ^f	2014 ^f	2015 ^f	CAGR 11-15 ^f
Turnover	457	495	530	553	573	590	5%
EBITDA	66	72	79	78	78	77	1%
EBITDA margin	14.4%	14.6%	14.9%	14.2%	13.6%	13.0%	
Dep.+ Prov.	-26	-27	-25	-23	-23	-22	-5%
EBIT	40	46	54	56	55	54	5%
EBIT margin	8.8%	9.2%	10.2%	10.1%	9.6%	9.2%	
Net Financials	-4	-5	-6	-7	-6	-5	-3%
Extraordinaries	0	0	0	0	0	0	n.s.
Income Tax	-14	-14	-14	-15	-15	-15	2%
Minority interest	-1	-1	-1	-1	-1	-1	2%
Net Profit	21	25	33	33	33	33	7%

Balance Sheet

(€ mn)	2010	2011	2012 ^f	2013 ^f	2014 ^f	2015 ^f	CAGR 11-15 ^f
Net Intangibles	15	12	13	13	13	14	3%
Net Fixed Assets	168	172	185	180	175	170	0%
Net Financials	16	17	17	17	17	16	-1%
Inventories	185	225	225	240	250	260	4%
ST Receivables	137	151	170	167	173	178	4%
Other assets	8	6	8	8	9	9	10%
Cash & Equivalents	33	22	14	10	15	18	-5%
Net Assets	562	605	632	634	651	664	2%
Equity & Minorities	269	282	296	317	338	358	6%
MLT Liabilities	30	90	77	77	77	67	-7%
o.w. Debt	14	62	50	50	50	40	-11%
ST Liabilities	257	227	253	234	228	232	1%
o.w. Debt	121	77	90	70	55	50	-10%
o.w. Payables	109	120	131	131	139	146	5%
Equity + Min. + Liab.	562	605	632	634	651	664	2%

DCF Assumptions (Cork Stoppers)

Re	13.2%
Rf ⁽¹⁾	7.2%
Beta Equity	1.0
Mkt Premium	6.0%
Rd	9.2%
Tax rate	29.0%
D/EV	35.0%
WACC	10.9%
g	2.0%

(1) Incl. country risk premium.

Source: BPI Equity Research.

Sensitivity Analysis (€/sh)⁽¹⁾

	-0.5%	g	+0.5%
-0.5%	2.00	2.10	2.30
WACC	1.70	1.80	1.90
+0.5%	1.40	1.50	1.60

(1) Incl. 10% small cap discount.

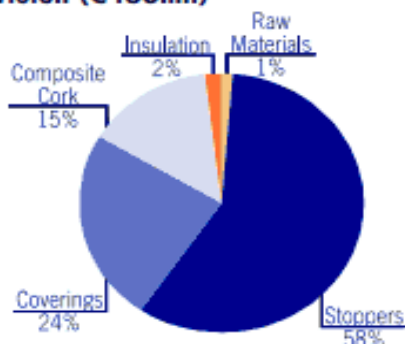
Source: BPI Equity Research.

Cash-flow Statement

(€ mn)	2010	2011	2012 ^f	2013 ^f	2014 ^f	2015 ^f
+ EBITDA	66	72	79	78	78	77
- Chg in Net W.C.	5	33	12	10	7	6
- Income Taxes	13	18	10	15	15	15
= Operating Cash Flow	48	21	57	53	56	56
- Expansion Capex	0	4	15	0	0	0
- Maintenance Capex	11	18	18	18	18	18
= Cash Flow after Inv.	37	-1	23	36	38	37
- Chg Net Fin. Inv.	-2	1	0	0	0	0
- Net Fin. Exp.	4	5	6	7	6	5
- Dividends Paid	0	13	21	12	12	13
+/- Equity	0	0	0	0	0	0
Other	1	6	-4	-1	-1	-1
=Change in Net Debt	-37	15	8	-16	-19	-18
Net Debt (+) / Net Cash (-)	102	117	126	110	90	72

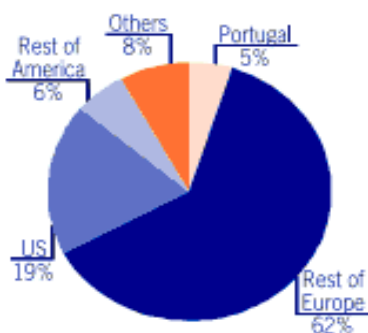
Source: Company data (2010, 2011) and BPI Equity Research (F).

9M12 Revenues Breakdown by Division (€409mn)



Source: COR.

9M12 Revenues Breakdown by Region (€409mn)



Source: COR.

Valuation Summary (€ mn)

Business	EV Attrib.	% EV
Stoppers	242	61%
Coverings	76	19%
Composite Cork	46	11%
Insulation	10	3%
Raw Materials	25	6%
EV	400	
- YE13 Adj. Net Debt ⁽¹⁾	170	
+ Financial Investments	17	
Equity Value	246	
# of Shares ⁽²⁾	126	
YE13 Fair Value (€)	2.00	
Small Cap Discount	10%	
YE13 Price Target (€)	1.80	

(1) Adj. for Other MLT Creditors & Confirming.

(2) Adj. for Treasury Stock.

Source: BPI Equity Research.

Historical Recommendation

Date	Recommendation
19-Sep-11	Hold
18-Sep-12	Buy

Source: BPI Equity Research.

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