

Copenhagen Business School

M.Sc. Accounting Strategy and Control (ASC)

2015

Author: Panagiotis Gkolemis

CPR: xxxxxx-xxxx

Signature:

Hand in Date: 21/08/2015

Supervisor: Edward Vali

Department of Accounting and Auditing

Number of standard pages: 80

Total Characters: 162,613

Executive Summary

The scope of this thesis was to determine the fair value of Pernod Ricard¹'s share as of 24.09.2014 when its last annual report was released. The fair price was estimated by the use of the DCF and EVA model and based on the conclusions of the strategic and financial analysis. Moreover, a relative valuation was conducted in order to support the result founded by the use of these two present value models. Finally, a sensitivity analysis was also made as many key inputs used in the DCF and EVA model are subject to uncertainty.

The strategic analysis revealed that the company is affected significantly by the hostile political decisions taken regarding the alcoholic drinks industry. The increase in VAT for alcoholic drinks in France and the prohibition of public wining and dining in China forced the sales to decrease by 7.35% in 2014. Moreover, new demographic groups such as millennials are concerned about the health problems related to alcohol consumption and they prefer wise drinking patterns. However, the sales are expected to increase significantly due to the improving living conditions in China, increased wine and spirits consumption in the US and due to the "Premiumisation" strategy. Also, the launch of the Allegro project in 2014 will increase the EBITDA margin as it is expected to generate savings of €150 million from decreased structure costs.

The financial analysis showed that PR has the lowest ROE and ROA among its peer companies. PR has already taken some actions such as the disposal of four non-priority brands. Moreover, the liquidity risk analysis revealed that as the Group has already passed the upper limit of its credit rating (3.5 Net debt/EBITDA), it is not is position to engage in major debt funded acquisitions. This subsequently means that not great investments are expected in the near future.

To make the forecasting as reliable as possible three scenarios are formed: a realistic, an optimistic and a pessimistic one. With a constant WACC of 5.62% applied, the fair price under the realistic scenario is found to be ≤ 104.28 on 24.09.2014, 18% higher than the actual trading price (≤ 88.41). The higher estimated price is deriving from the reasonable assumptions that the company will benefit from the increasing alcoholic drinks consumption in China and that it will decrease further its operating costs after the launch of the Allegro project. The relative valuation yields almost identical results (≤ 102.91 , ≤ 106.36) to the PV models which come to verify that PR's share was undervalued on this specific date.

¹ From this point forward, Pernod Ricard will be referred as PR.

TABLE OF CONTENTS

CHAPTER 1: Introduction	9
1.1 Introduction	9
1.2 Problem Statement	10
1.3 Methodology	10
1.3.1 Data	10
1.3.2 Structure of the thesis	
1.3.3 Limitations	12
CHAPTER 2: Company description	13
2.1 Pernod Ricard	13
2.2 Share Price History	13
2.3 Ownership structure	14
2.4 PR's business model	15
2.5 Strategy and Strategic Brands	16
2.6 Markets	16
2.7 Peer Group	17
2.7.1 Diageo	18
2.7.2 Bacardi-Martini	18
2.7.3 Constellation Brands	18
CHAPTER 3: Strategic Analysis	19
3.1 PEST Analysis	
3.1.1 Political factors	19
3.1.1.1 France	19
3.1.1.2 China	20
3.1.1.3 USA	20
3.1.2 Economic factors	21

3.1.2.1 France	21
3.1.2.2 China	21
3.1.2.3 USA	22
3.1.3 Sociocultural factors	23
3.1.3.1 France	23
3.1.3.2 China	23
3.1.3.3 USA	
3.1.4 Technological factors	
3.1.4.1 France	24
3.1.4.2 China	
3.1.4.3 USA	25
3.2 Porter's five forces analysis	25
3.2.1 Threat of new entrants	26
3.2.1.1 Economies of scale	26
3.2.1.2 Capital requirements	26
3.2.1.3 Product differentiation	27
3.2.1.4 Government Policy	27
3.2.2 Competitive rivalry among existing competitors	28
3.2.2.1 Industry growth	28
3.2.2.2 Market Concentration	29
3.2.3 Threats of substitute products	31
3.2.3.1 France	
3.2.3.2 China	
3.2.3.3 USA	
3.2.4 Bargaining power of buyers	
3.2.4.1 Off-trade channels	

3.2.4.2 On-trade channels	35
3.2.5 Bargaining power of suppliers	35
3.2.5.1 Suppliers of agricultural products	35
3.2.5.2 Suppliers of industrial products	36
3.3 Porter's Value Chain Analysis	36
3.3.1 Primary Activities	36
3.3.1.1 Operations	36
3.3.1.2 Outbound Logistics	37
3.3.1.3 Marketing & Sales	38
3.3.2 Secondary Activities	38
3.3.2.1 Human Resource Management	39
3.4 VRIO Analysis	39
3.4.1 Value	40
3.4.2 Rarity	41
3.4.3 Imitability	42
3.4.4 Organization	42
3.5 Conclusion of Strategic Analysis	42
CHAPTER 4: Financial Analysis	44
4.1 Accounting Principles	44
4.2 Accounting Quality	44
4.3 Restructuring Pernod Ricard's Financial Statements	45
4.3.1 Analytical Income Statement	45
4.3.1.1 Share of net profit/loss from associates	45
4.3.2 Analytical Balance Sheet	46
4.3.2.1 Investments in associates	46
4.3.2.2 Separation of operating and excess cash	46

4.3.2.3 Deferred tax assets & liabilities	47
4.3.2.4 Income tax payable & receivable	47
4.3.2.5 Assets & Liabilities held for sale	47
4.3.2.6 Non current & current Provisions	47
4.3.2.7 Non-current & current derivative instruments	48
4.4 Analysis of Pernod Ricard's profitability	48
4.4.1 Decomposing of ROIC	49
4.4.1.1 Profit Margin (PM)	49
4.4.1.2 Turnover Rate of Invested Capital (TIC)	50
4.4.1.3 Return on Invested Capital (ROIC)	51
4.4.2 Decomposing of ROE	51
4.4.2.1 Net Borrowing Cost (NBC)	51
4.4.2.2 Financial Leverage	52
4.4.2.3 Return on Equity (ROE)	53
4.5 Liquidity Risk Analysis	54
4.5.1 Measuring short-term liquidity risk	55
4.5.2 Measuring long-term liquidity risk	56
4.5.2.1 Interest Coverage Ratio	56
4.5.2.2 Net debt/EBITDA	57
4.6 Conclusion of Financial Analysis	58
CHAPTER 5: Summary of fundamental analysis	58
5.1 Strengths	60
5.2 Weaknesses	60
5.3 Threats	60
5.4 Opportunities	61
CHAPTER 6: Forecast	61

6.1 Determination of Explicit and Terminal period	62
6.2 Realistic Scenario	<u>63</u>
6.2.1 Revenue	63
6.2.2 EBITDA Margin	65
6.2.3 Depreciation	65
6.2.4 Tax Rate	65
6.2.5 Intangible and Tangible Assets	66
6.2.6 Interest Rate	66
6.2.7 Net Working Capital	67
6.2.8 Net Interesting Bearing Debt (NIBD)	67
6.3 Optimistic Scenario	68
6.4 Pessimistic Scenario	68
6.5 Budget Evaluation	69
CHAPTER 7: Cost of Capital Estimation	70
7.1 Capital Structure	71
7.2 Cost of Equity	72
7.2.1 Risk-free Interest Rate	73
7.2.2 Market Risk Premium	74
7.2.3 Systematic Risk (Beta)	75
7.2.4 Calculation of CAPM	76
7.3 Cost of Debt	77
7.4 Calculation of WACC	78
CHAPTER 8: Valuation	79
8.1 Discounted Cash Flow Model (DCF)	79
8.2 Economic Valued Added Model (EVA)	81
8.3 The Relative Valuation Approach (Multiples)	82

8.3.1 EV/EBITDA	83
8.3.2 EV/Sales	83
8.4 Sensitivity Analysis	84
CHAPTER 9: Conclusion	85
Bibliography	<u>89</u>
Appendix	92
Appendix 1: History	92
Appendix 2: PR's Decentralized Model	93
Appendix 3: Top 14 Strategic Brands	93
Appendix 4: Profit per Region, Profit Growth, historical development	94
Appendix 5: Historical growth in demand of wine and spirits - PR's key markets	94
Appendix 6: Income Statement	95
Appendix 7: Balance Sheet	96
Appendix 8: Analytical Income Statement	97
Appendix 9: Analytical Balance Sheet	98
Appendix 10: Beta Regression Analysis	<u>99</u>
Appendix 11: Common–Size Analysis	101
Appendix 12: Index Analysis	102
Appendix 13: Realistic, Optimistic and Pessimistic Forecast Assumptions	102
Appendix 14: Realistic Pro-Forma Statement	103
Appendix 15: Optimistic Pro-Forma Statement	104
Appendix 16: Pessimistic Pro-Forma Statement	105
Appendix 17: Budget Evaluation	105
Appendix 18: Valuation – Optimistic Scenario	106
Appendix 19: Valuation – Pessimistic Scenario	107

CHAPTER 1 - INTRODUCTION

1.1 Introduction

PR's purpose is primarily connected with the manufacture, purchase and sale of wines, spirits and liqueurs. General, its business activities are related to the trading of products and by-products which are manufactured in distilleries or in other similar industrial establishments. In 2015 PR celebrated its 40 anniversary from its foundation. The last 10 years PR has grown significantly due to its successful acquisitions. PR is a global co-leader in the alcoholic drinks market with the ambition to become industry's top player².

In 2010 the region Asia/Rest of World became PR's top region by net sales and profit. It was a landmark in PR's history that the emerging market of Asia overcame in sales and profits the traditional mature markets of Europe and Americas. While the markets of Europe and Americas are saturated, the growing living conditions of Chinese and Indian boost the revenue growth. In 2014 38% of PR's net sales and 43% of its profits came from Asia/Rest of World³.

On March 2014 PR issued an €850 million six-year bond with 2% interest rate. This was the lowest coupon rate in PR's history. Also, during 2014 PR acquired Kenwood vineyards to enhance its position in the premium wine segment in Americas. PR plans to enhance its global presence through further acquisitions⁴.

However, in 2014 PR experienced a slowdown in its net sales and profits (first time since 2010) due to serious macroeconomic problems in China and adverse currency effects. Moreover, Diageo which is the world's leading alcoholic drinks company plans to acquire United Spirits Limited⁵. USL is the leading player in India and if Diageo acquires it, it will strengthen more its global position⁶. It is questioned if PR will continue its successful development and achieve to be the world's top player.

² (www.pernod-ricard.com, 2015), (Ricard, 2014)

³ (Ricard, 2014)

⁴ (Ricard, 2014, p. 13)

⁵ From this point forward, United Spirits Limited will be referred as USL.

⁶ (Euromonitor International, 2014)

1.2 Problem Statement

The main scope of this thesis is to estimate the intrinsic value of the firm on the release date of its last annual report. Therefore, the main research question is as follows:

What is the fair value of PR's share on 24.09.2014?

A strategic and a financial analysis will be conducted to answer the above question. Given the main problem, a series of sub-questions are required to be answered:

- Which macroeconomic factors affect PR's performance?
- Which industry factors affect PR's business activities?
- Which internal activities contribute to its core competency?
- What was the financial performance of PR in period 2010-2014?
- What will be a realistic forecast of its future performance based on the results of the fundamental analysis?
- What is the underlying risk for investing in PR and which is the corresponding WACC?

1.3 Methodology

In this section will be provided an outline of the thesis and a description of how the main problem is planned to be answered. Also, it will be a synopsis of the theoretical framework included in each chapter.

1.3.1 Data

This is thesis is written from an external analyst's point of view and only public information has been used. Both qualitative and quantitative data have been used as inputs in this thesis. My main source of information was PR's annual reports. However, additional data have been collected from other reliable resources such as the World Bank Group, Orbis and Euromonitor International. The theories and the models which were used in the writing of this thesis come mainly from the work of Petersen and Plenborg (2012) and from the book: Measuring and Managing the Value of Companies by McKinsey (2000, 2010).

1.3.2 Structure of the thesis

Figure 1.1: Structure of the thesis

Chapter 1	Introduction
Chapter 2	Company description
Chapter 3	Strategic Analysis
Chapter 4	Financial Statement Analysis
Chapter 5	A summary of Fundamental Analysis
Chapter 6	• Financial Forecasts
Chapter 7	Cost of Capital Estimatiion
Chapter 8	• Valuation
Chapter 9	• Concluusion

Source: Own Creation

In Chapter 2 it will be a reference to PR's history and to its development since its foundation. Moreover, this chapter includes its share price history, its ownership structure, its strategy, the markets where PR operates and at the end there will be a presentation of its peer companies.

In Chapter 3, the macroeconomic environment of PR it is going to be examined through a strategic analysis. By PEST analysis the political, economical, social and technological factors which affect PR's profitability and growth opportunities are examined. Afterwards, the competitive environment of the industry is examined with Porter's 5 forces analysis. It covers aspects such as the bargaining power of customers and suppliers, the threat which comes from the substitute products and the accessibility of the market to new entrants. Finally, through the VRIO and Porter's Value Chain analyses, the resources and internal activities which contribute to PR's core competency are reviewed.

In Chapter 4, the financial performance of PR is examined for the period 2010-2014 and it is also benchmarked against the performance of peer companies with the use of several financial ratios. Initially the financial statements of PR will be re-formulated so to be analytical. Then, its profitability, its long-term and short-term

liquidity risk are reviewed. Through the financial analysis, the financial position of PR in relation to its major competitors is revealed.

In Chapter 5 the results of the strategic analysis and financial analysis are summarized into a SWOT matrix. Through the SWOT analysis the strengths and weaknesses of PR as well as the opportunities and the threats of its environment are reviewed. The results of the SWOT analysis will be the base for the forecasting and valuation.

Chapter 6 includes the estimation of PR's future cash flows in accordance to the results of the fundamental analysis. A pro-forma statement is formed where the core value drivers are projected. Finally, at the end of this chapter three different scenarios will be provided to make the forecasting as reliable as possible.

In Chapter 7 a fair weighted average cost of capital (WACC) is estimated which will be used as a discount factor in DCF and EVA valuation. The WACC represents the risk faced by both shareholders and debtholders who investing in PR. The underlying risk of the shareholders will be calculated with the use of the Capital Asset Pricing Model (CAPM).

In Chapter 8 PR will be valued by two present value models (DCF, EVA) and at the end it will be a sanity check with multiples. The use of two different present value approaches, as well of the relative valuation approach (multiples) increases the reliability of the valuation. Also, there will be a sensitivity analysis by which the main assumptions applied in the valuation models will be challenged.

Finally in Chapter 9 there is the conclusion of the thesis and the investment recommendation.

1.3.3 Limitations

PR's annual reports have served as my main source of information and I have used annual reports from 2010 to 2014. Subsequently this means that the historical performance of PR is examined from 2010 until the release day of the last annual report which is September 24, 2014. As this thesis is written from an external analyst's point of view, it is based only on public information. The fundamental analysis and the valuation are relied on public information which was available until 24.09.2014. This implies that any information which was released afterwards is excluded. The strategic analysis is focused on PR's key markets which are: France, China, and USA⁷. PR is a multinational company operating in more than 80 countries, so it will be confusing and time-

⁷ (Ricard, 2014, p. 127)

consuming to examine each market separately. Finally, this thesis is focused on PR's two core products: spirits and wines. PR's few Ready-To-Drink spirits (RTDs) and beer brands have excluded from this thesis as they are not representative of its main operations and they could distort the analysis.

CHAPTER 2 – COMPANY DESCRIPTION

2.1 Pernod Ricard

PR is a French alcoholic drinks company which produces distilled beverages. It was born in 1975 after the merger of two French anise-based spirit companies: Pernod and Ricard which were founded in 1805 and in 1932 in correspondence. The new Group benefited from its new resources to grow its distribution network and its range of brands in France and other countries. In the following years, PR expanded its brand portfolio and its distribution network through several acquisitions of other spirit and wine companies. The most important of these acquisitions were: Irish Distillers in 1988, Seagram in 2001, Allied Domecq in 2005, Vin & Spirit in 2008 and Kenwood in 2014. These acquisitions helped PR to build a diversified portfolio of premium brands in terms of value and geographical positions. PR is present in the three major geographical regions of the world: Europe, Americas and Asia. It has more than 85 affiliates, 18,000 employees and 100 production sites around the world. In 2010, the geographical region Asia/Rest of World became PR's top region. It has been listed on the Paris stock exchange market since 1/1/1975 and from 2003 is part of CAC 40 (Cotation Assistée en Continu) index which represents the French companies with the largest market capitalization. PR had a turnover of €7,945 million in 2014 which makes it a global co-leader in the wines and spirits industry⁸.

2.2 Share Price History

PR is listed on Paris stock exchange market since its foundation as it was created from the merger of the listed companies Pernod and Ricard. The following figure presents its share price development for the period 2000-2014.

⁸ (Ricard, 2014), (www.pernod-ricard.com, 2015)





Source: Own creation based on data extracted from (www.yahoofinance.com)

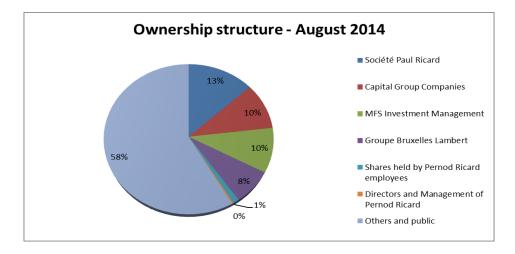
As it is obvious from figure 2.2, that PR's share price followed an increasing trend in the period between 2000 and 2014. The only exception was the period 2008-2009 when the global financial crisis hit the Europe. PR's share price dropped to \leq 35.48 in February 2009 but until the end of 2010 its share price had returned to procrisis values. Moreover, it is apparent that the market had responded positively to the major acquisitions (Seagram, Allied Domecq and Absolut) which PR made in period 2000-2014. In particular, PR's share price before the acquisition of Allied Domecq in July 2005 was \leq 43.63 and by the end of 2007 it had increased by 49% up to \leq 65.10. The successful strategy of PR the last fifteen years had as a result its share price to skyrocket from \leq 13.88 in March 2000 to \leq 88.41 in September 2014.

2.3 Ownership structure

PR except of CAC 40 index is also part of SBF 120 index (Société des Bourses Françaises) which represents the firms listed in Euronext Paris with the most actively traded stocks. At 30 June 2014 the share capital of PR was consisted by 265,421,592 shares with a par value €1.55 per share. Four major shareholders own the 40.28% of share capital. Ricard family owns the 13.14% of the share capital. The rest three major shareholders are two American investment management companies and one Belgian holding company. The employees own the 1.17% of the share capital while the directors own the 0.29%⁹.

⁹ (www.pernod-ricard.com, 2015), (Ricard, 2014)

Figure 2.2: Ownership structure



Source: Own creation based on data extracted from PR's annual report

2.4 PR's business model

The decentralized model of the Group includes the "Market Companies" and the "Brand Companies" which are both controlled by PR through holding companies called "Regions". PR is referred as the "Holding Company". The "Brand Companies" are autonomous affiliates which are responsible for production, brand development and managing strategy while the "Market Companies" are autonomous affiliates which are responsible for the development and distribution of brands in the local markets. The "Regions" represent all the affiliates which operate in the same region (Americas, Asia, Europe, Middle East and Africa) and they have their financial and operational control. The "Holding Company" is responsible for numerous functions such as the management of the overall Group strategy and of the equity investments. Moreover, the "Holding Company" is responsible for the tax policy of the Group and its financial policy. Finally, it is responsible for the communication with the investors, for the major research programs and it also gives the final approval to Brand companies for the advertising campaigns before their launch¹⁰.

¹⁰ (Ricard, 2014, p. 11)

2.5 Strategy and Strategic Brands

Clearly, PR wants to be the world's leading wine and spirit firm. Currently PR is second in volume and value terms to Diageo which is the top spirits company and it is tenth wine company of the world. The overall Group strategy is based on its decentralized model. As stated in PR's annual report its strategy relies on five key areas¹¹:

- Investing primarily in its international strategic brands.
- "Premiumisation" strategy which will set PR at high end market and it will secure the growth and profitability.
- Focusing its business activities to emerging markets as they have the greatest prospects for growth.
- Seizing new consumption opportunities.
- Growing through mergers and acquisitions so to remain a strong player in the wines & spirits segment.

The term "Premiumisation" refers to the Group's effort to increase the demand of high end products and to make the customers to trade up with more expensive and premium spirits and wines. In 2014 PR launched the Allegro project, a program designed to increase its operational efficiency. It relies on three objectives: prioritization, simplification and mutualization. The project will be applied to all the Group's affiliates. PR has one of the most premium brand portfolios of the industry. The Group has 37 premium brands in which invests systematically and relies on them for its development. The 37 premium brands include the "Top 14" spirits and champagnes, the 5 priority premium wine brands and the 18 key local spirits brands.

2.6 Markets

PR is a global player and it is present in the three most important regions of the world (Europe, Americas and Asia). As it has mentioned before it has more than 85 affiliates which cover the global demand. Through mergers and acquisitions it has achieved to expand its business activities worldwide. Ten years after its foundation it achieved to cover all 15 the European Union member countries. Several local acquisitions helped the Group to increase its brand portfolio. For instance, the Group acquired Mini ouzo in Greece and the Zoco pacharán in Spain. In addition to this, in 1985 the Group acquired Ramazzotti which helped it significantly to build a distribution network in Italy. The acquisition of Seagram in 2001 made the company one of the three global players and it enhanced its position in America and Asia. In 2005, the acquisition of Allied Domecq

¹¹ (Ricard, 2014, p. 11)

strengthened its presence in the promising market of North America through the addition of numerous spirits and liqueurs. The region Asia/Rest of World became PR's top region by overcoming in net sales and profits the traditional markets of Europe and Americas. In 2014, 43% of Group's profit came from Asia despite the adverse currency effects and the several macroeconomic problems which appeared there. PR achieved in few years to be the leading spirits company in China and in India¹². The figure 2.3 shows the net sales of each region between 2010 and 2014.

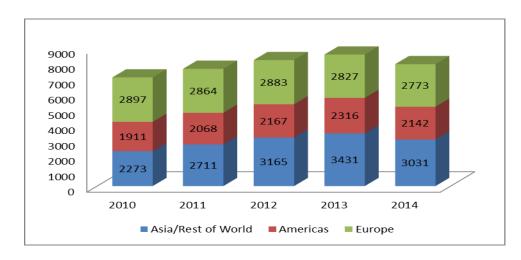


Figure 2.3: Net sales per each region, historical development

Source: Own creation based on data extracted from PR's annual reports

2.7 Peer Group

This section presents the relevant peer companies which can be used as a benchmark in the assessment of the operating performance of PR. A cross-sectional analysis is conducted, so an analyst could evaluate the relative performance of the company within the industry¹³. PR is the second largest spirits company in the world and it faces primarily competition from large multinational companies such as Diageo, Bacardi – Martini and Constellation Brands. Also, competitive companies to a lesser extent can be considered manufacturers of local brands like Sazerac in the US, Altia in Scandinavia and the Stock Spirits in Poland¹⁴. The most appropriate peer company should be considered Diageo which is the global leading spirits company. Bacardi – Martini and Constellation Brands have been selected due to their turnover size and similar operations.

¹² (Ricard, 2014, p. 3)

¹³ (Christian V. Petersen, 2012, p. 63)

¹⁴ (Ricard, 2014, p. 14)

2.7.1 Diageo

Diageo is a global leader in alcoholic drinks industry with an outstanding portfolio of spirits, wine and beer brands. It employs around to 28,000 people (10,000 more than PR) in its global business and it has business activities in more than 180 countries. It produces annually more than 6.5 billion liters of its brands from more than 100 sites in 30 countries. Similar to PR two-thirds of Diageo's net sales are attributable to its 14 brands, in particular 13 spirits brands plus one beer brand. 39% of its business is in the emerging markets in Asia, Africa, Latin America, Eastern Europe and Turkey. It is listed on both London and New York stock exchange market and it is headquartered in London, England. In 2014 Diageo's net sales were \leq 12,794 million while PR's were \leq 7,945 million¹⁵. The nature of its core products from which the most sales come from, its turnover size and its global distribution network renders Diageo ideally comparable to PR.

2.7.2 Bacardi-Martini

Bacardi-Martini is the world's largest privately held spirits company with an impressive portfolio of 200 brands and labels. It employs around to 6,000 people and it has 29 production sites in 16 countries. It is present in more than 150 countries and sells in average more than 200 million bottles per year. Bacardi-Martini is headquartered in Hamilton, Bermuda. In 2014 its turnover was \in 3,370 million while its fixed assets had a book value around to $1/_{20}$ of the book value of PR's fixed assets¹⁶.

2.7.3 Constellation Brands

Constellation Brands is a multinational producer and marketer of beer, wine and spirits. It has operations in the US, Canada, Mexico, New Zealand and Italy. It is the largest wine producer company of the world and the number three beer company in the U.S. Its products are sold in almost 100 countries and it has around to 40 production sites. It employs around to 6,300 people and it is headquartered in Victor, New York. Its turnover in 2014 was € 3,524 million and its fixed asset had a book value up to € 8,365 million. While Constellation Brands has not a great spirits portfolio, its well-developed wine segment renders it a comparable firm to PR.

¹⁵ (Diageo - Annual Report 2013/2014, 2014), (Orbis, 2015)

¹⁶ (www.bacardilimited.com, 2014), (www.wikipedia.org/wiki/Bacardi, 2015)

CHAPTER 3 – STRATEGIC ANALYSIS

A strategic analysis is essential because it helps an analyst to predict the future development of the financial value drivers with a high degree of visibility. While it is relative easy to estimate the financial value drivers it is more challenging to forecast how they are going to develop in the future¹⁷. The strategic analysis through the careful examination of internal and external factors it can help an analyst to forecast the expected cash flows and the associated risks. Also, it reveals any potential growth opportunities.

Petersen et al. suggest a top-down approach which aims understanding first the macro-economic factors which could influence the company's cash flow¹⁸. After it continues with a thoroughly analysis of industry's outlook and at the end the company's activities and main value drivers are examined. Four strategic analyses will be conducted: PEST, Porter's 5 forces, Value chain and VRIO analyses.

3.1 PEST Analysis

The primary objective of the PEST analysis is to detect macroeconomic factors that could influence a firm's cash flows¹⁹. PEST analysis includes four factor categories: Political/Legal, Economic, Sociocultural and Technological. These four factors will be examined for the key markets of PR: United States, France and China. PR argues that the "*Group's business is sensitive to general economic conditions in its key markets, in particular in the United States, France and China*"²⁰.

3.1.1 Political Factors

3.1.1.1 France

In France more than one year after the introduction of the Fillon tax (January 2012), spirits recover with difficulties, at least during the first half of the year²¹. Fillon tax is a part of a broad austerity package implemented by the French Prime minister Francois Fillon in 2012, so to preserve country's crucial AAA credit rating. This package included among others increase in VAT, cuts in social services and benefits and temporary

¹⁷ (Christian V. Petersen, 2012, p. 187)

¹⁸ (Christian V. Petersen, 2012, p. 187)

¹⁹ (Christian V. Petersen, 2012)

²⁰ (Ricard, 2014, p. 127)

²¹ (Euromonitor International, 2014)

tax hike for big corporations²². The extensive increase in taxation (excise duties raised by 9.6% to reach \leq 1,660/hl of pure alcohol in 2012) had affected the growth of spirits. This comes in agreement that a new period of economic stagnation has introduced in the country. Products as vodka that were dynamic during the most of review period reported more reasonable volume growth in 2012 and 2013. Spirits with usual flat or moderate growth, like other blended Scotch whisky, were dropped dramatically in 2012 and struggled to recover in 2013²³.

3.1.1.2 China

In China the prohibition on public funding for wining and dining has further enhanced during 2013. The central government has enriched the anti-corruption campaigns to make them more comprehensive. This included a prohibition on officials receiving gifts and a ban on gifting by using public funds at national festivals. These campaigns aim to build a cleaner and a more transparent political environment²⁴. Large multinational companies such as Pernod Ricard were also affected significantly from these anti-corruption campaigns. Financial times argue that PR's growth hit by *"the Chinese government's crackdown on conspicuous spending by officials"*. The ban on officials to receive gifts had a major impact on PR's business activity²⁵. This comes in agreement with its last annual report where stated that the organic growth was -2% in emerging markets, *"mainly driven by China (organic growth of -23%) as a result of a general macroeconomic slowdown and measures to curb conspicuous consumption"*²⁶. Moreover, as stated in WSJ: *"Drinks makers have been particularly hard hit since the Chinese government's crackdown on extravagant gift-giving and lavish dining among officials"*²⁷. Finally, Pierre Pringuet (CFO of PR) concludes that the difficulties in China will not be over by Chinese new-year but it will take a full fiscal year for sales to recover²⁸.

3.1.1.3 USA

In the US on the demand side, after the announcement of Fed that it would pull back from the bond market and that this may cause the US government shutdown, the confidence of consumers has decreased due to general uncertainty. Also, restaurants continued to struggle as costumers were still careful of spending levels

²² (France 24, 2011)

²³ (Euromonitor International, 2014)

²⁴ (Euromonitor International, 2014)

²⁵ (Ft.com, 2014)

²⁶ (Ricard, 2014, p. 94)

²⁷ (WSJ, 2014)

²⁸ (Ft.com, 2014)

while dining out²⁹. PR argues that the US market had worse results in 2014 from 2013 with a remarkably downturn in the on-trade channel³⁰.

3.1.2 Economic Factors

3.1.2.1 France

In September 2014, the French government changed its GDP growth forecasts from 0.4% to 0.5% for 2014 and from 1.0% to 1.7% for 2015. Also, the French government announced that it would need two more years (until 2017) to limit its public budget deficit to 3.0%. Annual inflation dropped to 0.4% in August 2014 as a result of announcing growth in price of food and energy items. France's annual inflation rate will be 0.8% by December 2014 (in comparison to the target of just below 2.0% maintained by the European Central Bank), attributable to weak demand. The low demand will keep put downward pressure on prices in the French economy. Volume consumption of alcoholic drinks will continue to decrease by 2% in volume over 2013-2018. The "drink-less-drink-better" trend will continue to drive sales. The alcoholic beverages are expected to grow by 4% in off-trade value terms at constant 2013 prices³¹.

3.1.2.2 China

In China the amount of sales of alcoholic drinks recovered in 2013 after a slowdown in growth in 2012 due to economic recession³². In 2013 the average unit price of alcoholic beverages raised as a result of increased costs in raw materials, labor and transportation. Increasing disposable incomes and better living standards help the Chinese people to buy more premium alcoholic drinks, notably in beer. Also, the well-developed bars/pubs culture helped the volume of sales to increase³³. China's GDP growth rate has dropped from 9.70 in 2010 to 7.40 in 2014 but China is still among the countries with the highest GDP growth rate in the world³⁴.

The examination of the inflation in China leads to better understanding of the purchasing power of consumers. Under increased inflation the purchasing power of the consumers will be limited while in "deflation", it increases but this phenomenon is also able to start a depression. The consumers will delay the payments of

²⁹ (Euromonitor International, 2014)

³⁰ (Ricard, 2014, p. 97), on-trade channels apply to places where alcoholic drinks are consumed.

³¹ (Euromonitor International, 2014)

³² (Euromonitor International, 2014)

³³ (Euromonitor International, 2014)

³⁴ (The World Bank)

their bills and to start new investments as the power of their money increases along with the time. Therefore the most experts argue that the ideal inflation rates wave between 1% and 2%. China has stabilized its inflation rate almost at 2% the last 3 years.

As regards the unemployment, which is also an important economic factor and reflects the outlook of economy it has been stabilized at almost 4% over the last 5 years. Such a level of unemployment is representative of a healthy economy and ranks the China among the countries with the lowest unemployment. In addition to this, the very low unemployment rate in combination with the increased living standards in China shows that purchasing power of consumers has been increased, something that has been already reflected in PR's sales over the last 5 years.

3.1.2.3 USA

In the US the GDP growth rate has been stabilized around to 2% the last 5 years. It is obvious that the gross domestic product of the US is not growing like China's neither its future is so promising but seems that it has been stabilized. As regard the inflation rate, it is maintained the last 5 years at the optimal levels between 1% and 2%. In 2009 the American economy had negative inflation rates as a result of the financial crisis of 2008. After the deflation in 2009, the inflation rates seem to have been normalized as the US recovered from crisis. The current levels of inflation (1%-2%) are considered by the most experts as optimal. In the US the unemployment has been decreased over the last 5 years. The decline in unemployment along with the increase in GDP and the normalization of the inflation rates show that the US economy has fully recovered from 2008 financial crisis. In addition to this, Federal Reserve officials consider that the job market has more room to improve. Officials argue: "In the long run, the unemployment rate will range from 5 percent to 5.2 percent"³⁵.

Figure 3.1: Financial outlook of PR's key markets

GDP growth (annual %)	2009	2010	2011	2012	2013
USA	-2.80	2.53	1.60	2.32	2.22
China	9.21	10.45	9.30	7.65	7.67
France	-2.94	1.97	2.08	0.33	0.29

³⁵ (Bloomberg, 2014)

Inflation, consumer prices (annual %)	2009	2010	2011	2012	2013	2014
USA	-0.36	1.64	3.16	2.07	1.46	1.62
China	-0.70	3.31	5.41	2.65	2.63	1.99
France	0.09	1.53	2.12	1.96	0.86	0.51

Unemployment,(% of total labor force)	2009	2010	2011	2012	2013
USA	9.40	9.70	9.00	8.20	7.40
China	4.40	4.20	4.30	4.50	4.60
France	9.10	9.30	9.20	9.90	10.40

Source: Own creation based on data extracted from (The World Bank)

3.1.3 Sociocultural factors

3.1.3.1 France

In France the spreading awareness over security and health concerns lead to selective and wise consumption patterns. The growing awareness over the health concerns encourages consumers to follow a drink-less-drink-better attitude. While consumers decrease their volume consumption, at the same time they buy premium and super-premium alcoholic beverages. This had as a result full-year sales of alcoholic drinks to experience value growth of 3% in 2013. In addition to this, regular consumption has been replaced gradually by consumers with cocktails (homemade or ready-to-drink) and more festive occasions. This phenomenon will support the market to still grow over the period 2013-2018. Home-drinking and premiumisation trends will most be enhanced over the forecast period even as the amount of on-trade sales channels is going to weaken further³⁶.

3.1.3.2 China

In China in the upcoming period alcoholic drinks are expected to experience positive total volume growth. The FIFA World Cup and the continuous entertaining will help the volume of the sales to increase all over the forecast period. On the other hand, negative factors such as the healthy drinking attitude, the growing saturation, and strict government policy will all have an impact in growth in alcoholic drinks. The younger generations who are the major consumer group they don't consume alcoholic beverages every day and they are aware about healthy concerns. The manufacturers through the production of alcoholic drinks with appealing characteristics try to attract the young consumers. Younger consumers are attracted by the flavors of

³⁶ (Euromonitor International, 2014)

spirits, but they also are interested also about the character of products. More creative products are anticipated to appear in the following period, as the interest on manufacturing attractive products is growing³⁷.

3.1.3.3 USA

Millennials are assumed the biggest demographic segment in the US after the baby boomers. When compared with the baby boomers millennials prefer more varied tastes and they are more willing to experiment with new products. The marketing strategies are going to focus on millennials' personality through exclusive and differentiated products. Wellbeing is the dominant trend across the US and it has affected also the alcoholic drinks industry. This trend was further enhanced as more women consume strong alcoholic drinks like whiskies and vodka. Demographic groups, such as millennials, women and Hispanics helped the flavor innovation to grow further and be the dominant trend in alcoholic drinks industry. Therefore, manufacturers are expected to modify their products to differentiate and to be able to attract the interest of these promising consumers. Millennials who are aged between 16 and 31 are the 22% of the total population in the US in 2013. The most significant characteristics of the millennials, there are the sense of individuality and the belief of unique personal identity. Millennials are expected by 2018 to comprise the 38% of the drinking population in the US³⁸.

3.1.4 Technological Factors

3.1.4.1 France

In France, the last two years, the main trend in packaging innovation is the use of half-bottles. The half bottles are popular because they enable the consumers to buy a spirit bottle with less than 10 euros. The massive use of half bottles is a result of the increased taxation and of the economic recession that has been introduced to the country³⁹.

3.1.4.2 China

In China, online sales of alcoholic drinks have experienced significant growth during 2013. Alcoholic drinks manufactures mainly of foreign spirits, beer and wine are giving much importance to internet retailing. Through internet retailing is a lot easier for them to educate the consumers and to demonstrate their products.

³⁷ (Euromonitor International, 2014)

³⁸ (Euromonitor International, 2014), (www.mynewsdesk.com, 2013), (www.bevindustry.com, 2014)

³⁹ (Euromonitor International, 2014)

Internet retailing is an easy way to educate the consumers by using vivid pictures and informative descriptions of the products. In addition to this, the manufacturers can explain to Chinese consumers how to better enjoy foreign spirits such as whisky, vodka and rum and they also can do online promotions to boost consumer trials. Internet retailing is anticipated to be a key contributor in growth of alcoholic drinks in the next period. Time and price sensitive consumers are more likely to buy products online because of the quick home delivery service and the low price offering in comparison with the other channels. PR has already understood the importance of online retailing and it has applied several online promotional campaigns. For example, PR offers Absolut with 30% price discount online⁴⁰.

3.1.4.3 U.S.A

In the US line extensions and new launches were made to catch up with the recent trends. The main concepts behind these extensions and new products were the flavor innovation, new packaging styles, health and wellness, demographic targeted products and premium products. These trends in alcoholic drinks are going to grow among the recent demographic groups where there is demand for premium alcoholic drinks. This evolution in products may affect the term of "premium". For instance, until now the most common characteristics of premium products were the higher alcohol content, reserve brands or limited releases. In the forecast period, these characteristics are expected to change so to match with the demands of the new demographic groups. Demographic targeted products such as bag-in-a-box wines like a purse is an attempt to make this kind of products more elegant and more appealing to women when gathering with friends. In addition to this, elements such as organic, gluten free, natural or sulphites free will characterize a product as premium in the upcoming period⁴¹.

3.2 Porter's five forces analysis

The Porter's five forces refer to different forces which have an impact in an industry and can affect the ability to gain acceptable returns. Petersen et al. argue that *"In order to understand the competition in an industry the "five forces" approach serves as a useful checklist*⁴². The Porter's five forces include:

- Threats of new entrants
- Competitive rivalry among existing competitors

⁴⁰ (Euromonitor International, 2014)

⁴¹ (Euromonitor International, 2014)

⁴² (Christian V. Petersen, 2012, p. 189)

- Potential pressure from substitute products
- Bargaining power of buyers
- Bargaining power of suppliers

As in PEST analysis the Porter's 5 forces analysis will be conducted for the key markets of PR.

3.2.1 Threat of new entrants

New entrants' desire to gain market share will have a negative impact on returns of the existing players. If the entry barriers are low the profit margin tends to vanish. Among the typical barriers to entry are: economies of scale, product differentiation, capital requirements, switching costs, access to distribution channels and government policy⁴³. In the upcoming section, some of these barriers to entry will be examined.

3.2.1.1 Economies of scale

Economies of scale are a typical characteristic of the alcoholic drinks industry as an increased production leads to greater efficiency and lower per unit fixed costs. Large operational units (i.e. great number of distilleries) will have as a result increased production and revenue. As it will be examined further in Porter's Value Chain analysis PR and Diageo who are the global leaders of the industry, they have the lowest operating costs in comparison to the rest peer companies. One reason behind the presence of economies of scales is that specific brands of PR share the same infrastructures and as a result the joint costs are decreased. For instance, Chivas Regal, Ballantine's and Royal Salute share the Speyside Malt Whisky distillery in Scotland. Also, in Midleton Distillery which is owned by PR, except the well-known Jameson's Irish whiskey, five more whiskey brands of the Group are produced⁴⁴. Another reason of the presence of the economies of scale in the alcoholic drinks industry, is the bulk buying. PR used in its operations more than 630,000 tons of glass in 2014⁴⁵. It is logical that it is in position to negotiate better terms with its suppliers than a new entrant due to its high requirements.

3.2.1.2 Capital requirements

PR is the global co-leader in the premium spirits industry with more than 100 production sites. It is almost impossible to a new entrant in the alcoholic beverages industry to compete with PR which has PPE (Property,

^{43 (}Christian V. Petersen, 2012, p. 191)

⁴⁴ (www.pernod-ricard.com, 2015), (http://www.irishdistillers.ie/, 2015)

⁴⁵ (Ricard, 2014, p. 76)

Plant and Equipment) with book value more than €2,000 million. Constellation Brands has PPE with book value of €2,386 million while Diageo's PPE worth €4,348 million. The increasing demand for spirits and wines, especially in emerging markets, may attract new entrants but they cannot be considered worthy opponents of PR which has a global distribution network, large-scale infrastructures and 40 years of experience.

3.2.1.3 Product differentiation

PR has based its marketing strategy on product differentiation by trying to set its products at the high-end market. In 2013 the 75% of its net sales came from its premium brands. In the US despite the slowdown in the on-trade channel, an organic growth of 2% was achieved in 2014 due to Premiumisation strategy and strict pricing policy. PR's wide portfolio of premium brands helps the Group to maintain its leadership position in the premium wines and spirits industry. The increasing demand for its Top 14 strategic brands and premium wines indicates that the consumers believe in the special character of PR's products and in their differentiation from other alcoholic beverages produced by competitors.

Figure 3.2: Net sales of strategic brands, historical development

In millions of 9-litre cases	2010	2011	2012	2013	2014
Top 14 strategic brands	42.9	45.6	47.2	47.3	46.8
Priority premium wines	10.2	10.1	10.8	10.7	10.6

Source: Own creation based on data extracted from PR's annual reports

As it obvious from figure 3.2, there was an increased demand for the Top 14 strategic brands in the period 2010-2013. In 2014 the net sales of its strategic brands was adversely affected from the anti-corruption campaign in China and the prohibition to officials to receive premium wines and spirits as a gift. However, the drop in sales in China is considered a transitory phenomenon and as mentioned in PEST analysis the new demographic groups prefer premium beverages. The growing demand for premium beverages assists PR to expand its business activities and it also creates a barrier to entry to new entrants as they lack in experience and in brands with strong heritage.

3.2.1.4 Government policy

In France after the increase in taxes and excise duties in 2012 (Fillon Tax), a barrier to entry has automatically created in this industry. A rise of excise duties by 9.6% has as a result the slowdown of sales of alcoholic drinks

by 2% in volume in 2012 and 1% in 2013. According to experts the demand of alcoholic beverages will continue to decrease by 2% all over the forecast period (2013-2018). The significant increase in taxation and excise duties make a hostile environment for new players in France. In China, the prohibition on public funding for wining and dining has created a barrier to entry for new alcoholic drinks companies. The restrictions on public wining and dining have a several impact on premium spirits and wines and they have been strengthened during 2013. Still, new companies can be introduced to the market on a small scale, being attracted by its high profit margins. In the US some products, such as spirits and tobacco, always remain vulnerable to increases in excise duties. This tendency of the governments to increase the taxes on these specific products may discourage new players to enter the market.

It can be concluded that it is almost impossible for a new entrant to compete with the global co-leader of wine and spirits industry which has large-scale infrastructures and a wide portfolio of famous premium brands. The Premiumisation strategy followed by PR helped the Group to expand its business activities and simultaneously to differentiate from its competitors. Also, the increased taxation faced regularly by alcoholic drinks manufactures may discourage new manufacturers to enter the market.

3.2.2 Competitive rivalry among existing competitors

Intense competition has an adverse impact on returns. Rivalry occurs when there are numerous competitors, slow industry growth, overcapacity and customers who perceive the products as commodities. Also, there is an increased competition when the industry is characterized by high fixed cost and exit barriers⁴⁶. The competition in the alcohol drink industry is characterized by few major international players. Large multinational competitors of PR are: Diageo, Bacardi-Martini, Beam Suntory, Brown-Forman, Campari, Moët-Hennessy, Rémy Cointreau and Constellation Brands. In the most markets there are a few major players and a countless number of local alcoholic drinks manufacturers.

3.2.2.1 Industry growth

The growth of industry is probably the most important factor when the rivalry among the existing competitors is examined. When the market is characterized by high growth rates then competition is low, as the companies can grow without trying to take the market share of the existing competitors. As PR is a multinational company the industry growth will be examined for its key markets which are France, China and the US. In France the

⁴⁶ (Christian V. Petersen, 2012, p. 190)

demand for both spirits and wine decreased by 1.5% between 2009 and 2014. The increased VAT on alcoholic drinks in combination with the overall economic slowdown faced by the French economy had as a result the demand for alcoholic drinks to decrease. The negative industry growth will have as a result an increased competition as the existing players will try to retain their profitability through the acquisition of the market share of their competitors. However, PR is the top spirits company in France with a stable market share over the last five years which might indicates that has convinced the end customers about its product differentiation. On the other hand, in China there was a tremendous growth in wine and spirits consumption as the demand for both spirits and wine grew by more than 40% in the period 2009-2014. The great outlook of the Chinese economy, the improving living conditions of Chinese people along with the preferences of young people to consume more premium products had as result the consumption of spirits and wine to skyrocket. The huge demand for alcoholic beverages will attract new entrants but as mentioned before it will be difficult for them to compete with PR. Finally, in the US the spirits and wine grew by 13.5% in the period 2009-2014. The wine and spirits consumption grew substantially as the American economy has been stabilized and the new demographic groups consisted by women and millennials show a preference to premium wine and spirits⁴⁷.

3.2.2.2 Market Concentration

Except the industry growth an additional factor which should examined, is the market concentration. The market concentration estimates the extent to which the sales of the market are controlled by one or more companies. If a small number of companies dominate a large part of a market, then the market can be characterized as concentrated and the competition is limited. An extreme example is when the market tends to be monopoly where there is high concentration and low competition. An effective tool to measure the market concentration is the Herfindahl-Hirschman Index (HHI) which summing the market share of each firm after having squaring it. The HHI index ranges from 1 to 10000 and it is calculated as follows:

Herfindahl index = =
$$\sum (mkt \ share_n)^2$$

⁴⁷ (Euromonitor International, 2014), Appendix 5

The competition theoretically decreases as long as the index increases while, when it comes close to zero the competition of the market tends to be perfect⁴⁸. The US Department of Justice characterizes a market as moderately concentrated if it is ranked from 1,500 to 2,500 in the index. From 2,500 and above it is considered as highly concentrated while below 1,500 is recognized as non-concentrated⁴⁹.

China	2010	2011	2012	2013	2014
HHI Index	61	69	75	76	74
France	2010	2011	2012	2013	2014
HHI Index	896	913	937	925	933
USA	2010	2011	2012	2013	2014
HHI Index	725	710	732	706	687

Figure 3.3: HHI index, Spirits markets, historical development

Source: Own creation based on data extracted from (Euromonitor International, 2014)

As it is obvious from figure 3.3, all the key spirits markets of PR could be characterized as non-concentrated as they are ranked below 1,500 in the index. Especially in China the concentration is extremely low as each spirit company controls a tiny market share. The small market share that each spirits company controls in Chinese market indicates: high industry growth, unfulfilled demand and numerous competitors. It is logic that the large Chinese market attracts numerous competitors. In China and France the index is steadily growing the last five years while in the US the opposite phenomenon is observed. This might indicates, especially for France, that the market is consolidated steadily through mergers and acquisitions. The decreasing HHI index in the US is probably attributable to the new demographic groups whose different preferences (green packaging, wellbeing etc.) open doors to new competitors.

China	2010	2011	2012	2013	2014
HHI Index	47	38	33	27	24
France	2010	2011	2012	2013	2014
HHI Index	92	96	99	108	118
USA	2010	2011	2012	2013	2014
HHI Index	933	975	931	918	908

Figure 3.4: HHI index, Wine markets, historical development

Source: Own creation based on data extracted from (Euromonitor International, 2014)

⁴⁸ (Phlips, Applied Industrial Economics, 1998, pp. 6,395)

⁴⁹ (The US Department of Justice, 2015)

In the same vein, the key wine markets of PR could be considered as low concentrated, especially the wine markets of France and China. In the US and China the index is decreasing the last five years while in France it followed an upward trend between 2010 and 2014. Chinese domestic wine producers seize the opportunity to increase their market share supported by the anti-extravagance campaign and the perception of consumers that the expensive imported wines do not differ from the cheap domestic ones⁵⁰. In the US, as millennials and women are becoming the leading demographic groups, the demand for wine is growing and more competitors are attracted. The recent acquisition of the Kenwood vineyards by PR is fully aligned with the expected growth in the American wine market⁵¹. The market concentration in France is substantially low due to the strength of local players and limited branding. Finally, in France there is a steady increase in the HHI index as small and medium local players are acquired by international alcoholic drinks companies⁵².

To sum up the above findings, the competition in France can be considered high as many competitors has a tiny market share and simultaneously both the wine and spirits industry faces negative growth rates. In China the situation is different as despite the numerous competitors, the demand of alcoholic beverages grows with outstanding rates. The demand for spirits and wine has increased by more than 40% the last 5 years. Therefore, as long as the alcoholic drinks industry grows by more than 7% per year, the competition can be considered low. Finally in the US, the decreasing HHI index indicates that more players try to enter the market which might lead to an increased competition. However, as long as the spirits and wine industry grows with high rates, the competition can be characterized moderate.

3.2.3 Threats of substituting products

As regards the substitute products, if substitution is easy and viable it will limit the power of the firms in the industry and it will influence adversely their sales. The category of substituting products for spirit and wine, accounts for beer, cider and RTDs/High Strength Premixes. An increased threat will have as a result wine and spirits to lose their market share. For that reason, the current and the future market share of each alcoholic product is examined for the key markets of PR. If spirits or wine is expected to lose their market from beer and RTDS, it reveals that there is a high substitution threat.

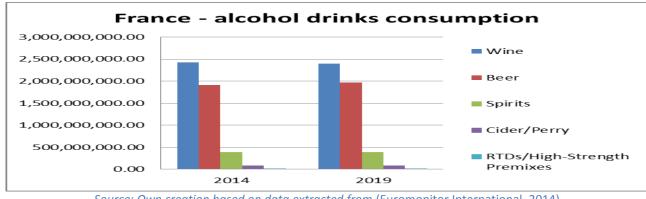
⁵⁰ (Euromonitor International, 2014)

⁵¹ (Ricard, 2014, p. 10)

⁵² (Euromonitor International, 2014)

3.2.3.1 France

In France, the alcoholic drinks market was split between beers and wine in 2014. Wine controls the 50% of the market as almost 2.5 billion liters of wine have been consumed in France during 2014. Beer has the 40% of the market and spirits have the 8%. The remaining 2% is controlled by Cider/Perry while the market share of RTDs is less than 1%⁵³. It is reasonable that in the "homeland" of wine the biggest market share is controlled by wine. According to Euromonitor International it is expected that each alcoholic product will retain its market share until 2019⁵⁴. It can be concluded that there isn't a significant threat arising from substitute products as the market share controlled by each alcoholic product will remain the same in future.





3.2.3.2 China

In China the market distribution between the alcoholic drinks is totally different from France's. The dominant product in China is the beer which controlled the 84% of the alcoholic drinks market during 2014. More than 50 billion liters of beer were consumed in China in 2014. The remaining percentage is divided between spirits and wine. RTDs and cider had both less than 1% of the market.

However, the sales of spirits are expected to have an outstanding growth all over the forecast period. The spirits are expected to grow by 37% until the 2019 as their overall consumption will grow by 2 billion liters. The alcoholic drinks industry of China is very promising as every alcoholic product is expected to grow substantially. The beer will have the least growth (12%) until 2019. The consumers will trade up to high-end alcoholic

Source: Own creation based on data extracted from (Euromonitor International, 2014)

⁵³ (Euromonitor International, 2014)

⁵⁴ (Euromonitor International, 2014)

products such as spirits and wines. RTDs are expected to skyrocket as their sales will grow by 433%⁵⁵. This trend towards the consumption of RTDs can be partially connected to millennials and women who are more interested to new tastes and flavors. PR should examine the growth of RTDs in China as it has not a well-developed RTD segment. To sum up, the trend towards premiumisation in China will favor PR and the threat coming from substitute products like beer will be decreased.

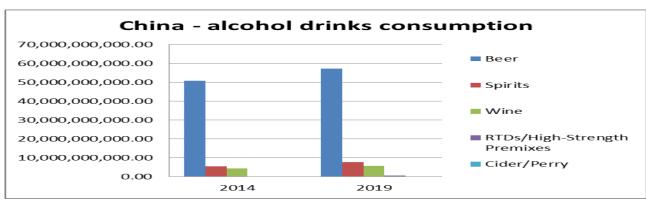


Figure 3.6: Current and future market share of each alcoholic product in China

3.2.3.3 USA

In the US, the alcoholic drinks industry is dominated by the presence of beer. The beer controlled the 80% of the market during 2014 while spirits and wine was limited to 8% and 10% respectively. Cider had the 1% of the market and RTDs the remaining 3%.

The overall demand of beer is expected to remain stable during the forecast period while the demand of spirits and wines will grow by almost the same rate (+8%). RTDs are expected to grow by 12% while the demand of Cider will skyrocket by 278%. The expected high increase in the consumption of cider and wine justifies the recent acquisition of Kenwood vineyards by PR. Women who are the upcoming dominant demographic group prefer to consume premium wines rather than more simple alcoholic beverages such beer. Finally, millennials who are more interested about the flavor and the character of the product will increase the demand for RTDs. To conclude, spirits will continue to play a significant role in the alcoholic drinks market of the US but PR should also examine the upcoming spread of RTDs which can be considered as a threat.

Source: Own Creation based on data extracted from (Euromonitor International, 2014)

⁵⁵ (Euromonitor Passport, 2014)

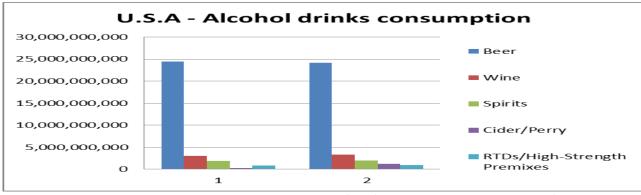


Figure 3.7: Current and future market share of each alcoholic product in the US

3.2.4 Bargaining Power of Buyers

If the buyers can easily switch to different products, they will have a great power and they will dictate terms to their suppliers. The distribution channels in the alcoholic drinks industry are separated into off-trade and on-trade. The off-trade channels are referred mainly to wholesalers, hypermarkets and supermarkets where the customer can buy the product but it cannot be consumed at that place. In contrast, the on-trade channels are referred to hotels, restaurants, clubs, bars etc. where the alcoholic drinks are purchased to be consumed.

3.2.4.1 Off-trade channels

The hypermarkets and the supermarkets are the main representatives of the off-trade channels as they offer the biggest amount and greatest variety of alcoholic drinks at a low price. The great number of spirits and wine brands in combination with the low switching cost to a competitor's product, give a great bargaining power to buyers. However, PR's goodwill and intangible assets of almost €16,500 million indicate that its promotional and advertising campaigns have convinced the end customers for its product differentiation. Also, as it was mentioned before in Porter's 5 forces analysis, there is a steady increase in the demand of the Top 14 strategic brands. This indicates that the final consumers seek exclusive for these specific brands and as a result it is more difficult for the hypermarkets and supermarkets to exclude them from their distribution channels. Moreover, the hypermarkets and supermarkets prefer to cooperate with big players like PR as they can supply them with a great variety of products, they have huge stocks and they can give them better offers in comparison to small companies. The bargaining power of the off trade channels can be considered as moderate as they can switch

Source: Own creation based on data extracted from (Euromonitor International, 2014)

easily between alcoholic drinks companies but they are limited by the great demand for PR's brands and its superior services.

3.2.4.2 On-trade channels

As regards the on trade channels (hotels, restaurants, clubs, bars etc.) similarly to off-trade, their bargaining power can be considered moderate. They can easily change between the different spirits and wine brands but their power is limited by the high demand for PR's products.

3.2.5 Bargaining power of suppliers

In the same vein, if the cost for the suppliers to switch from one company to another is low and their products are considered unique, they have the power to squeeze the profitability of the industry and to control their clients. The bargaining power of the suppliers is affected from several factors such as their number, the importance of their good and services for their industry and the costs for the company to switch from one to another⁵⁶. The suppliers of PR can be separated into two main categories: the suppliers of agricultural products and the industrial suppliers (mainly-glass bottles suppliers).

3.2.5.1 Suppliers of agricultural products

The raw materials which are necessary for the production of the alcoholic drinks are highly standardized. The low substitution rate of the raw materials increases the bargaining power of the suppliers. PR has offset this threat by having sustainable relationships with its suppliers and subcontractors. Each affiliate is responsible to select and monitor its own suppliers. In addition to this, in October 2013 PR launched the CSR (Corporate social responsibility) commitments. This document was signed by suppliers and subcontractors in order to ensure that they will follow ethical business practices. Moreover, PR takes specific actions to ensure that the relationships between suppliers and affiliates will be properly. These actions include internal training courses to affiliates about the proper selection of suppliers and secondly regular examinations of their relationships from a commercial standpoint⁵⁷. Finally, as stated in PR's report *"the Group has entered into physical supply contracts with some suppliers in order to secure the delivery price of certain grains"*⁵⁸.

⁵⁶ (Christian V. Petersen, 2012, p. 190)

⁵⁷ (Ricard, 2014, p. 85)

⁵⁸ (Ricard, 2014, p. 128)

3.2.5.2 Suppliers of industrial products

As stated in PR's annual report: *"Pernod Ricard is not significantly dependent on its suppliers"*⁵⁹. In 2014, it had relationships with five industrial suppliers: Ardagh Glass (glass bottles), Guala (closures), O-I (glass bottles), Saver Glass (glass bottles) and Verallia (Saint-Gobain glass bottles)⁶⁰. PR probably does not depend significantly on any industrial supplier because the glass is a common raw material which can easily be found.

To sum up, the bargaining power of the agricultural suppliers can be considered as moderate intense as their raw material have low substitution rate but PR has taken some actions to limit their power. Finally, the industrial suppliers have low bargaining power as their product which is the most times the glass is common.

3.3 Porter's Value Chain Analysis

The Porter's value chain analysis examines both the primary and supporting activities of a firm in order to identify its core competitive advantage. The competitive advantage will increase its possibility of gaining larger market shares and margins⁶¹. The model is separated into primary and support activities. The activities are the building blocks which help a company to create a product valuable to its consumers. Value chain analysis helps identifying which steps-activities can be eliminated or what corrections can be made.

3.3.1 Primary activities

Primary activities are the activities engaged in the physical creation of the product, its sale, its transfer to the consumer and also include the after sale assistance⁶². The primary activities of inbound logistics and after sales service are not examined as it is assumed that they are not involved significantly in the core competency of PR. Firstly, it is assumed that PR does not gain a competitive advantage from storing and controlling the raw materials or neither from the after sales service due to the consumable nature of its products.

3.3.1.1 Operations

Operations include the activities associated with the transformation of the inputs into the final product. An examination of the relationship between the revenue and operational expenses will reveal the cost efficiency

⁵⁹ (Ricard, 2014, p. 14)

⁶⁰ (Ricard, 2014, p. 14)

⁶¹ (Christian V. Petersen, 2012, p. 191)

⁶² (Porter, 1998, p. 38)

in PR's production. Operating expenses are the costs linked with a company's main business activities and include COGS, SG&A, R&D and other operating expenses.

Adapted Value Chain Analysis	COGS/Revenue	Depreciation/Revenue	Operating expenses/Revenue	Net Profit/Revenue
Pernod Ricard	35%	3%	76%	14%
Diageo	21%	3%	73%	19%
Bacardi Martini	74%	1%	94%	3%
Constellation Brands	82%	9%	78%	28%
Average	53%	4%	80%	16%

Figure 3.8: Examination of the cost efficiency in PR's operations, average figures from period 2010-2014

Source: Own creation based on data extracted from (Orbis, 2015) and PR's financial statements⁶³

PR can easily achieve high gross margins as it has the second lowest COGS/Revenue ratio among to its peers. The low COGS is attributable to the production of the most products in-house and the sporadically use of subcontractors⁶⁴. PR owns 5,850 hectares of vineyards⁶⁵ which can be translated as a competitive advantage over to its competitors in the wine segment because the company gains from economies of scale. Generally, PR has satisfying cost efficiency in production as its Operating Expenses/Revenue ratio is lower from the average. PR has stabilized its operating expenses to 76% of the revenue the last five years. It is expected to increase further its operational efficiency after the launch of Allegro project in 2014. This project is focusing on three key elements: 1) Prioritization: Better clarification of the roles and the responsibilities inside the firm, 2) Simplification: An effort to simplify the processes and the organization, 3) Mutualization: Common use and storage of resources. The project will strengthen the decentralized model of PR as it will enhance the direct relationships between Brand Companies and Market Companies. The Allegro project is expected after three years to create recurring savings up to €150 million. The one third of these savings will be reinvested in brand development⁶⁶.

3.3.1.2 Outbound logistics

This activity is associated mainly with collecting, storing and physically distributing the products to consumers⁶⁷. As stated in PR's annual report, almost the 80% of its transportation is done by the sea. This method consumes a low amount of energy and generates only ¼ of gas emissions in comparison to on road

⁶³ Information about the R&D and S&D expenses are not provided for the most of the companies.

⁶⁴ (Ricard, 2014, p. 12)

⁶⁵ (Ricard, 2014, p. 14)

⁶⁶ (Ricard, 2014, p. 10)

⁶⁷ (Porter, 1998, p. 40)

transportation. The remaining 20% of is optimized with careful planning of routes and loads. Finally, PR mentions that the Group will continue these initiatives towards eco-design all along the supply chain⁶⁸. The lower use of carbon means lower energy costs and an improved social-environmental profile. The decreased energy costs and the improved social-environmental profile contribute to PR's core competency.

3.3.1.3 Marketing and Sales

This activity includes the means by which a consumer can buy the product. It includes advertising, promotion, pricing, channels selection & valuation and sales force⁶⁹. During 2014, PR created limited editions and new premium products in accordance to its premiumisation strategy. Such products were the summer bottle of Ricard, the new ABSOLUT Craft, Ballantine's Brasil and the Jacob's Creek Double Barrel. Also, PR promoted the Havana Club through digital videos for the art of mojito cocktails⁷⁰.

Moreover, during 2014 PR UK launched "Your signature spirit" market campaign by which the customers could print their personal messages onto the labels of the company's "Chivas Regal 12 Year Old", "The Glenlivet 12 Year Old" and "Aberlour 10 Year Old" bottles. After the purchasing of a bottle, a customer could go online and by using its barcode he could create his personal message. Then this personal message was printed as a label and was sent back to the customer during a week. According to marketing manager of PR UK this campaign helped to build relations with the customers and "positive brand experiences". This cost efficient marketing campaign was successful and it enhanced the charm of PR's brands in UK⁷¹. Such marketing initiatives and promotion activities increase the brand loyalty of PR's customers.

3.3.2 Secondary Activities

Support activities help the primary ones by providing procurement, human resources, technology. The company's infrastructure assists the entire value chain⁷². The human resources management is only examined as PR lists its people among its competitive advantages⁷³. The R&D expenses for the most of the peer companies are close to zero which might indicates that the industry does not gain significant value from the secondary activity of technology.

^{68 (}Ricard, 2014, p. 73)

⁶⁹ (Porter, 1998, p. 40)

⁷⁰ (Ricard, 2014, p. 10)

⁷¹ (http://www.packagingnews.co.uk, 2014)

⁷² (Porter, 1998, p. 40)

⁷³ (Ricard, 2014, p. 9)

3.3.2.1 Human resource management

*"Human resource management consists of activities involved in the recruiting, hiring, training, development and compensation of all types of personnel"*⁷⁴. PR's decentralized model is based on three core values: entrepreneurial spirit, mutual trust and sense of ethics. This culture it is supported by a collective attitude and a sense of teamwork. PR encourages the freedom of association and supports the optimization of working conditions⁷⁵.

PR's training programs adapt the capabilities of each employee to the demands of his current position, prepare him for his forthcoming assignments and they also include subjects such as: marketing, management, finance, sales, communication, industry, legal issues and CSR. In 2011 the Group launched the PR University to boost talent development and to support diversity. PR's University has 27 programs taught in French, English and Spanish. PR encourages the professional development through initiative schemes such as the iLead which was launched in 2011. The iLead is a talent evaluation tool based on leadership models and works as a benchmark for specific skills. The iLead in combination with the management reviews is used to recognize and select the promising talents⁷⁶.

In 2013 PR rewarded with the Human Capital Trophy for its work in the areas of training, for its organizational innovations and for its integration policy in youth recruitment. In the same year PR cooperated with Towers Watson (a risk management and HR consulting firm) to examine the opinion of its employees for the firm. The results of the opinion poll showed a high level of commitment and that the employees feel proud for the company working for⁷⁷. This secondary activity by doing a successful work in the areas of training and development of employees contributes to PR's core competency.

3.4 VRIO Analysis

The VRIO analysis is an analytical method, by which a firm's internal resources and capabilities are examined according to specific criteria, so their contribution to a sustained competitive advantage to be revealed. The VRIO acronym stands for the four questions applied to each resource: 1) Value: Is the source or capability

⁷⁴ (Porter, 1998, p. 42)

⁷⁵ (Ricard, 2014, p. 52)

⁷⁶ (Ricard, 2014, p. 59)

⁷⁷ (Ricard, 2014, p. 52)

valuable to the firm? 2) Rarity: Is the resource rare or limited? 3) Imitability: Can the resource be easily imitated or substituted? 4) Organization: Is the firm organized properly to capture fully the value of the resource?

If the resource or capability is valuable, rare, non-imitable and the firm can fully utilize it through a wellorganized structure and management system, then it meets all the requirements to bring a sustainable competitive advantage for the firm⁷⁸.

3.4.1 Value

A source is considered valuable if it assists the firm to exploit an opportunity or if it can diminish the threats of the market. Potential opportunities are considered the changes in technology, culture, economy, political environment and legislation which can be utilized by a firm to increase its value. On the other hand, a resource is regarded valuable if it can mitigate the threats deriving from the suppliers, buyers, existing companies, new entrants and substitutes⁷⁹. PR's main resources are agricultural products and raw materials such as grapes, wheat, corn and barley. Moreover, an internal capability can be considered its global distribution network which enables the Group to sell its products worldwide and be present in more than 80 countries.

As mentioned in PEST analysis the living conditions of Chinese people are expected to be improved as might lead to trade up with premium products. Moreover, in the US upcoming demographic groups are expected to increase the demand of spirits and wine. Resources such as farm raw materials indirectly assist PR to exploit the opportunities deriving from the changes in culture and from an increased demand for alcoholic beverages. From this point of view, PR's raw materials help the Group to seize the opportunity and they should be considered as valuable.

On the other hand, the global distribution network of PR enables the company to be present in both traditional and emerging markets. This capability should be considered valuable as it has helped significantly the firm to seize the opportunities in the emerging market of China the last 5 years. Also, it helped the Group also not to lose its dominant role in the mature markets of France and Americas. Furthermore, this capability decreases the threat derived from existing players and new entrants as few firms are able to build a global distribution network due to extremely high cost.

⁷⁸ (Barney, Firm Resources and Sustained Competitive Advantage, 1991, p. 112)

⁷⁹ (Barney, Firm Resources and Sustained Competitve Advantage, 1991, p. 106)

3.4.2 Rarity

Limited and valuable resources increase the competitive advantage of the firm as they indirectly "forbid" competitors to implement the same strategies with the use of identical resources. The rarity of the farm raw materials is going to be examined through a comparison of the future supply and demand of these products. As stated before among the main farm raw materials of PR are: wheat, corn and barley.

In million tons							
Wheat	2014	2015	2016	2017	2018	2019	2020
Supply	713	718	700	708	715	724	732
Demand	697	710	703	710	716	723	731
Corn							
Supply	983	980	954	976	993	1008	1025
Demand	939	961	965	982	999	1015	1031
Barley							
Supply	145	138	137	139	143	146	149
Demand	141	137	138	141	143	146	149

Figure 3.9: Future supply and demand of wheat, corn and barley

Source: Own creation based on data extracted from International Grains Council⁸⁰

As it is obvious from figure 3.9 the current grain supply is sufficient to cover the demand for these products, but this relation is going to be reversed until 2020. In 2020, the supply of wheat and barley will be just enough to cover their demand while the produced corn it will not be sufficient enough. It can be concluded that these three raw materials increase the competitive advantage of PR as they are moderately limited and they will not be sufficient enough for massive entrance of new alcoholic drinks manufacturers.

The rarity of PR's global distribution network should be examined also. A way to examine how common is for an alcoholic drinks company to have a global distribution network is to examine the number of companies which have a remarkable global market share.

Figure 3.10: Total number of spirits companies with global market share above 1.5%

Companies	2009	2010	2011	2012	2013	2014
Diageo Plc	4.40	4.40	4.60	4.80	4.80	9.50
Pernod Ricard Groupe	4.30	4.40	4.40	4.40	4.40	4.50
Hite Jinro Co Ltd	-	-	-	3.00	2.90	3.00
Thai Beverage PCL	2.50	2.50	2.60	2.70	2.80	2.80
Suntory Holdings Ltd	0.70	0.60	0.60	0.60	0.60	2.00
Bacardi & Co Ltd	1.60	1.60	1.60	1.60	1.60	1.50
Total number of spirits companies with market share above 1.5%	4	4	4	5	5	6

Source: Own creation based on data extracted from (Euromonitor International, 2014)

⁸⁰ (International Grains Council, 2015)

As it can be seen from figure 3.10, there are few spirits companies that have global market share above 1.5%. Moreover, among these few companies are included 2 Chinese spirits companies whose increased market share are due to their vast home market, so the total number of companies with a remarkable market share it is even smaller. Having considered the small number of spirits companies with a sufficient global market share, it can be concluded that the distribution network of PR contributes to its competitive advantage due to its rarity.

3.4.3 Imitability

PR's main resources cannot be imitated due to their nature. PR's products have special characteristics such as taste, color and flavor which are directly connected with the raw materials used in production. As a result these farm raw materials cannot be imitated or be substituted by other agricultural products. This non-imitability character of its main resources enhances the core competency of PR as they are essential in production of alcoholic drinks and they cannot be replaced by other raw materials. As regards the global distribution network, it can be difficult imitated as it is prohibitively expensive.

3.4.4 Organization

The last criterion is related to the ability of the firm to exploit a valuable, rare and non-imitable resource. A firm should be able to utilize the full potential of such a resource through well-organized management systems and organizational structures. As regards the raw materials, PR can't exploit probably fully their potential as the company has the lowest ROA among its peer companies⁸¹. Finally, the company can fully utilize its global distribution network as its sales coming from all the parts of the world and simultaneously it was able to respond to the low growth rates of its mature markets by focusing more to the emerging markets of Asia.

From the VRIO analysis, it can be concluded that the distribution network of PR contributes to a sustainable competitive advantage towards its peer companies as it is valuable, rare, difficult to be imitated and can be fully exploited through a well-organized structure.

3.5 Conclusion of Strategic Analysis

The strategic analysis revealed that PR is vulnerable to hostile political decisions taken regarding the alcoholic drinks industry and the tendency of the governments to increase VAT in alcoholic drinks when seeking for

⁸¹ Return on Assets - It will be further discussion in the chapter of financial analysis.

additional taxes. The anti-corruption campaign in China and the extensive taxation in France have adversely affected the growth of alcoholic beverages in these markets. The economic stagnation in France which is a representative market of Europe comes to confirm the Group's market development strategy followed in Asia. The impressive outlook of the Chinese economy in combination with the improving living conditions of the Chinese people creates expectations for an increased future demand. New demographic groups such millennials and women are concerned about health problems related to alcoholic drinks consumption and they prefer to drink less but premium products. This phenomenon is aligned with Premiumisation strategy followed by PR which tries to put its products at the high-end market. The Porter's five forces analysis showed that PR faces an increased competition in France and a moderate competition in the US and China. Using Ansoff's terminology there is a room for market penetration in both mature and emerging markets through the acquisition of rivals and by enhancing its promotional campaigns. Although there are numerous competitors in both wine and spirits industry it is still hard for an existing competitor or a new entrant to compete with PR which has a global distribution network and a portfolio of well-known brands. The bargaining power of agricultural products suppliers is moderate as their products are essential in the production but their performance is subject to regular examinations and they have signed contracts that they will follow ethical business practices. Similarly, the bargaining power of buyers is moderate despite the fact that the switching cost is low, because they are restricted from an increased demand for PR's products. Finally, the threat coming from substitute products is low as the research showed that the new alcoholic drinks consumers will trade up with premium spirits and wines in future. Chinese and Americans youngsters are going to change from beer consumption to wine and spirits as they prefer more premium products.

The internal analysis revealed that PR has among the lowest COGS in comparison to its peers as the most of its products are manufactured in house. In the same vein, PR has low operating expenses in comparison to its peers but there is still room for further improvement if wants to be the top-player. PR has already done some movements towards this direction as the launch of the Allegro project with purpose to decrease its structure costs. Finally, the VRIO analysis showed that its global distribution network contributes to its core competency as it is rare and enables the Group at the same time to exploit any potential opportunities arising in any place of the world.

43

CHAPTER 4 – FINANCIAL ANALYSIS

In order to conduct a reliable forecasting, a review of the historical financial performance of the company is required. The historical development of key financial ratios will serve as an indicator for the future performance of the company. The combined conclusions of the financial and strategic analysis will create a solid foundation for forecasting. The time frame of the analysis will be five years which means that the financial performance of PR will be examined for the period from 2010 to 2014.

4.1 Accounting principles

The consolidated financial statements of PR have been prepared in accordance with the International Financial Reporting Standards (IFRS). PR's financial year accounts from 1 July to 30 June. There was a change in the accounting standards related to the Employee Benefits (IAS 19) applicable to PR from 1 July 2013 and with retroactive effect from 2012. In particular, the changes related to the elimination of the corridor method which allowed a company not to recognize the amortization of actuarial gains and losses if they don't exceed the 10% of the defined benefits plans. In addition, actuarial gains and losses are recognized in the other comprehensive income statement and they are not be recycled to income statement under the account "Other operating income and expenses" as prior. The consolidated financial statements of 2012/2013 have been restated due to the retroactive effect of this change⁸².

4.2 Accounting quality

The annual reports of the period 2010-2014 have been audited by Deloitte and Mazars who state that PR's consolidated financial statements give a true view of the financial position of the Group⁸³. This does not necessarily have to be absolute accurate but it merely implies that the auditing companies in collaboration with PR agree that the statements give a fair presentation of the Group's performance. Deloitte had served as an external auditor for Diageo also but it was replaced by Kepler Associates on 7 December 2013. Mazars has been an auditor for international food & beverage companies such as Lesaffre Group, Louis Roderer and

⁸² (Ricard, 2014, p. 151)

⁸³ (Ricard, 2014, p. 206)

Kraftfoods⁸⁴. It is believed that the annual statements between 2010 and 2014 include valid data which will be used in the financial analysis and evaluation of PR.

4.3 Restructuring Pernod Ricard's Financial Statements

The main goal of this section is to classify the accounting items as either operating or financing to reveal PR's core operations which are the main driving force behind the value creation⁸⁵. The core operations of a company are what it renders it unique and they are also difficult to be imitated by competitors. The investors and lenders examine thoroughly the operating items when they evaluating a company, as they are difficult to be copied. Furthermore, the isolated financial items show how the operations are financed⁸⁶.

4.3.1 Analytical Income Statement

Both in the analytical balance sheet and analytical income statement each accounting item should be classified as either being "operative" or "financing". The reason behind this separation is to distinguish the different sources of the firm's profits⁸⁷. The classification of activities as operating enables an analyst to measure and forecast the performance of the firm without being distorted from the more volatile finance activities. The items in the analytical income statement should match with the associated items in the analytical balance sheet. The key figure in the analytical income statement is the net operating profit after tax (NOPAT) and for its calculation the tax should be deducted from earnings before interest and tax (EBIT). Due to the reason that corporation's tax at total is affected by net financial expenses it is required to add back the "tax shield"⁸⁸. The tax shield is calculated as follows: *Tax shield= Tax rate * Net financial Expenses*

4.3.1.1 Share of net profit/loss from associates

All these companies are part of the alcoholic drinks industry and they assist PR to its core operations⁸⁹. For this reason these investments are regarded to be aligned with PR's core operations and they should be included in the calculation of NOPAT. It is considered that any possible misclassifications of this account will not affect significant the financial ratios due to its small figure.

⁸⁴ (http://www.mazars.com/)

⁸⁵ (Christian V. Petersen, 2012, p. 68)

⁸⁶ (Christian V. Petersen, 2012, p. 68)

⁸⁷ (Christian V. Petersen, 2012, p. 70)

⁸⁸ (Christian V. Petersen, 2012, p. 73)

⁸⁹ (Ricard, 2014, p. 231)

4.3.2 Analytical Balance Sheet

In the analytical balance sheet the accounting items must be separated into operating and financing. The total investment in a company's operating activities is named as Invested Capital and it is the sum of the operating assets minus the operating liabilities⁹⁰. Petersen et al. state that *"Invested Capital represent the amount a firm has invested in its operating activities and which requires a return"*⁹¹.

Invested Capital = Operating Assets – Operating Liabilities

As in normal balance sheet so in analytical the total assets are equal to the liabilities plus owner's equity. The invested capital deriving from the assets should be equal to invested capital deriving from liabilities plus shareholder's equity.

4.3.2.1 Investments in associates

As mentioned before the changes here have to match with the changes in the analytical income statement, so this account is regarded as an operational.

4.3.2.2 Separation of operating and excess cash

Cash and cash equivalents should be separated between operating cash and excess cash. Excess cash should not be included in invested capital because by definition it is unnecessary for the daily operating activities of the company⁹². The operating cash is registered as an operational item in the analytical balance sheet along with the other current operating assets while the excess cash is classified as a financial item. As PR does not provide any information about the operational cash, a modest rule of thumb will be used in the estimation of the operational cash, as is usual in real life⁹³. It is assumed that the 2% of the Cash and cash equivalents should be considered as operational cash.

⁹⁰ (Christian V. Petersen, 2012, p. 74)

^{91 (}Christian V. Petersen, 2012, p. 74)

⁹² (Tim Koller, 2010, p. 145)

⁹³ (Christian V. Petersen, 2012, p. 77)

4.3.2.3 Deferred tax assets & liabilities

Deferred tax assets are the result of tax loss carryforwards and of temporary differences between tax base and carrying amount of assets and liabilities⁹⁴. As regard the deferred tax liabilities "*are likewise treated as operating items, arising as a consequence of temporary differences between book values and tax values*"⁹⁵. Because the most of the deferred tax assets and liabilities are associated with the loss carryforwards and the ongoing operations of PR, they will be treated as operating items⁹⁶.

4.3.2.4 Income tax payable & receivable

Tax payable should be considered as an operating activity because it comes from the reason that the company *"pays too little in tax on account during the fiscal year"*⁹⁷. For the same purpose, tax receivable will be considered as an operational item.

4.3.2.5 Assets & Liabilities held for sale

Assets & Liabilities held for sale should be considered as a financing item as the disposal of those assets will reduce the borrowing of the company or it could increase the excess cash and cash equivalents⁹⁸. For this reason the accounting item assets & liabilities held for sale will be classified as financing.

4.3.2.6 Non-current & current provisions

The provisions of PR except of the ones about retirement benefits are separated into two categories: provisions for restructuring and provisions for litigation. Koller et al. argue that the litigation expenses should be regarded as a non-operational accounting item, especially if the litigation charge recurs infrequently⁹⁹. However, as stated in PR's annual report *"the Group routinely faces litigation in the normal course of business"*¹⁰⁰. For that reason litigation provisions are considered as an operational item. In the same vein, despite the fact that Koller et al. suggest to classify the provisions for restructuring as a non-operational item, they will be regarded as operational because they are mostly related with the company's regular activities. In

⁹⁴ (Ricard, 2014, p. 152)

^{95 (}Christian V. Petersen, 2012, p. 88)

⁹⁶ (Ricard, 2014, p. 161)

^{97 (}Christian V. Petersen, 2012, p. 79)

^{98 (}Christian V. Petersen, 2012, p. 90)

⁹⁹ (Tim Koller, 2010, p. 162)

¹⁰⁰ (Ricard, 2014, p. 131)

particular, as stated in PR's annual report the provisions of restructuring are connected with the training cost of the departed individuals, costs of site closure, impairment of inventories, scrapping of PPE and restructuring costs. These costs are considered directly connected with PR's regular activities and is assumed that both noncurrent and current provisions will be regarded as operating items.

4.3.2.7 Non-current & current derivative instruments

Petersen et al. argue that operating and financial hedges are regarded as being financial decisions¹⁰¹. In addition to this, Koller et al. suggest that the derivatives used for hedging from trade receivables and payables should be excluded from invested capital and grouped under financial assets¹⁰². For these reasons non-current & current derivative instruments, both assets and liabilities, will be treated as financial items.

4.4 Analysis of Pernod Ricard's profitability

Examining the company's historical profitability provides useful information about the company's future survival or not and it could also help defining the future expectations for the company. In addition to this, a strong profitability is a signal of economic health and it could help the company to maintain the relationships with suppliers and customers¹⁰³.

The profitability can be separated in operating profitability and in profitability affected by the financial leverage. Return on invested capital (ROIC) measures the operating profitability while Return on Equity (ROE) measures the profitability by taking into consideration both operations and leverage. These profitability ratios require the appropriate benchmark in order an analyst to be able to evaluate if the ratios are in a satisfactory level or not. Weighted average cost of capital (WACC) could be considered such as an appropriate benchmark for ROIC and owner's required rate of return (re) for ROE. Furthermore, a comparison with the competitor's profitability ratios it could help an analyst to determine if the performance of the Group was positive¹⁰⁴. For that reason PR's profitability ratios are examined in comparison with the ratios of 3 of its major competitors who are: Diageo, Bacardi-Martini and Constellation Brands. Those companies are referred in PR's annual report among its major multinational competitors¹⁰⁵ and they are selected also due to the nature of their products

¹⁰¹ (Christian V. Petersen, 2012, p. 98)

¹⁰² (Tim Koller, 2010, p. 647)

¹⁰³ (Christian V. Petersen, 2012, p. 93)

¹⁰⁴ (Christian V. Petersen, 2012, p. 96)

¹⁰⁵ (Ricard, 2014, p. 14)

and their turnover size make¹⁰⁶. The consolidate financial statements of peers are in different currencies from PR but all the values have been converted into millions of euros according to the exchange rate at each closing date, therefore the values should be treated with care. In addition to this, the ratios extracted from Orbis are based on raw data, so they should be examined carefully. The profitability ratios for PR have been calculated for the last five years as it is assumed that this period can represent a firm's lifecycle.

4.4.1 Decomposing of ROIC

The ROIC is decomposed into profit margin (PM) and turnover rate of invested capital (TIC) as ROIC cannot explain solely whether the profitability is a result of improved revenue and expense relation or it comes from a satisfactory utilization of invested capital¹⁰⁷.

4.4.1.1 Profit Margin (PM)

The profit margin represents the relation between the revenue and expenses and expresses NOPAT as a percentage of net revenue¹⁰⁸. PR's profit margin evolution across the last 5 years has been calculated based on data extracted from the reformulated financial statements. The profit margin of the peers has been calculated based on data extracted from Orbis database¹⁰⁹.

Profit Margin (%)	2010	2011	2012	2013	2014
Pernod Ricard	19.65%	18.74%	19.79%	18.81%	17.62%
Diageo	22.79%	23.71%	28.92%	27.02%	26.40%
Bacardi - Martini	4.77%	4.43%	3.37%	2.31%	5.62%
Constellation Brands	7.71%	16.54%	20.12%	18.47%	45.24%

Figure 4.1: Profit Margin, historical development

Source: Own creation based on data extracted from Orbis and PR's analytical statements

The PM of PR has been stabilized around to 19% in the period 2010-2013. The only exception was the last year when the PM decreased down to 17.62%. In 2014, despite the strict pricing policy (the price of the top 14 strategic brands increased by 2%) and the reduction of advertising and promotion expenses¹¹⁰, the PM

¹⁰⁶ It should be noticed that the accounting policies followed by the peers can be different from the accounting policy of PR but I have assumed that it does not affect the comparability.

¹⁰⁷ (Christian V. Petersen, 2012, p. 107)

¹⁰⁸ (Christian V. Petersen, 2012, p. 107)

¹⁰⁹ (Orbis, 2015)

¹¹⁰ Appendix 11 – Common size analysis

dropped. The drop in profit margin was caused by the increase in the other operating expenses and due to the decline in net sales. The increase in other operating expenses is attributable to the launch of Allegro project and to the impairment of some brands like Kahlua and Lamb's Navy Rum¹¹¹. Generally, the decline in PM was dominated by the decrease in sales and especially in the region Asia/Rest of World. In the following period PR expects a gradual recovery in the Chinese market and in combination with a tight cost control, the PM is expected to increase. As it can be seen from the common-size analysis, the cost of sales in relation to revenue has been decreased in all the examined period. In comparison with the other peer companies, PR has almost all the years the second highest PM. Diageo who is the leader of the market has the highest PM as it has the highest revenues and simultaneously the lowest operating expenses among the peer companies.

4.4.1.2 Turnover rate of the Invested Capital (TIC)

"The turnover rate of invested capital expresses a company's ability to utilize the invested capital"¹¹². The examination of PR's TIC for the last five years can show to an analyst if there is a positive progress in the utilization of Invested Capital.

Pernod Ricard	2010	2011	2012	2013	2014
Net Sales	7,081	7643	8215	8575	7945
Invesnted Capital	20119	18538	20094	19670	19878
тіс	0.35	0.41	0.41	0.44	0.40

Figure 4.2: TIC, historical development

Source: Own creation based on data extracted from PR's analytical statements

As it can been seen from figure 4.2, PR's TIC has increased steadily the last five years, except from 2014 when a deep drop was registered. In 2014 the TIC decreased from 0.44 to 0.40. At the same year the invested capital increased slightly (+1) while the net sales dropped by 7.35%. The decrease in TIC in 2014 was mainly caused by the significant drop in sales due to macroeconomic reasons rather by mismanagement of invested capital. Generally, a high TIC means that the company is generating a lot of sales compared to the invested capital used to fund its operations. However, this is not a general rule as capital-intensive companies have lower TIC than companies with fewer assets.

¹¹¹ (Ricard, 2014, p. 160)

¹¹² (Christian V. Petersen, 2012, p. 108)

4.4.1.3 Return on Invested Capital (ROIC)

ROIC measures the overall profitability of the firm and express how well the firm uses its invested capital to generate returns. It is estimated by dividing the NOPAT with Invested Capital. The ROIC represents the amount of money that a company brings to its debtholders and shareholders based on the money invested in its operations¹¹³.

Figure 4.3: ROIC, historical development

Pernod Ricard	2010	2011	2012	2013	2014
Invested Capital	20119	18538	20094	19670	19878
NOPAT	1392	1432	1626	1613	1400
ROIC	6.92%	7.73%	8.09%	8.20%	7.04%

Source: Own creation based on data extracted from PR's analytical statements

As it is obvious from the above figure, PR's ROIC experienced a steady development between 2010 and 2013. However, in 2014 the ROIC decreased down to 7.04% from 8.20% in 2013. While there was only a minor change in the invested capital, the NOPAT decreased significantly (-13.19%). After the examination of PM and TIC it can be concluded that the decrease in ROIC was caused mainly by the drop in sales in China, the adverse currency effects and much less by a minor increase in other operating expenses (e.g. Allegro project). ROIC is an important valuation ratio as a higher ROIC will have as a result, ceteris paribus, a higher value. Also, a company with a high ROIC attracts more investors and it is most likely to obtain access to cheaper financing¹¹⁴.

4.4.2 Decomposing of ROE

The main ratio which measures the impact of financial leverage on profitability is ROE. The factors which affect the ROE are the following: Operating Profitability, Net borrowing cost and Financial Leverage.

4.4.2.1 Net borrowing cost (NBC)

NBC is measured by dividing the net financial expenses after tax with net interest bearing debt. Petersen et al. argue that NBC barely matches with a company's borrowing rate as NBC is influenced by the differences

 ¹¹³ (Christian V. Petersen, 2012, pp. 107,108)
 ¹¹⁴ (Christian V. Petersen, 2012, p. 94)

between deposit and lending rates and by other financial items such as currency losses and gain on securities¹¹⁵.

Figure 4.4: NBC, historical development

Pernod Ricard	2010	2011	2012	2013	2014
Net financial expenses after tax	413	354	453	422	374
Net interest bearing debt	10779	9064	9374	8489	8100
NBC	3.83%	3.91%	4.83%	4.97%	4.62%

Source: Own creation based on data extracted from PR's analytical statements

As it is easy observable from figure 4.4, while there was a steady increase in NBC in the period 2010 - 2013, in 2014 the NBC decreased. Moreover, as it can be seen NIBD has decreased steadily the last four years. PR tries the last years to accelerate the debt reduction so to improve its credit ratings. In 2014, the NIBD has decreased by 5% and the financial expenses by 11%. As a result of this overall effort, PR achieved to issue in March 2014 an 850 million 6 year old bond with 2% coupon rate. This is the lowest coupon rate of any of the Group's bond issuances¹¹⁶.

4.4.2.2 Financial Leverage

Financial Leverage shows the proportion of debt used to supplement equity financing. Financial leverage is measured by dividing NIBD by Equity. A high financial leverage leads to high interest payments and consequently to an increased bankruptcy risk, as the company may not be in position to repay its debt. Financial leverage is beneficial when the interest expense associated with the debt is lower from the generated returns.

Figure 4.5: Financial Leverage, historical development

Pernod Ricard	2010	2011	2012	2013	2014
NIBD	10779	9064	9374	8489	8100
Equity	9337	9474	10719	11179	11778
Financial Leverage	1.15	0.96	0.87	0.76	0.69

Source: Own creation based on data extracted from PR's analytical statements

 ¹¹⁵ (Christian V. Petersen, 2012, p. 117)
 ¹¹⁶ (Ricard, 2014, p. 7)

Figure 4.5 shows that the financial leverage has decreased steadily the last four years as a result of a continuous increase in equity financing and a constant decrease in NIBD. This shows that PR is based gradually more on shareholder's funds to finance its projects. Also, the increase in equity indicates that the shareholders have a positive belief for the outlook of PR's future performance as they reinvest back their money. The difference between ROIC and NBC is called Spread and if Spread is positive the ROE will increase as the financial leverage increases¹¹⁷. The Spread was developed the last 5 years as follows:

Figure 4.6: Spread, historical development

Pernod Ricard	2010	2011	2012	2013	2014
ROIC	6.92%	7.73%	8.09%	8.20%	7.04%
NBC	3.83%	3.91%	4.83%	4.97%	4.62%
Spread	3.09%	3.82%	3.26%	3.23%	2.43%

Source: Own creation based on data extracted from PR's analytical statements

PR's Spread has remained positive all the last five years. The highest difference between ROIC and NBC was registered in 2011 when Spread was up to 3.82%. In 2014 the spread dropped despite the fact that the NBC decreased. Spread was affected by the significant drop in ROIC. A decreasing Spread discourages PR to take more debt, as the benefit from debt financing decreases while the risk of default increases.

4.4.2.3 Return on Equity (ROE)

*"Return on equity measures the profitability by taking account both operating and financial leverage"*¹¹⁸. ROE for the peer companies was obtained from Orbis¹¹⁹. ROE represents how much profit a company has generated with the shareholder's money. ROE is calculated by dividing net earnings after tax with shareholder's equity.

Figure 4.7: ROE, historical development

ROE	2010	2011	2012	2013	2014
Pernod Ricard	10.47%	11.37%	10.70%	10.64%	8.72%
Diageo	40.65%	36.22%	34.75%	34.85%	32.95%
Bacardi Martini	22.18%	22.14%	14.52%	6.41%	17.23%
Constellation Brands	3.85%	21.92%	16.63%	13.56%	39.01%

Source: Own creation based on data extracted from (Orbis, 2015) and PR's financial statements

¹¹⁷ (Christian V. Petersen, 2012, p. 118)

¹¹⁸ (Christian V. Petersen, 2012, p. 117)

¹¹⁹ (Orbis, 2015)

As it can be seen from the figure 4.7 PR had the lowest ROE among the peer companies in the period 2010-2014. Moreover, PR's ROE followed also a decreasing trend the last 3 years. In simply words, PR's low ROE indicates shareholders' funds are not used effectively. Diageo who is the major competitor of PR has a substantially higher ROE. However, in terms of trend Diageo's ROE has also decreased in all the period examined. Diageo and PR who are the leaders of the industry have more stable ROE than Bacardi Martini and Constellation Brands. As all the firms examined are alcoholic drinks companies with similar assets it will be also beneficial to examine supplementary the Return on Assets (ROA) to evaluate the firm's profitability and the ability to generate profits from its assets. ROA it will give to an analyst a clearer picture about how well a company utilizes its assets.

ROA	2010	2011	2012	2013	2014
Pernod Ricard	3.61%	4.20%	4.14%	4.39%	3.72%
Diageo	8.37%	9.61%	8.69%	9.81%	9.79%
Bacardi Martini	3.42%	4.20%	2.85%	1.13%	4.41%
Constellation Brands	1.23%	7.81%	6.26%	5.08%	13.59%

Figure 4.8: ROA, historical development

Source: Own creation based on data extracted from (Orbis, 2015) and PR's financial statements

As it can be seen from figures 4.7 and 4.8, PR shows that it has stabilized both the level of its ROE and ROA. On the other hand, PR has also the lowest ROA among the peer group. This reveals that PR has the margin to improve its profitability with by managing better its assets. PR can improve its current ROA and ROE ratios by focusing more on its profitable brands and by selling the non-profitable ones. PR has already done some actions towards this direction as the disposal of the Danish brands: Aalborg, Brøndums and Gammel Dansk and the German brand Malteserkreu in 2013¹²⁰.

4.5 Liquidity Risk Analysis

Liquidity is vital for any kind of company as without liquidity a company isn't able to pay its bills, to start profitable investments and usually a lack of liquidity leads to bankruptcy. For the above reasons, it is important to examine both short term and long term liquidity risk. The analysis of short-term liquidity risk reveals the company's ability to pay all its short term obligations while the analysis of the long-term liquidity risk, also

¹²⁰ (Ricard, 2014, p. 9)

known as solvency risk shows the company's long term financial health and the ability to meet all the future obligations¹²¹. Both short-term and long-term liquidity will be examined in the following section.

4.5.1 Measuring short-term liquidity risk

The current ratio is calculated by dividing the total current assets by the current liabilities and it is used to measure the short-term liquidity risk¹²². Quick ratio is a variation of current ratio but includes only the most liquid current assets such as: cash, securities and receivables. Quick ratio eliminates the impact of inventory and it is a more conservative indicator of the short-term liquidity risk than the current ratio¹²³.

Current Ratio	2010	2011	2012	2013	2014	Quick Ratio	2010	2011	2012	2013	2014
Pernod Ricard	1.49	1.95	1.76	1.47	1.70	Pernod Ricard	0.48	0.63	0.60	0.46	0.46
Diageo	1.76	1.46	1.52	1.54	1.54	Diageo	0.93	0.75	0.69	0.78	0.67
Bacardi - Martini	1.28	1.51	1.39	1.32	1.58	Bacardi Martini	0.65	0.74	0.76	0.84	0.80
Constellation Brands	1.89	3.14	1.70	3.65	1.36	Constellation Brands	0.52	1.08	0.55	1.46	0.50

Figure 4.9: Current ratio, Quick ratio, historical development

Source: Own creation based on data extracted from (Orbis, 2015) and PR's analytical statements

In 2014, PR had the highest current ratio among all the peer companies. This might indicates that PR has a greater ability to cover its current liabilities through the sales of its current assets. However, the current ratio does not cover many aspects of a company's financial health because a company can have a high current ratio due to its manufacturing nature. Manufacturing companies have usually large inventories and accounts receivables and as a result the financial position of the company can be distorted. Moreover, it is doubtful if the company's inventories can be sold at their book value. Finally, the current ratio is directly connected with the activity of the company, especially in manufacturing companies like PR's case. Greater activity will lead to larger purchases of materials (higher accounts payable) and larger inventories.

As it can be seen from figure 4.9, while PR had the highest current ratio in 2014 simultaneously it had the lowest quick ratio in all the period examined. Consequently this indicates that PR's high current assets are due to its high inventory levels. Also, the low quick ratio indicates that PR faces the highest short-term liquidity risk. Bacardi-Martini is in the opposite position, as it has the lowest current ratio and simultaneously it has the highest quick ratio in comparison to its peers. Despite the fact that the net sales of Bacardi-Martini are almost

¹²¹ (Christian V. Petersen, 2012, p. 150)

¹²² (Christian V. Petersen, 2012, p. 155)

¹²³ (Christian V. Petersen, 2012, p. 155)

the half of PR's, it has more receivables than PR. Finally, the quick ratio shows that none of the peer companies is able to cover its short term liabilities rather all of them depend on each year's earnings.

4.5.2 Measuring long-term liquidity risk

4.5.2.1 Interest Coverage Ratio

The interest coverage ratio measures a firm's ability to cover its net financial expenses. The interest coverage ratio measures a company's long term-liquidity risk by showing how many times EBIT can cover net financial expenses¹²⁴. A high interest coverage ratio shows that a firm is in position to pay its financial expenses several times over based on its operating profit, while a low ratio reveals a high bankruptcy risk.

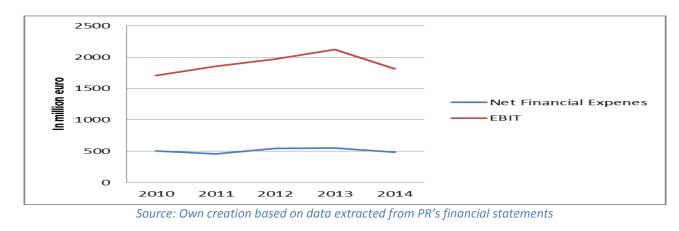
Figure 4.10: Interest Coverage Ratio, historical development

Interest Coverage Ratio	2010	2011	2012	2013	2014
Pernod Ricard	3.37	4.04	3.59	3.82	3.74
Diageo	2.79	3.84	4.72	4.72	4.28
Bacardi Martini	2.59	3.81	2.73	2.13	4.22
Constellation Brands	1.70	3.00	2.77	2.35	2.51

Source: Own creation based on data extracted from (Orbis, 2015) and PR's financial statements

PR had the highest interest coverage ratio between 2010 and 2011 in relation to its peer companies but in the next period the ratio followed a decreasing trend. As it can be seen from the following figure the ratio dropped in 2014 due to the significant decrease in PR's EBIT and not from an increase in its net financial expenses.





¹²⁴ (Christian V. Petersen, 2012, p. 161)

As it have mentioned before the drop in EBIT (-14.30%) is attributable to the decrease in net sales due to macroeconomic problems faced in the emerging market of Asia and due to adverse currency effect. In contrast, the net financial expenses decreased by 12.45% which is aligned with the overall effort of PR to control better its financial expenses. Generally, as it can be seen from the common-size analysis PR has kept its financial expenses almost stable in relation to the revenue in all the examined period. Diageo shows to face the lowest long-term liquidity risk among the peers, as the last 3 years it has the highest interest coverage ratio. Finally, PR shows to face more short-term liquidity risk than long-term.

4.5.2.2 Net debt/EBITDA

Net debt to EBITDA ratio is calculated by dividing a firm's net interest-bearing liabilities by its EBITDA. This ratio measures the amount of years required for a company to repay its interest bearing debt if EBITDA and Net debt are held constant. In other words, this ratio shows the possibility of defaulting on issued debt. For the calculation of the ratio the NIBD has been used for PR and the non-current liabilities for the peer companies. The higher is the ratio, the higher the risk for the company.

Net debt/EBITDA	2010	2011	2012	2013	2014
Pernod Ricard	5.44	4.41	4.36	3.57	3.71
Diageo	3.77	4.07	3.11	2.69	2.88
Bacardi-Martini	4.19	4.89	5.45	6.52	3.65
Constellation Brands	5.75	5.30	5.03	6.33	5.75

Figure 4.12: Net debt/EBITDA, historical development

Source: Own creation based on data extracted from (Orbis, 2015) and PR's financial statements

As it can be seen from figure 4.12 the Net debt to EBITDA ratio decreased steadily in the period 2010-2013. In 2014 PR had the second highest ratio as its EBITDA dropped significantly (-8.28%). This increase of the ratio is mainly attributable to adverse currency effects¹²⁵. Despite the fact that PR tries to reduce its financial leverage, a Net debt/EBITDA ratio of 3.71 is above the maximum limit of 3.5 that Moody's considers compatible with a Baa3 rating¹²⁶. PR's high leverage in comparison to its EBITDA indirectly prohibits the company to engage in debt funded acquisitions and thus to be more competitive towards Diageo, especially after the upcoming acquisition of USL. This can be considered as a significant disadvantage for a company which operates in the consolidating alcoholic drinks industry. Especially in the mature market of France which is characterized by

¹²⁵ (Ricard, 2014, p. 94)

¹²⁶ (Moody's)

negative growth rates and increased competition, the companies grow mainly through acquisitions of competitors and small firms.

4.6 Conclusion of Financial Analysis

The financial analysis showed that the decline in profitability was dominated by the drop in sales due to macroeconomic reasons rather than a mismanagement of invested capital. PR has the lowest ROE and ROA among its peer companies which indicate that it does not exploit full potential of its assets. PR tried to improve its current low ROA through the disposal of four non-priority brands. However, there is plenty room for further development as currently has even lower than the half ROA of Diageo. The liquidity analysis showed that the exclusive examination of the current ratio for manufacturing firms could lead to wrong conclusions about the short-term liquidity risk. While PR has the highest current ratio, in the same time has the lowest quick ratio. This indicates that it has large inventories whose sale could be used to cover its short-term liquidity analysis showed that PR has decreased its financial expenses after the upgrade of its credit rating to investment grade as it relies more on bond issues for its financing. However, its current Net debt/EBITDA of 3.7 indirectly prohibits PR to engage in debt founded acquisitions, something important for the consolidating alcoholic beverages industry.

CHAPTER 5 – A SUMMARY OF FUNDAMENTAL ANALYSIS

The results of the financial statement and strategic analysis are summarized in a SWOT matrix. While external analyses help an analyst to understand a company's opportunities and treats and the overall attractiveness of the industry, the internal analyses provide a better understanding of the company's strengths and weaknesses in relation to its peers. A SWOT analysis helps an analyst to summarize the results of external and internal analyses and to conduct a sensible evaluation of the company's strengths, weaknesses, opportunities and threats¹²⁷.

¹²⁷ (Christian V. Petersen, 2012, p. 192)

Figure 5.1: SWOT Matrix

External	
Opportunities:	Threats:
 Increased demand in emerging markets: Better living conditions of local people in China will increase the total demand New demographic groups: Upcoming demographic groups with different preferences → room for different products. Growth in wine consumption: Wine is expected to have strong presence in the US and China→ acquisitions of wine brands 	 Hostile Political Decisions: Increase in excise duties and VAT in France/prohibition of public wining and dining in China etc. Recession in France Spread of drink-less-drink-better attitude: Lower demand. Increase of production cost in China: salaries/transportation cost/raw materials. Acquisition of USL by Diageo.
Internal	
Strengths:	Weaknesses:
Global presence/ Great distribution	• Low ROA: PR has one of the lowest

- Global presence/ Great distribution
 network: PR is present in more than 80
 countries.
- Increased operational efficiency: High Profit Margin/Allegro project.
- Premiumisation: 14 strategic brands & 18 local key brands.
- Low ROA: PR has one of the lowest ROA in comparison to its peers: PR should focus more on its profitable brands and sell the non-profitable ones.
- Net debt/EBITDA of 3.7: An increased Net debt/EBITDA prohibits the company to engage in debt funded acquisitions.

Source: Own creation

5.1 Strengths

PR is the co-leading company in the alcoholic drinks industry with a global distribution network. PR has affiliates in more than 80 countries with 96 production sites. The great distribution network secures the global presence of PR in both traditional and emerging markets. An additional strength of the Group is its high profit margin due to low COGS and operating expenses. The low COGS is attributable to the economies of scale and also because the most of its products are manufactured in-house. Moreover, the operating expenses are expected to be decreased further after the launch of the Allegro project during 2014. Finally, an important strength of PR is its "Premiumisation" strategy which places its brands at the high end market. The organic growth of 1% in net sales of Americas was attributable to "Premiumisation" and *"to pricing discipline, with particularly strong resilience among the Top 14 strategic brands"* PR's extensive premium brand portfolio enables the company to cover the different needs of the customers.

5.2 Weaknesses

In 2014 PR had the lowest ROE and ROA among its peer companies. The low ROA indicate that companies with similar assets are able to achieve higher revenue. PR should improve its ROA by managing better its assets and by focusing more on its profitable brands. Another significantly weakness of PR is its increased leverage as it indirectly prohibits the company to proceed in debt funded acquisitions.

5.3 Threats

A threat for PR is the frequent hostile political decisions taken against the alcoholic drinks industry in general. Such political decisions were the increase in VAT in France and the prohibition of public wining and dining in China. These political restrictions led to a zero growth in France and to a sharp drop of sales in China (-23% organic growth) in 2014. Moreover, a significant threat for the alcoholic drinks industry is the spread of drink-less-drink-better attitude. Health concerns and wellbeing are the dominant trends in USA. Also, in China and France the youth has a different drinking attitude from the existed consumers as it prefers to drink less but premium products. PR has already adjusted its strategy around premiumisation, so to place the company at the high end market and to boost profitability by an increased price mix. Moreover, another threat is the increasing production cost in China. The steady augmentation in wages, transportation costs and cost of raw materials has as a result an increasing production cost for alcoholic drink manufacturers. An increasing production cost will

¹²⁸ (Ricard, 2014, p. 97)

squeeze further the profit margin for the alcoholic drinks companies. Lastly, a significant threat for PR is the upcoming acquisition of USL by Diageo which will secure its position as the leading company. This acquisition will enhance the distribution network of Diageo in India where USL is the leading player.

5.4 Opportunities

As mentioned in PEST analysis, the living conditions in China are expected to be further improved in future which might lead to the increase of the demand for alcoholic drink products. This increase in the purchasing power of Chinese consumers will help substantially PR's profitability as already the 39% of its net sales derived from the emerging markets. In addition to this, new demographic groups are expected to having a leading role in the following years. Millennials, women and Hispanics are expected to be the dominant demographic groups in the US. These groups are expected to boost profitability but they have different needs from the previous generations of consumers (baby boomers etc.). For instance, they prefer premium products, wine and RTDs and they are concerned more about wellness and green packaging. It will be beneficial for PR to launch products that they are going to match with their preferences and to adjust its marketing strategy, so to transform them into loyal consumers. Lastly, the expected growth in wine consumption in the US and China should be examined by PR and if its financial position is proper (reduced leverage¹²⁹) further acquisitions of wine brands should be processed.

CHAPTER 6 – FORECAST

The strategic and financial analyses have laid a solid foundation for forecasting PR's future performance. The strategic analysis examined among others, the key markets of PR, the macroeconomic problems faced in these markets, the level of the competition, the relationships with the customers and suppliers and the primary and support activities which contribute towards its core competency. On the other hand, the financial analysis revealed the financial value drivers behind the value creation and also examined the profitability and the liquidity risk for the period 2010-2014. The results of this fundamental analysis could serve as a reliable base for the estimation of PR's future cash flows.

There are two different ways to design a pro forma statement: the "line-item" approach and the "sales driven" approach. By the "line-item" approach each accounting item is forecasted *"without reference to the expected*

¹²⁹ (Ricard, 2014, p. 13)

level of activity^{"130}. On the other hand, by the sales-driven approach, accounting items such as operating expenses and investments are forecasted based on the expected level of activity. The sales-driven approach will be used in the design of the pro-forma statement as it relates better the related expenses with the expected level of activity¹³¹.

To make the valuation as reliable as possible, three scenarios will be formed: a realistic, an optimistic and a pessimistic. In each scenario different assumptions about the development of the main value drivers will be taken into account. The realistic scenario will be examined thoroughly as it will serve as the base for the sensitivity analysis, relative valuation and conclusion of the thesis.

6.1 Determination of Explicit and Terminal period

It is essential before forecasting to determine "how many years to forecast and how detailed your forecast should be"¹³². It is suggested the definition of two periods during forecasting: an explicit period and a terminal period. During the explicit period a firm grows at a constant rate as long as it reinvests annually a specific part of its operating profits to its business. Moreover, during the explicit period a company gains a stable rate of return on both existing capital and new capital invested. The explicit period of a firm last as long as its growth rate is smaller than the growth rate of economy where it operates¹³³. In the terminal period the financial drivers of the company remain constant. The reason behind the two different periods in forecasting is that the company's growth rate will eventually be similar with the long-term growth rate of the economy where it operates¹³⁴. Koller et al. suggest that the explicit period should be long enough up to 10-15 years as the use of a shorter explicit period will lead to the undervaluation of the company¹³⁵. However, many analysts use shorter budget periods of five-six years in their forecasting as they consider "risky" to forecast the accounting items for a longer period. An explicit period of five years has been selected for the purpose of this thesis as in the work of Petersen et al¹³⁶. Therefore, the forecast period is defined as follows:

- Explicit period: 2015-2019
- Terminal period: 2020

¹³⁰ (Christian V. Petersen, 2012, p. 175)

¹³¹ (Christian V. Petersen, 2012, p. 175)

¹³² (Tim Koller, 2010, p. 187)

¹³³ (Tim Koller, 2010, p. 188)

¹³⁴ (Christian V. Petersen, 2012, p. 177)

¹³⁵ (Tim Koller, 2010, p. 188)

¹³⁶ (Christian V. Petersen, 2012, p. 178)

6.2 Realistic scenario

This scenario is a realistic outcome of the fundamental analysis as the estimated future performance of PR is based solely on the expected market conditions and outlook of the industry. Moreover, for the estimation of PR's expected activity the historical development of the accounting items having been considered.

6.2.1 Revenue

Under the "sales-driven" approach, the revenue is the most critical element to forecast, as the other items are directly connected to the expected level of activity. To be in position to make a reliable forecast for the revenue, it is essential to examine the historical revenue growth and contribution of each region to the total revenue.

Figure 6.1: Revenue per region, Revenue growth of each geographical region, historical development

Revenue per region (%)	2010	2011	2012	2013	2014	Revenue Growth	2011	2012	2013	2014
Asia/Rest of World	32.10%	35.47%	38.53%	40.02%	38.14%	Asia/Rest of World	19.27%	16.75%	8.40%	-11.66%
Americas	26.99%	27.06%	26.38%	27.01%	26.96%	Americas	8.22%	4.79%	6.88%	-7.51%
Europe	40.91%	37.47%	35.09%	32.97%	34.90%	Europe	-1.14%	0.66%	-1.94%	-1.91%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	Total	7.94%	7.48%	4.37%	-7.32%

Source: Own creation based on data extracted from PR's annual reports

As it can be seen from figure 6.1 the contribution of Europe to the total revenue has decreased significantly the last five years from 40.91% to 34.90%. In contrast the revenue deriving from Asia/Rest of World increased significantly from 32.10% to 38.14% between 2011 and 2014. Finally, the contribution of Americas to the total revenues has remained almost steady to 27% in all the period examined. France, the United States and China are the key markets of PR and they are representative economies of each region. Therefore, the forecasting of revenue growth will be based on the expected demand for wine and spirits in these markets.

Figure 6.2: Expected growth in wine and spirits industry

Regions	Spirits 2014-2019 %	Spirits 2014-2019 CAGR%	Wiine 2014-2019%	Wine 2014-19 CAGR %
China	37.00	6.5	32.10	5.7
USA	8.50	1.6	8.40	1.6
France	0.50	0.1	-1.10	-0.2

Source: Own creation based on data extracted from (Euromonitor International, 2014)

From figure 6.2 it can be seen that it will be a huge increase in the consumption of spirits in China as their demand is expected to grow by 37% until 2019. As mentioned in the strategic analysis, the improved living conditions in China will lead the consumers to trade up with premium products. In the US the demand of wine and spirits is expected to grow similarly by 8.50% until 2019. The upcoming dominant groups such as women show a preference to premium wines. On the other hand, the overall demand of wine is expected to decrease slightly in France until 2019. The increase in excise duties and VAT in combination with the slowdown of French economy has as a result a slight decrease in the demand of wine and stagnation in the demand of spirits. Finally, it will be beneficial to examine the historical revenue growth of peer multinational companies to have a detailed view of the industry growth rates.

Revenue Growth	2010	2011	2012	2013	2014
Diageo	10%	-8%	21%	-1%	-4%
Bacardi-Martini	1%	10%	-1%	3%	-3%
Constellation Brands	-14%	-3%	-18%	8%	65%
Brown Forman	-0.8%	-6.2%	18.4%	5.8%	-0.9%
LVMH	19.2%	16.4%	18.8%	3.3%	5.6%
Remy Cointreau	8%	12%	12%	21%	-13%
Beam Suntory	14%	13%	5%	-1%	-
Davide Campari	5%	2%	16%	-4%	19%

Figure 6.3: Revenue Growth of peer multinational companies, historical development

Source: Own creation based on data extracted from (Orbis, 2015)

As it can be seen from figure 6.3 the industry is not characterized by stable growth rates. The growth rates of PR's major competitors have fluctuated substantially in the period 2010-2014. Large multinational spirits companies like Diageo, Bacardi-Martini and Brown Forman have affected probably from the anti-corruption campaign in China and they registered negative growth rates in 2014. On the other hand, the huge increase in Constellation Brands' sales (+65%) is attributable to its wine and beer segment. The two main conclusions are that the industry is not characterized by stable revenue growth rates and that a firm can easily pass from a negative to an extreme high growth rate in a period of one year. These characteristics showing that the industry has not entered in its mature phase yet.

However, PR shows to have less volatile growth rate and as the demand for premium spirits is expected to increase especially in China, the sales are expected to increase too. PR is the top premium spirits supplier in China¹³⁷ and it is predicted to capture a remarkable market share. However, it is believed that PR cannot achieve exceptional growth rates like in 2011, 2012 as the sales of premium spirits has adversely affected from

¹³⁷ (Ricard, 2014, p. 2)

the anti-corruption campaign in China and it will take time to recover. Based on the above findings, the conclusions of fundamental analysis and on the assumption that PR will continue its Premiumisation strategy along with a strict pricing policy, the revenue growth is assumed to be 4% for the explicit period and 2% for the terminal.

6.2.2 EBITDA Margin

As it was mentioned in the Value Chain Analysis, the operating expenses remained almost the same in the period 2010-2014. However, during 2014 PR launched the Allegro project with a scope to increase its operational efficiency. The Allegro project is expected to reduce the structure costs by ≤ 150 million over three years or at least ≤ 50 million over two years¹³⁸. This amount of savings represents almost the 2% of the revenue in 2014 values. On the other hand, an increase in operating expenses in China is expected due to the increasing transportation costs, cost of raw materials and salaries. It is therefore assumed that the EBITDA margin, after the launch of the Allegro project will be improved slightly from 27.45% in 2014 to 28.5% for the whole forecast period.

6.2.3 Depreciation

Figure 6.4: EBITDA Margin, historical development

Pernod Ricard	2010	2011	2012	2013	2014	Average	
Depreciation/Intang. and tang. assets	1.56%	1.25%	1.06%	1.57%	2.23%	1.53%	
Source: Own creation based on data extracted DP's analytical statements							

Source: Own creation based on data extracted PR's analytical statements

As it can be seen from figure 6.4 the relationship between the Depreciation and Intangible and Tangible assets fluctuated between 1% and 2% in the period 2010-2014. The average depreciation of the last five years will be used for both the explicit and terminal period.

6.2.4 Tax Rate

Figure 6.5: Effective tax rate, historical development

Pernod Ricard	2010	2011	2012	2013	2014			
Effective Tax Rate	19%	23%	17%	24%	23%			
Source: Own creation based on data extracted from PR's analytical statements								

¹³⁸ (Ricard, 2014, p. 100)

The French marginal tax rate (+33%) is substantially higher than the effective tax rate of PR between 2010 and 2014. The use of the marginal tax rate will lead to overestimation of the tax payables and to a distorted result. The effective tax rate has remained almost steady the last two years. Consequently it is assumed that the tax rate will be 23% for the entire forecast period.

6.2.5 Intangible and Tangible Assets

Figure 6.6: Intangible and Tangible Assets to Revenue, historical development

Pernod Ricard	2010	2011	2012	2013	2014			
Intang.&Tang.Assets/Revenue	245.87%	210.66%	208.24%	192.87%	206.19%			
Source: Own creation based on data outracted from DP's analytical statements								

Source: Own creation based on data extracted from PR's analytical statements

As it is obvious from figure 6.6 the Intangible & Tangible Assets to Revenue ratio has decreased significantly after 2010. In 2013 the ratio had fallen to five-year-low as a result of its effort to manage better its assets. A slight increase in ROA was registered after the disposal of four non-priority brands¹³⁹. The capital expenditures (CAPEX) were almost stable the last three years. Also, in 2014 the most of the CAPEX were connected with PR's normal operations such as building of new cellars and acquisition of storage casks for the maturing capacity of whisky and cognac¹⁴⁰. Moreover, despite the fact that PR plans to expand its business activities through further acquisitions, its current Net debt/EBITDA of 3.7 indirectly prohibits the Group to engage in remarkable debt funded acquisitions, as it is above the limit of its current credit rating. Therefore, it is assumed that the Intangibles and Tangibles Assets to Revenue ratio will decrease up to 200% for the entire forecast period as the sales are expected to recover and not great investments could be made due to PR's high leverage.

6.2.6 Interest rate

Figure 6.7: Interest rate, historical development

Pernod Ricard	2010	2011	2012	2013	2014
Interest rate	4.64%	4.26%	6.05%	5.91%	5.71%

Source: Own creation based on data extracted from PR's analytical statements

¹³⁹ (Ricard, 2014, p. 9)

¹⁴⁰ (Ricard, 2014, p. 17)

As it was stated before, PR issued in March 2014 an €850 million six-year bond with 2% interest rate. This was the lowest coupon rate in PR's history. In 2012 PR has upgraded its rating to investment grade, so from this year and after, the biggest part of its interest bearing debt was represented by bonds.

Figure 6.8: Bonds/Interest bearing debt, historical development

Pernod Ricard	2010	2011	2012	2013	2014
Bonds - non-current	2,893	4657	8044	6949	6844
Bonds - current	934	82	153	1001	929
Interest bearing debt	12661	10952	11358	10271	9822
Bonds/Interest bearing debt	30%	43%	72%	77%	79%

Source: Own creation based on data extracted from PR's analytical statements

It is assumed that the interest rate will be decreased further in the future as PR will rely more on bonds with low coupon rates for its financing. Therefore, the interest rate is predicted to be 5% for the explicit period and 4% for the terminal.

6.2.7 Net Working Capital (NWC)

Figure 6.9: NWC to Revenue, historical development

Pernod Ricard	2010	2011	2012	2013	2014			
Net working capital/Revenue	38.26%	31.89%	36.36%	36.51%	44.00%			
Sources Own exertion based on data outrasted from DD's analytical statements								

Source: Own creation based on data extracted from PR's analytical statements

The Net working Capital to Revenue ratio has followed an increasing trend the last four years, as the Group has increased significantly its inventories and simultaneously there was an effort to control better its operating payables. In 2014 the revenues dropped dramatically, so the relationship between revenues and NWC changed substantially. As it assumed that the drop in sales is a transitory phenomenon but the improvement of NWC will continue as before 2014, a NWC/Revenue of 38% is considered realistic for the entire forecast horizon.

6.2.8 Net interest bearing debt (NIBD)

Figure: 6.10: NIBD to Invested Capital, historical development

Pernod Ricard	2010	2011	2012	2013	2014
NIBD/Invested Capital	56%	51%	49%	45%	43%

Source: Own creation based on data extracted from PR's analytical statements

It is obvious that PR puts effort to reduce its debt because probably aims to have access to cheaper financing through an improved financial position. As PR is able to generate equity financing, it is assumed that it will continue its debt reduction policy. A NIBD to Invested Capital of 40% will be applied to the explicit period and a NIBD to Invested Capital of 38% to terminal.

6.3 Optimistic scenario

In this section, there will not be a detailed estimation of the forecasted items as in the realistic scenario but it will be a briefly discussion about the development of the major accounts if the most conditions are in favor of PR.

According to this scenario the revenue growth could be 5% during the explicit period and 2% in terminal. The arguments behind are that PR could easily overcome the macro-economic problems faced in China and that the Group will increase significantly its revenues due to the expected high demand for spirts and wine in this market. Also, under this scenario there will be an increase in the revenue growth as PR could gain an additional market share from its major competitors due to a successful implementation of the Premiumisation strategy in its mature markets of France and Americas. Lastly, in this optimal scenario the recent acquisition of Kenwood vineyards will assist PR to further increase its market share in the wine market of the US. The EBITDA margin will increase from 27.45% in 2014 to 29.5% in both the explicit and terminal period. The Allegro project will decrease notably the operational costs and simultaneously the production costs will remain unaffected from the expected increase of salaries and transportation costs in China.

Finally, under this scenario it is assumed that the Group will improve its current low ROA and it will be able to achieve higher revenue with fewer assets. PR will be able to generate more revenue without having to invest more on its assets and its Intangible & Tangible/Revenue ratio will continue its decreasing trend as before 2014. Therefore, it is expected that the ratio will be 195% for both the explicit and terminal period.

6.4 Pessimistic scenario

In this worst-case scenario, there will be an estimation of the future performance of PR when the things go unfavorable for the Group. In contrast to the optimistic scenario, there will be an estimation of its main accounts when the macroeconomic problems faced in the key markets will remain and the expected performance of the firm will not be satisfying.

Under this scenario the Group will not be able to fully overcome the problems faced in China and the sales will recover slightly in that region. Moreover, PR will lose a sufficient market share in India due to the acquisition of USL by Diageo. Diageo will enhance its presence in India which is PR's second biggest emerging market. Also, it is assumed that the sales will drop in France, as the country's economic slowdown will continue and a growing number of consumers will not be in position to buy premium products as PR's. Finally, the revenue growth will be affected from the common acceptance of the drink less-drink better attitude from the youth. As mentioned in PEST analysis, the new generation of consumers is concerned more about health problems related to consumption of alcohol and prefers wise drinking patterns. For the reasons above, it is expected that the revenue growth will be 2% in the explicit period and only 1% during the terminal.

The operating costs will remain the same as the Allegro project will not be sufficient enough to cover the increased production costs in China. The EBITDA to revenue ratio will be 27.45% for the whole forecasted period. Lastly, under this scenario the Intangible and Tangible Assets to Revenue ratio will remain at the current levels as not great investments are expected neither an improvement to its current low ROA.

6.5 Budget Evaluation

Petersen et al. suggest evaluating the reliability of our estimations by comparing the expected with past performance¹⁴¹. The budget evaluation will be based on the development of ROIC according to all the scenarios.

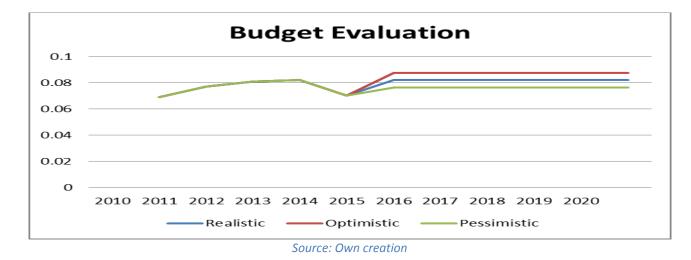


Figure 6.11: Budget Evaluation

¹⁴¹ (Christian V. Petersen, 2012, p. 205)

As it can be seen from figure 6.12, ROIC follows a different growing pattern according to each scenario applied. The basic difference of these three scenarios is the way they consider the macroeconomic problems faced in China. Under the realistic scenario these problems are considered transitory but time-consuming while in optimistic scenario they are considered easily manageable and lastly in worst-case one as unsolved.

The second major difference is the expectation about the development of ROA. According to the realistic scenario the Intangible & Tangible assets to Revenue ratio will decrease slightly as the revenue is expected to recover and the ROA to remain at its current levels. In the optimistic scenario it is assumed that both the ROA and revenue will increase and as a result the ratio will drop significantly. Finally, in the pessimistic scenario neither the revenue nor the ROA it is expected to be improved, so the ratio will remain stable. Finally, the last minor difference is the expected level of the EBITDA margin. The Allegro project is expected to be successful, very successful and unsatisfactory depending on each scenario applied. It is assumed that the realistic scenario is the closest approximation for PR's future performance as having considered the results of the strategic and financial analysis. The value of PR according to optimistic and pessimistic scenario will be examined also in the following chapter of valuation.

CHAPTER 7 - COST OF CAPITAL ESTIMATION

To evaluate a firm with a present value model as DCF¹⁴² it is required to discount the future free cash flows (FCFF) by the weighted average cost of capital. *"The WACC represents the opportunity cost that investors face for investing their funds in one particular business instead of others with similar risk"*¹⁴³. The WACC reflect the opportunity cost that both the shareholders and creditors face as the future cash flows will be available to both of them.

WACC formula:

$$WACC = r_D(1-T)\frac{D}{V} + r_E\frac{E}{V}$$

Source: (Christian V. Petersen, 2012, p. 246)

¹⁴² DCF - The discount cash flow approach. It will be analyzed further in Chapter 7.

¹⁴³ (Tim Koller, 2010, p. 235)

Where *D* is the *Net Interest Bearing Debt (NIBD)*, *E* is the market value of equity, *V* is the market value of equity plus market value of debt, *rd* is the cost of debt after tax, *re* is the shareholder's required rate of return and *t* is the tax rate. In the upcoming section, the components of PR's WACC such as the capital structure, the cost of debt capital after tax and the shareholder's required rate of return will be examined. At the end, when all the figures required are obtained, the WACC of PR is calculated.

7.1 Capital Structure

The cost of capital should be based on target weights because the current capital structure may not remain stable as the business activities of the company go on. Moreover, the use of the current capital structure for the valuation purposes may have as a result to overestimate or underestimate the value of the tax shields as the leverage of the companies will drop or rise¹⁴⁴. The cost of capital should be on market values as it represents the true opportunity cost of investors and creditors¹⁴⁵. Another significant reason for using a target capital structure is that it gives the solution to the problem of circularity involved in estimating the weighted average cost of capital. The problem of circularity becomes apparent as an analyst is unable to estimate the WACC without knowing the market value of equity and he is unable to estimate the market value of equity without knowing the WACC¹⁴⁶. One way to determine the target capital structure is to use the capital structure of the peer companies as a benchmark¹⁴⁷. According to Professor Aswath Damodaran the Market Debt/ Equity for the beverage (alcoholic) industry in Europe is 31.92%¹⁴⁸.

	Number of firms	Book Debt to Capital	Market D/E
Europe	51	45,76%	31,92%
US	22	41,29%	20,98%
China	31	3,66%	1,16%
Global	216	39,04%	22,37%

Figure 7.1: Book Debt to Capital, Market D/E

Source: Own creation based on data extracted from (Damodaran, 2015)

¹⁴⁴ (Tim Koller, 2010, p. 266)

¹⁴⁵ (Christian V. Petersen, 2012, p. 246)

¹⁴⁶ (Tom Copeland, 2000, p. 204)

¹⁴⁷ (Christian V. Petersen, 2012, p. 247)

¹⁴⁸ (Damodaran, 2015)

Therefore as PR is a European company, it seems reasonable for an analyst to use 31.92% as the target capital structure. The market value of debt and equity is also estimated to compare it with the one extracted from Professor Damodaran's site.

For the publicly traded companies a familiar approach is to multiply the number of shares outstanding with the current stock price¹⁴⁹. As of 30.06.2014 PR had 265.816.388 shares outstanding and on 24.09.2014 the share price was \notin 88.71 which gives a market value of equity at \notin 23.581 million¹⁵⁰. As regards the market value of debt, Koller et al suggest that in the most cases the book value of debt reasonably represents the market value¹⁵¹. As a result, the book value of debt will be used as an approximation for the market value.

Pernod Ricard	2010	2011	2012	2013	2014	24/09/2014
Outstanding shares	264,856,425	265,032,466	265,147,554	266,352,885	265,816,388	265,816,388
Share price - 30/06	57.98	62.92	79.69	82.1	86.11	88.71
Market Value of Equity	15,356,375,522	16,675,842,761	21,129,608,578	21,867,571,859	22,889,449,171	23,580,571,779
Market Value of Equity in millions	15,356	16,676	21,130	21,868	22,889	23,581
Book Value of Equity	9,337	9,474	10,719	11,179	11,778	-
NIBD	10,779	9,064	9,374	8,489	8,100	8,100
D/E (Book Values)	115.44%	95.68%	87.45%	75.94%	68.77%	-
D/E (Market Values)	70.19%	54.36%	44.36%	38.82%	35.39%	34.35%

Figure 7.2: Market D/E, historical development

Source: Own creation based on data extracted from PR's analytical statements & (www.yahoofinance.com)

As it is easily observable the debt-to-equity ratio based on market values is close to the one of Professor Damodaran for the beverage industry (alcoholic) in Europe. PR has reduced its debt-to-equity ratio in period 2010-2014, so it seems reasonable that it will be decreased further in future. The market debt-to-equity ratio of 31.92% will be used as an input to the upcoming WACC estimation.

7.2 Cost of Equity

The most financial textbooks suggest using the Capital Asset Pricing Model (CAPM) for the estimation of the owner's required rate of return¹⁵². "*The CAPM postulates that the expected rate of return on any security equals the risk-free rate plus the security's beta times the market risk premium*"¹⁵³.

¹⁴⁹ (Tom Copeland, 2000, p. 208)

¹⁵⁰ (Ricard, 2014), (www.yahoofinance.com)

¹⁵¹ (Tim Koller, 2010, p. 267)

¹⁵² (Christian V. Petersen, 2012, p. 249)

¹⁵³ (Tim Koller, 2010, p. 239)

CAPM is defined as:

```
\boldsymbol{r}_{i} = \boldsymbol{r}_{t} + (\boldsymbol{r}_{m} - \boldsymbol{r}_{t})\boldsymbol{\beta}_{i}
```

Source: Petersen and Plenborg, 2012, p. 249

Where *rf* is the risk free rate, β (beta) is the systematic risk on equity and rm is the return on market portfolio. The CAPM is based on the idea that *by "holding a sufficiently broad portfolio of shares, investors will only pay for the risk that cannot be diversified away*"¹⁵⁴ and that only the systematic risk (β) is priced.

7.2.1 Risk-free interest rate

The risk-free interest rate represents the return that an investor could gain without bearing any risk¹⁵⁵. Copeland et al argue that theoretically *"the best estimate of the risk-free rate would be the return on a zero-beta portfolio, constructed of long and short positions in equities in a way that produces the minimum variance zero-beta portfolio"*¹⁵⁶. Because of the cost and problems of constructing a zero-b portfolio this approach is not practical for estimating the risk-free rate. Instead Copeland et al. suggest using a 10 year Treasury bond rate¹⁵⁷. For the above mentioned reason, although PR is a French company the 10-year German government bond will be used as a proxy for the risk-free rate. Firstly, German and French government bond are denominated both in Euro and secondly the German 10-year bond carry the least amount of risk among all the EUR denominated 10-year bonds something that renders it as the closest approximation to the risk-free rate. In addition to this, Koller et al. argue that *"when valuing European companies, we prefer the 10-year German Eurobond. German bonds have higher liquidity and lower credit risk than bonds of other European countries¹⁵⁸". In the estimation of the risk-free rate it will be considered the average yield of the 10-year German bond in the last decade (2004-2014) and in the last five years (2009-2014) to increase the accuracy.*

¹⁵⁴ (Christian V. Petersen, 2012, p. 249)

¹⁵⁵ (Christian V. Petersen, 2012, p. 249)

¹⁵⁶ (Tom Copeland, 2000, p. 215)

¹⁵⁷ (Tom Copeland, 2000, p. 216)

¹⁵⁸ (Tim Koller, 2010, p. 241)

Figure 7.3: Risk free rate

10-year German government bond	Bond yield
10 years average (24/09/2004-24/09/2014 daily quotes)	2.93
5 years average (24/09/2009-24/09/2014 daily quotes)	2.11
Total Average risk free rate	2.52

Source: Own creation based on data extracted from Bundesbank, (Bundesbank)

7.2.2 Market Risk Premium

The market risk premium can be defined as the difference between the market's expected rate of return and the risk-free rate¹⁵⁹.

The Market Risk Premium can be described as follows:

rm – rf = Market Risk Premium

Source: (Christian V. Petersen, 2012, p. 263)

The market risk premium can be estimated based on historical data assuming or on ex ante estimates¹⁶⁰. The ex-post approach is based on the historical difference between the market returns and risk-free returns 50 to 100 years ago. The hypothesis behind this approach is that the historical market risk premium is a rational indicator of the future market risk premium. However, Petersen et al. state that this assumption is unlikely to hold¹⁶¹. A different way to estimate the market risk premium is the ex-ante approach by which it is estimated based on the analysts' consensus earnings forecast¹⁶². The ex-ante approach will be used for the estimation of the market risk premium. As the consensus of the analysts, the survey of Pablo Fernadez et al. of the IESE Business School in which 8228 persons such as professors, managers of financial companies and analysts will be used. The participants of this survey have estimated the required market risk premium to calculate the required return to equity in different countries. For France according to the survey, the average required market risk premium is 5.8%¹⁶³ and this figure will be applied as an input to the estimation of the required return to equity (re).

¹⁵⁹ (Tom Copeland, 2000, p. 216)

¹⁶⁰ (Tom Copeland, 2000, p. 216)

¹⁶¹ (Christian V. Petersen, 2012, p. 263)

¹⁶² (Christian V. Petersen, 2012, p. 263)

¹⁶³ (Pablo Fernadez, 2014)

7.2.3 Systematic Risk (Beta)

As reported by Petersen et al., the Beta (β e) "measures the co-variation between the company-specific returns and the market portfolio's stock returns"¹⁶⁴. Also, Koller et al. argue that a stock's expected return is driven by beta which measures the co-variation of the stock and the market and since beta cannot be observed directly, the estimation of its value it is required¹⁶⁵.

A reasonable approach to estimate PR's beta is by an ordinary least square regression of historical returns on CAC 40 (Cotation Assistée en Continu) which is considered as a benchmark stock market index for the French economy and the PR's share returns. CAC 40 represents the performance of the forty largest equities listed in France in terms of free-float market-capitalization and liquidity. In addition to this, more diversified indexes as the SBF 250 index (Société des Bourses Françaises 250 Index) which reflects all the sectors of the French economy and the SBF 120 (Société des Bourses Françaises 120 Index) which represents the 120 most actively traded stocks listed in Paris are applied as representatives for the market portfolio. According to Koller et al. the measurement of the raw regressions must include at least 60 points data and should be based on monthly observations because more frequent return periods such as weeks or days will lead to systematic biases¹⁶⁶. In the calculation of beta, 60 monthly observations of the last five years have been used.

Figure 7.4: Beta

Results	CAC 40	SBF 250	SBF 120
Beta	0.619086916	0.65092114	0.649347152
Beta Rounded	0.62	0.65	0.65
SE (beta)	0.048	0.048	0.048
R2	0.271	0.279	0.280
Beta Range	0.352-0.885	0.375-0.926	0.375-0.922

Source: Own creation based on data from (www.yahoofinance.com)

As it can been seen from figure 7.4, based on the historical findings on co-variation between PR's returns and on CAC 40, SBF 250, SBF 120 returns the beta of PR ranges between 0.62 and 0.65. A beta less than 1 implies that the equity investment has less systematic risk that the market portfolio¹⁶⁷. However, Koller et al. suggest

¹⁶⁴ (Christian V. Petersen, 2012, p. 251)

¹⁶⁵ (Tim Koller, 2010, p. 249)

¹⁶⁶ (Tim Koller, 2010, p. 250)

¹⁶⁷ (Christian V. Petersen, 2012, p. 251)

improving the results from raw regressions by using industry comparables and smoothing techniques because raw regressions represent only estimates of a company's true beta. An approach is to calculate an unlevered beta for the industry and then relevering this beta to firm's target capital structure. The Hamadas equation is used to covert the unlevered beta into a levered¹⁶⁸:

 $b_L = b_U x [1 + (1 - T) (D/E)]$

The major multinational competitors of PR have been used as they are referred in PR's last annual report¹⁶⁹.

Figure 7.5: Levered, Unlevered Beta

Company	Levered Beta	D/E	Marginal Tax Rate	Unlevered Beta
CONSTELLATION BRANDS, INC.	1.02	1.30	0.40	0.57
DAVIDE CAMPARI - MILANO S.P.A.	0.15	0.80	0.31	0.10
BEAM SUNTORY INC.	-	-	-	-
BROWN FORMAN CORP	0.60	0.49	0.40	0.46
DIAGEO PLC	0.64	1.57	0.21	0.29
REMY COINTREAU SA	0.50	0.59	0.33	0.36
LVMH MOET HENNESSY - LOUIS VUITTON SA	0.92	0.42	0.33	0.72
BACARDI-MARTINI	-	-	-	-
Average	0.64			0.42

Source: Own creation based on data extracted from (Ft.com), (KPMG)

In the Hamadas equation the marginal tax rate of each company's country has been used. However, for the calculation of PR's levered beta the effective tax rate (23%) has been used.

Levered Beta =
$$0.42*(1+(1-0.23)*(8100/11778) = 0.42*(1+(0.77*0.68) = 0.64))$$

The levered beta estimated by this approach is almost identical to the beta calculated before with the ordinary least square regression of historical returns on CAC 40. For that reason, a beta of 0.65 will be applied in the calculation of required return of shareholders.

7.2.4 Calculation of CAPM

As all the inputs to estimate the re are available, it is calculated as follows:

re= rf + beta*(rm-rf) = 2.52% + 0.65*(5.8%)= 6.29%

 ¹⁶⁸ (Eugene F. Brigham, 2003, p. 613)
 ¹⁶⁹ (Ricard, 2014, p. 14)

7.3 Cost of Debt

According to Petersen et al. the interest rate on debt is defined as follows:

$$rd = (rf + rs) * (1-t)$$

Source: (Christian V. Petersen, 2012, p. 265)

Where rd is the required rate of return on debt, rs the credit spread and t is the tax rate.

An approach to estimate the credit spread for investment–grade companies (companies with rating \geq BBB) is to use the yield to maturity of the company's long-term bonds¹⁷⁰. The yield to maturity should be calculated on liquid, option-free long term debt because short term bonds do not match with the duration the free cash flow of the company¹⁷¹. The weighted average coupon rate of PR's decennial bonds was 4.57% in 2014 and the average risk free rate as it has been calculated before is 2.52%¹⁷². Therefore, the credit spread in 2014 was 2.05%.

Figure 7.6: Spread

Nominal Amount in million USD	Carrying amount at 30/6/2014 in million EUR	Carrying amount %	Weighted Average
1000	750	30.54%	1.53%
1500	1,119	45.56%	2.03%
800	587	23.90%	1.02%
Total	2,456.00	100%	4.57%
		rf	2.52%
		Spread	2.05%

Source: Own creation based on data extracted from PR's annual reports

Also, using a firm's bond rating is good approximation for estimating the yield to maturity directly. "Once you have the rating, convert the rating into a yield to maturity¹⁷³". In 2013 PR is rated BBB by Standard & Poor's in 2014 and Baa3 by Moody's¹⁷⁴. Also, PR is rated BBB by Fitch in 2014¹⁷⁵. According to Professor Damodaran a

¹⁷⁰ (Tim Koller, 2010, p. 261)

¹⁷¹ (Tim Koller, 2010, p. 262)

¹⁷² (Bundesbank), (Ricard, 2014)

¹⁷³ (Tim Koller, 2010, p. 263)

¹⁷⁴ (Moody's), (Standard & Poor's)

¹⁷⁵ (Fitch)

BBB rating is translated into a credit spread of 1.75%¹⁷⁶. However, a more conservative approach will be followed as the net debt to EBITDA increased from 3.5 to 3.7 in 2014 and the spread will be considered 2.05%.

As regards the corporate tax rate, the effective tax rate will be used in the calculation of the cost of debt. For companies with a great number of foreign subsidiaries, the effective tax rate can represent a weighted average of the group's different corporate tax rates¹⁷⁷. Moreover, the marginal tax rate of France is substantially higher from PR's effective tax rate is all the period examined. For that reason is not a representative indicator of what PR pays in taxes and it should not be used in the calculation of cost of debt. The effective tax rate of Pernod Ricard in 2014 was 23%.

Figure 7.7: Marginal, Effective Tax Rate, historical development

Pernod Ricard	2010	2011	2012	2013	2014
Effective Tax Rate	19%	23%	17%	24%	23%
Marginal Tax Rate	33%	33%	33%	33%	33%

Source: Own creation based on data extracted from (KPMG) and PR's financial statements

The cost of debt can be calculated now as follows:

7.4 Calculation of WACC

The D/E ratio can be converted to D/V ratio by using the following formula:

$$D/V = (D/E)/(1+D/E)$$

Therefore, the proportion of capital supplied by debt is:

As all the required inputs are obtained, the weighted average cost of capital can be calculated as follows:

 ¹⁷⁶ (Damodaran, 2015)
 ¹⁷⁷ (Christian V. Petersen, 2012, p. 265)

Based on the above findings, a WACC of 5.62% will be applied in the whole forecast period. However, during the sensitivity analysis, the changes to market value of equity are examined when different assumptions about the WACC are used.

CHAPTER 8 - VALUATION

Despite the great number of different valuation approaches, they can be categorized into four main groups: present value models, liquidation, relative valuation (multiples) and contingent claim valuation¹⁷⁸. The value of PR is estimated by using the relative valuation approach and two present value models (PV). Under the PV models the intrinsic value of a company is estimated by discounting its expected future cash flows with a discount factor which represents the risks and the time value of the money¹⁷⁹. The value of PR is estimated by DCF model which is the most common present value model used by analysts and by EVA model. Finally, the results of these two present value models will be compared with the ones of relative valuation. In the relative valuation approach the value of the company is estimated by comparing it with the value of peers with the use of multiples¹⁸⁰.

8.1 Discounted Cash Flow Model (DCF)

According to DCF model a value of an enterprise is determined by discounting future free cash flows (FCFFs) at WACC. Since the FCFFs are available to all the investors, the discount factor should reflect the risk faced by all the investors. WACC represents the required rate of return for both debtholders and shareholders, so it is an ideal discount factor¹⁸¹. The DCF model is defined as follows:

$$\sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC_g)^t} + \frac{\left[\frac{FCFF_{n+1}}{(WACC_{st}-g_n)}\right]}{(1+WACC_g)^n}$$

Where *FCFF* is the *Free Cash Flow to the Firm*, *WACC* is the *Weighted Average Cost of Capital* and *g* is the *growth rate* in terminal period.

¹⁷⁸ (Christian V. Petersen, 2012, p. 210)

¹⁷⁹ (Christian V. Petersen, 2012, p. 210)

¹⁸⁰ (Christian V. Petersen, 2012, p. 211)

¹⁸¹ (Tim Koller, 2010, p. 183)

The application of a constant WACC has some disadvantages, as it is indirectly be assumed that the capital structure will remain the same in the whole forecast period. For example, the future tax shields will be underestimated by the current WACC, if the company plans to increase its debt to capital ratio¹⁸². However, for simplicity reasons the most analysts apply a constant cost of capital through the forecast horizon¹⁸³. A constant WACC will be applied in the following DCF valuation. It is required to deduct the current NIBD to obtain the estimated market value of equity as the DCF estimates the market value of the enterprise. According to the assumptions considered in the realistic scenario, the value of PR with the use of DCF model is estimated as follows:

DCF model - in million of euros	2015 e	2016 e	2017 e	2018 e	2019 e	2020e
FCFF	1830	896	932	969	1008	1,471
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Discount Factor	0.95	0.90	0.85	0.80	0.76	
Present value, FCFF	1,733	803	791	779	767	
Present Value of FCFF in forecast horizon	4,872					
Present Value of FCFF in terminal period	30,905					
Estimated enterprise value	35,777					
NIBD	8,100					
Estimated market value of equity	27,678					
Number of Shares - millions	265					
Estimated share price on 24.09.2014	104.28					

Figure 8.1: DCF valuation

Source: Own creation

The DCF model yields an enterprise value of €35,777 million which leads to an equity value of €27,678 million after the subtraction of NIBD. The share price found to be €104.28 which is €15.87 higher than the actual trading price of PR's share on the release date of the last annual report (24.09.2014). The share price founded gives a premium of 27% to an investor in comparison with the trading price of the share on that date (€88.41). In the optimistic scenario the price found to be €117.19 while in the pessimistic one the price found to be €79.46. The large deviations among the different scenarios' results show how sensible the PV models are when different assumptions about the level of the key inputs are considered.

 ¹⁸² (Tim Koller, 2010, p. 121)
 ¹⁸³ (Tim Koller, 2010, p. 119)

8.2 Economic Value Added model (EVA)

According to EVA model the value of a company is determined by the initial capital plus the present value of the residual wealth created in each year of the forecast period¹⁸⁴. A surplus value (EVA) is created when ROIC exceeds WACC. The two-stage EVA-model includes three figures: the initial invested capital, the present value of EVAs for the forecast period and the present value of EVAs for the terminal. It is defined as follows:

$$EV_0 = Invested capital_0 + \sum_{t=1}^{n} \frac{EVA_t}{(1 + WACC)^t} + \frac{EVA_{n+1}}{(WACC-g)} \times \frac{1}{(1 + WACC)^n}$$

Where: $EVA = NOPAT_{t-}$ (WACC x Invested Capital_{t-1}) or ($ROIC_{t-}WACC_{t}$) x Invested Capital_{t-1}

The EVA model is based on accrual accounting data while the DCF model is based on cash flow data. However, they are considered "theoretically equivalent valuation approaches"¹⁸⁵. As in DCF model so in EVA the market value of NIBD must be deducted from the enterprise value to obtain the estimated market value of equity. The value of PR according to EVA valuation model and based realistic scenario assumptions is estimated as follows:

EVA Model - in million of euros	2015 e	2016 e	2017 e	2018e	2019 e	2020e
NOPAT	1,618	1,683	1,750	1,820	1,893	1,931
Invested Capital, begging of the period	19,878	19,665	20,452	21,270	22,121	23,006
ROIC	8.14%	8.56%	8.56%	8.56%	8.56%	8.39%
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Cost of Capital	1,117	1,105	1,149	1,195	1,243	1,293
EVA	501	577	601	625	650	638
Discount Factor	0.94	0.88	0.85	0.80	0.76	
Present Value EVA	471	510	510	502	494	
Invested Capital, begging of the period	19,878					
Present Value of EVA in forecast horizon	2,487					
Present Value of EVA in terminal period	13,402					
Estimated enterpise value	35,777					
NIBD	8,100					
Estimated market value of equity	27,677					
Number of shares - millions	265					
Estimate share price on 24.09.2014	104.28					

8.2: EVA Valuation

Source: Own creation

 ¹⁸⁴ (Christian V. Petersen, 2012, p. 220)
 ¹⁸⁵ (Christian V. Petersen, 2012, p. 219)

The DCF and EVA model lead to the exactly same result whatever scenario applied (realistic, optimistic and pessimistic) which confirms the fact that they are theoretically equivalent approaches¹⁸⁶. In the DCF model the terminal period accounts for the 86% of the enterprise value while in the EVA model it accounts only for the 37%. Finally, in the EVA model the 56% of the enterprise value derives from the current invested capital.

8.3 The Relative Valuation Approach (Multiples)

A relative valuation will be conducted to serve as a sanity check on the estimated share price under the PV models. According to relative valuation approach a value of a company is determined by *"applying the price of a comparable company relative to a variety of accounting items*"¹⁸⁷. The relative valuation is a popular valuation approach as is not complex neither time consuming¹⁸⁸. For the purpose of this thesis, the multiples EV/EBITDA and EV/Sales have been selected. EV/EBITDA multiple is suitable for transnational comparisons as it does not get affected by each country's individual taxation polices. Also, these two multiple are considered more reliable than others which are based on market capitalization as they include in the enterprise value the amount of debt that a company has.

The peer companies defined in Chapter 2 are limited for a reliable relative valuation as Bacardi – Martini is a privately held company. In the multiple-valuation two more peer companies have been considered: Brown-Forman Corporation and LVMH Louis Vuitton. Brown-Forman Corporation is an alcoholic beverages manufacturer while LVMH Louis Vuitton has business activities related to the alcoholic drinks industry too. Both of them are regarded by PR among its major multinational competitors¹⁸⁹. Multiples were sourced from Yahoo Finance on valuation date. The harmonic mean, mean and median have been used for averaging the multiples. For the purpose of this thesis, the harmonic mean has been selected as it leads to more accurate results and generally its use is supported by analysts¹⁹⁰.

¹⁸⁶ Appendix (17,18)

¹⁸⁷ (Christian V. Petersen, 2012, p. 211)

¹⁸⁸ (Christian V. Petersen, 2012, p. 226)

¹⁸⁹ (Ricard, 2014, p. 14)

¹⁹⁰ (Christian V. Petersen, 2012, p. 234)

Figure 8.3: Relative Valuation

Relative Valuation	EV/EBITDA	Relative Valuation
CONSTELLATION BRANDS	16.28	CONSTELLATION BRA
BROWN FORMAN CORP	19.93	BROWN FORMAN CO
DIAGEO PLC	17.82	DIAGEO PLC
LVMH - LOUIS VUITTON SA	12.72	LVMH - LOUIS VUITTO
Mean	16.69	Mean
Harmonic mean	16.24	Harmonic mean
Median	17.05	Median
EBITDA	2,181	Sales
Enterprise Value	35,415	Enterprise Value
NIBD	8,100	NIBD
Equity Value	27,316	Equity Value
Number of Shares	265	Number of Shares
Share price	102.91	Share price

5.55 **VUITTON SA** 2.88 5.08 4.57 an 5.22 7,945 36,330 lue 8,100 28,230 265 nares

EV/SALES

4.88 7.02

106.36

Source: Own creation based on data extracted from (www.yahoofinance.com) on 28.97.2015

8.3.1 EV/EBITDA

The enterprise value has been calculated by multiplying PR's EBITDA in 2014 with the average multiple of 16.24. EV/EBITDA yields a share price of €102.91, 14.09% higher than the actual trading price of PR's share on 24.9.2014 and almost identical to the estimated share price under the PV models (€104.28). EV/EBITDA multiple confirms the result of the DCF and EVA model that the share price of PR was undervalued. This reveals probably that the investors believed at this specific time that the macroeconomics problems faced in China were serious and that the sales will not recover soon.

8.3.2 EV/Sales

In the same vein, EV/Sales yields a share price of €106.36 close both to the result of EBITDA multiple and PV models. This multiple also verifies that the share price of PR was undervalued which might indicates that the investors' beliefs about the future of the company were seriously affected from the sharp drop in revenue in 2014. It can be concluded that these two multiples verify the result of the PV models and the trading price of €107.85 per share on valuation date (28.07.2015).

8.4 Sensitivity analysis

According to Petersen et al. a valuation should always be combined with sensitivity analysis which will examine the alternative valuation results when different assumptions about the development of the key value drivers are taken into account. The key inputs of this valuation are: the WACC, the terminal growth rate and EBITDA margin, as a change in their level affects substantially the final result of the valuation. In the estimation of WACC and EBITDA margin many assumptions have been made. Moreover, the constant growth rate is critical as the terminal period represents almost the 86% of the enterprise value. For the reasons above, these important parameters are going to be challenged in the following sensitivity analyses.

			WACC			
	-	3.62%	4.62%	5.62%	6.62%	7.62%
	1.0%	191.22	127.94	92.18	69.22	53.27
	1.50%	223.25	140.15	97.49	71.57	54.18
g	2.0%	275.07	157.02	104.28	74.43	55.26
	2.50%	373.15	181.84	113.24	77.99	56.55
	3.0%	629.42	221.99	125.62	82.53	58.12

Figure 8.4: Sensitivity analyses, WACC and terminal growth rate

Source: Own creation

As it is obvious from figure 8.3 a change in WACC of 1% affects significantly the share price, as it serves as a discount factor. The estimated WACC of 5.62% seems the most realistic as if it was 1% higher or lower would have as a result a remarkable overvaluation or undervaluation of the share. With a constant terminal growth rate of 2%, a WACC of 4.62% leads to share price of \leq 157.02 while a WACC of 6.62% to a share price of \leq 74.43. However, under the estimated WACC (5.62%) PR's share price on 24.09.2014 (\leq 88.41) is undervalued even if the terminal growth rate is 1%. As regards the terminal growth rate, it affects more the share price when the WACC decreases. In the following sensitivity analysis the different valuation results are examined when different assumption about the terminal growth rate and EBITDA margin are considered.

EBITDA MARGIN							
	-	26.5%	27.5%	28.5%	29.5%	30.5%	
	1.0%	80.65	86.41	92.18	97.94	103.70	
	1.5%	84.78	91.14	97.49	103.85	110.21	
g	2.0%	90.06	97.17	104.28	111.39	118.50	
	2.50%	97.02	105.13	113.24	121.35	129.46	
	3.0%	106.65	116.13	125.62	135.11	144.60	

Figure 8.5: Sensitivity analysis, EBITDA margin and terminal growth rate

Source: Own creation

As it can be seen from figure 8.4, the share price is not as volatile as when different levels of WACC were considered but a change in the level of the EBITDA margin also affects the share price. With a constant growth rate of 2%, even if the EBITDA margin will be 26.5% PR's share was still undervalued. However, after the consideration both of the Allegro project and the increased production costs in China a slight increase from 27.45% up to 28.5% seems reasonable. The increased salaries and transportation costs in China will put a pressure in the EBITDA margin while the Allegro project with a scope to reduce the structure costs up to 1%-2% will improve it. However, if PR wants to be the top player in alcoholic drinks industry should improve its EBITDA margin as currently Diageo has the biggest one among the peer companies.

It can be argued that the PV models are sensitive to small changes in the key parameters such as WACC, terminal growth rate and EBITDA margin. For instance, as mentioned before a minor change in the level of WACC will lead to totally different valuation results. This also accounts for the terminal growth rate, as in DCF model the most of the enterprise value derives from the terminal period. Finally, if the EBITDA margin decreases slightly from 28.5% to 26.5%, this will lead ceteris paribus, the share price to decrease from €104.28 to €90.06. Therefore, it can be concluded that the PV models depend heavily on the assumed level of the key inputs.

CHAPTER 9 – CONCLUSION

The purpose of this thesis was to find out the fair value of PR's share as of 24.09.2014 which was the date when the last annual report was released. In order to answer this question, a series of sub-questions had to be answered first.

A strategic and a financial analysis were essential, to lay a solid foundation for the forecasting of the key value drivers. The estimated WACC represents the risk related to investing in PR and served as discount factor in the PV models. All these sections were necessary, so the following sub-questions to be answered.

Which macroeconomic factors they affect PR's performance?

The PEST analysis revealed the political, economical, social and technological factors which affect significantly the performance of PR. The PEST analysis showed that PR is vulnerable to the political decisions taken for the alcoholic drinks industry in general, as for instance the alcoholic drinks are the common "victim" when the governments seek for an increase in VAT. The implementation of Fillon tax affected significantly the sales of PR in France and the overall sales dropped significantly in 2014 (-7.35%) after the prohibition of public wining and dining in China. Moreover, the review of the macroeconomic environment revealed the low prospects for revenue growth in France as the country enters in recession. Furthermore, the analysis showed that new demographic groups such as women and millennials are concerned about health problems related to alcohol consumption and prefer wise drinking patterns. On the other hand, there will be a tremendous increase in demand of alcoholic drinks in China as the living conditions of the Chinese people are improving.

Which industry factors affect PR's business activities?

The Porter's five forces analysis showed that PR faces a moderate competition in the US and China as despite the numerous competitors these markets are characterized by outstanding growth rates. PR faces an increased competition in France where the alcoholic drinks companies own a small market share and simultaneously both wine and spirits industry experience negative growth rates. On the other hand, it is difficult for an alcoholic beverages manufacturer, especially new, to compete with PR which has PPE with book value close to ξ 2,000 million. Moreover, this analysis revealed that both the bargaining power of buyers and suppliers is moderate. The bargaining power of buyers is moderate as there is an increased demand for PR's brands. As regards the suppliers, their power is limited due to regular examinations and contracts. Finally this analysis revealed that there is a low substitution threat as the new demographic groups will trade up to wine and spirits in the upcoming period.

Which internal activities contribute to its core competency?

The Value Chain analysis revealed that PR has one of lowest COGS among the peers, as the most of the products are manufactured in-house. Moreover, the low COGS are attributable to economies of scale and as

many brands of PR share the same infrastructures. Generally, PR has the second-lowest operating expenses right behind Diageo who is the leader of the industry. Moreover, the Value Chain analysis showed that both the primary activity of Outbound Logistics and the secondary activity of HR contribute to its core competency. The gas emissions are minimized as the most of the transportations are done by the sea and the rest are optimized. The low gas emissions mean lower energy cost and an enhanced environmental profile. Also, the innovative HR management based on the collective attitude and sense of teamwork leads to satisfied employees characterized by a high level of commitment. Finally the most important capability of PR is it global distribution network as few companies have such a network and simultaneously enables the Group to seize growth opportunities from any place of the world.

What was the financial performance of PR in period 2010-2014?

The main conclusions of the financial analysis is that PR is characterized by a low ROA and that the increase in its Net debt/EBITDA ratio from 3.5 to 3.7 in 2014 does not permit the Group to process to any debt funded acquisitions. PR has the lowest ROA among its peer companies and if it wants to remain competitive towards Diageo should focus only to its priority-profitable brands. A Net debt/EBITDA ratio of 3.5 is the upper limit for a company with Baa3, so as PR has already passed this limit it is not in position to engage in debt funded acquisitions, as a further increase in its debt will put in risk its credit rating and its access to cheaper financing.

The strategic and financial laid a solid foundation for forecasting PR's future performance. After a thoroughly examination of the historical levels of the key value drivers and a consideration of the conclusions of the fundamental analysis a realistic pro-forma statement formed. So, the following sub-question could be answered.

What will be a realistic forecast of its future performance based on the results of the fundamental analysis?

The main value drivers that affect mainly the result of the valuation are: the revenue growth, the EBITDA margin and the level of Intangible and Tangible Assets in relation to revenue. The sales are expected to recover as there will be an increased demand for premium alcoholic drinks in the key markets of PR, especially in the US and China. In China, there will be a tremendous increase in wine and spirits consumption until 2019 (37% in Spirits, 32.10% in Wine). Also, in the US the demand for wine and spirits is expected to grow notably until the same year (8.5%). Having considered the expected high demand for premium alcoholic beverages, it assumed that the revenue growth will be 4% for the explicit period and 2% for the terminal. As regards the EBITDA it is

expected to be improved after the launch of the Allegro project. Finally, the Intangible and Tangible Assets to revenue ratio is expected to decrease as the sales will recover and not great investments are expected.

What is the underlying risk for investing in PR and which is the corresponding WACC?

The WACC represents the risk faced both from debtholders and shareholders. The WACC found to be 5.62% and it was assumed that it will remain permanent for the whole forecast period. In the estimation of WACC a target capital structure of 31.92% applied as the current may change in future. Also, although PR is a French company, the yield of the 10-year German government bond used as a proxy for risk-free rate as the German bonds carry the least amount of risk among all the EUR denominated bonds. Moreover, the market risk premium was found to be 5.8% for France based on the ex-ante approach. In the estimation of beta except of the examination of the co-variation between PR's returns and French main stock market indexes (CAC 40, SBF 250, SBF 120), the Hamadas equation also applied. After a sensible evaluation of the raw regressions and the result of Hamadas equation the beta was assumed to be 0.65. Finally, the estimation of the cost of debt was based on the difference between the weighted average coupon rate of PR's decennial bonds and risk-free rate.

The main question was in position to be answered, since these series of sub-questions having being answered first. Therefore, *what is the fair value of PR's share on 24.09.2014?*

The fair price of PR's share on the release date of its last annual report by the use of the DCF and EVA model was estimated to be ≤ 104.28 . The estimated price is 18% higher than the trading price of PR's share on this specific date. After there was a sanity check, with the use of EV/EBITDA and EV/Sales multiples. The relative valuation yielded almost identical results to the result of PV models (≤ 102.91 , ≤ 106.36). The different scenarios (realistic, optimistic and pessimistic) yielded totally different results something which comes in agreement with the fact that the PV models are sensible to key inputs such as revenue growth and EBITDA margin. Finally, because the most of the inputs used in PV models are subject to uncertainty, a sensitivity analysis was conducted to examine the different valuation results when different assumptions about the level of the key inputs were considered.

Based on the valuation results of the PV models and multiples, PR's share can be considered undervalued. The assumptions considered in forecasting are reasonable, so the investment recommendation is a "buy". PR's share was on that date a good investment opportunity as the share was significantly undervalued and an investor could benefit from its low trading price.

Bibliography

Books:

Christian V. Petersen, T. P. (2012). *Financial Statement Analysis: Valuation, Credit Analysis & Executive Compensation.* Trans-Atlantic Publications.

Tim Koller, M. G. (2010). Valuation: Measuring and Managing the Value of Companies, 5th Edition. Wiley.

Tom Copeland, T. K. (2000). Valuation: Measuring and Managing the Value of Companies. John Wiley & Sons.

Eugene F. Brigham, J. F. (2003). Fundamentals of Financial Management. South-Western College Pub.

Phlips, L. (1998). Applied Industrial Economics.

Porter, M. (1998). Competitive Advantage: Creating and Sustaining Superior Performance. Free Press.

Articles and working papers:

Pablo Fernadez, P. L. (2014). Market Risk Premium used in 88 countries in 2014. IESE Business School.

Barney, J. (1991, March). Firm Resources and Sustained Competitve Advantage. *Journal of Management*.

Reports:

Ricard, P. (2014). Pernod Ricard 2010-2014 - Registration Documents.

(2014). Diageo - Annual Report 2013/2014.

Databases:

Euromonitor International. (2014). <u>http://www.portal.euromonitor.com.esc-</u>web.lib.cbs.dk/portal/magazine/homemain

Euromonitor International - "Alcoholic Drinks in China". (2014).

Euromonitor International - "Alcoholic Drinks in France". (2014).

Euromonitor International - "Alcoholic Drinks in the US". (2014)

Euromonitor International - "Spirits in China". (2014).

Euromonitor International - "Spirits in France". (2014).

Euromonitor International - "Spirits in the US". (2014).

Euromonitor International - "Wine in China". (2014).

Euromonitor International - "Wine in the US". (2014).

Euromonitor International-"Wine in France". (2014).

Orbis. (2015). Retrieved from <u>http://www.bvdinfo.com/en-gb/our-products/company-information/international-products/orbis</u>

The World Bank. (n.d.). Retrieved from http://data.worldbank.org/

Damodaran, A. (2015). Damodaran Online. Retrieved from http://people.stern.nyu.edu/adamodar/

Webpages:

www.pernod-ricard.com. (2015). Retrieved from http://pernod-ricard.com/21/home

http://www.diageo.com. (n.d.). Retrieved from <u>http://www.diageo.com/en-row/Pages/default.aspx</u>

www.bacardilimited.com. (2014). Retrieved from http://www.bacardilimited.com/

www.yahoofinance.com. (n.d.). Retrieved from http://finance.yahoo.com/

www.wikipedia.org/wiki/Bacardi. (2015). Retrieved from https://en.wikipedia.org/wiki/Bacardi

Bloomberg Business. (2015, March). Retrieved from <u>http://www.bloomberg.com/news/articles/2015-03-</u> <u>18/the-fed-just-said-u-s-unemployment-can-go-even-lower</u>

Ft.com. (n.d.). Retrieved from http://www.ft.com/home/europe

Ft.com. (2014). Retrieved from <u>http://www.ft.com/intl/cms/s/0/f808399a-949d-11e3-9146-00144feab7de.html#axz23dLXP87DL</u>

Ft.com. (2015). Retrieved from http://markets.ft.com/research/Markets/Tearsheets/Summary?s=RI:PAR

(2014). Retrieved from WSJ:

http://www.wsj.com/articles/SB10001424052702304788404579520823382895450

MorningStar. (n.d.). Retrieved from <u>http://www.morningstar.com/</u>

Reuters. (2015). Retrieved from http://www.reuters.com/finance/stocks/overview?symbol=PERP.PA

Investing.com. (2015). Retrieved from http://www.investing.com/equities/pernod-ricard

MSN Moneycentral. (2015). Retrieved from <u>http://www.msn.com/en-us/money/stockdetails/fi-</u> 160.1.RI.PAR?symbol=RI&form=PRFISB

Fitch. (n.d.). Retrieved from <u>https://www.fitchratings.com/</u>

KPMG. (n.d.). *KPMG*. Retrieved from <u>http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/corporate-tax-rates-table.aspx</u>

Moody's. (n.d.). Retrieved from https://www.moodys.com/

Standard & Poor's. (n.d.). Retrieved from http://www.standardandpoors.com/ratings/en/us/

France 24. (2011). Retrieved from <u>http://www.france24.com/en/20111107-france-austery-package-fillon-tax-hike-spending-cuts-eurozone-economy-paris/</u>

http://www.justice.gov/. (2015). Retrieved from http://www.justice.gov/atr/public/guidelines/hhi.html

http://www.mazars.com/. (n.d.). Retrieved from <u>http://www.mazars.com/Home/Sectors/Food-Beverage/F-B-</u> <u>credentials</u>

http://www.packagingnews.co.uk. (2014). Retrieved from http://www.packagingnews.co.uk/news/markets/pernod-ricard-launches-your-signature-spirit-personalised-bottles/

International Grains Council. (2015). Retrieved from http://www.igc.int/en/Default.aspx

Bundesbank. (n.d.). *DEUTSCHE BUNDESBANK EUROSYSTEM*. Retrieved from <u>http://www.bundesbank.de/Navigation/EN/Statistics/Time_series_databases/Macro_economic_time_series/it</u> <u>s_details_value_node.html?tsId=BBK01.WT1010</u>

The US Department of Justice. (2015). Retrieved from http://www.justice.gov/atr/public/guidelines/hhi.html

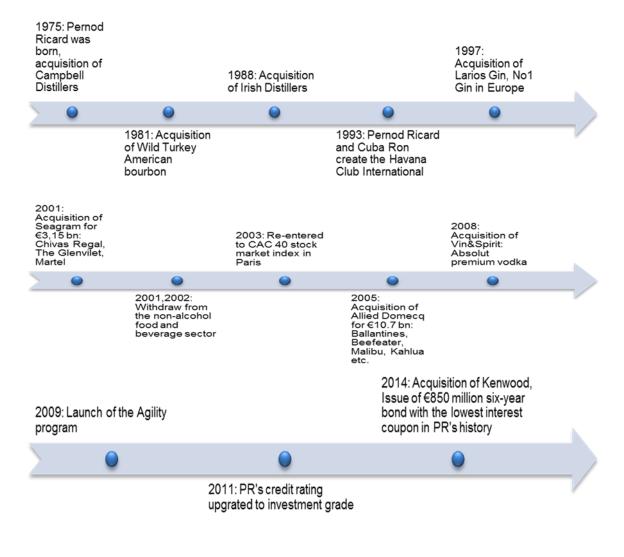
http://www.irishdistillers.ie/. (2015). Retrieved from <u>http://www.irishdistillers.ie/our-brands/irish-distillers-irish-whiskey.html</u>

www.mynewsdesk.com. (2013, June). Retrieved from http://www.mynewsdesk.com/uk/pressreleases/usalcoholic-drinks-market-driven-by-flavour-innovation-874663

www.bevindustry.com. (2014, July). Retrieved from <u>http://www.bevindustry.com/articles/87687-</u> premiumization-trend-drives-distilled-spirits-dollar-sales

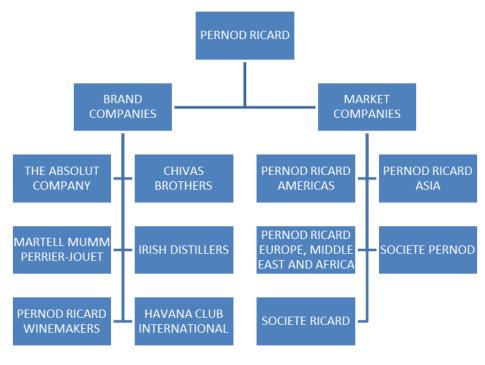
Appendix

Appendix 1: History



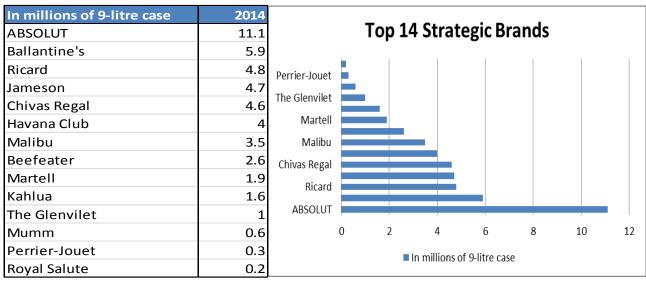
Source: Own creation

Appendix 2: PR's Decentralized Model



Source: Own creation

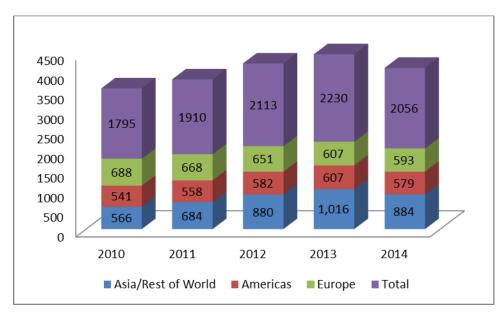
Appendix 3: Top 14 Strategic Brands



Source: Own Creation

Profit	2010	2011	2012	2013	2014
Asia/Rest of World	566	684	880	1,016	884
Americas	541	558	582	607	579
Europe	688	668	651	607	593
Total	1795	1910	2113	2230	2056
Asia/Rest of World	-	20.85%	28.65%	15.45%	-12.99%
Americas	-	3.14%	4.30%	4.30%	-4.61%
Europe	-	-2.91%	-2.54%	-6.76%	-2.31%
Sum	-	6.41%	10.63%	5.54%	-7.80%

Appendix 4: Profit per Region, Profit Growth, historical development



Source: Own creation based on data extracted from PR's financial statements

Appendix 5: Historical growth in demand of wine and spirits - PR's key markets

Categories	Geographies	2009-14 %	2009-14 CAGR %	2009-14 Absolute
Spirits	China	40.60	7.10	1,610,865.00
Spirits	USA	13.60	2.60	222,499.60
Spirits	France	-1.50	-0.30	-5,734.10

Categories	Geographies	2009-14 %	2009-14 CAGR %	2009-14 Absolute
Wine	China	41.00	7.10	1,263.30
Wine	USA	13.70	2.60	365.80
Wine	France	-1.60	-0.30	-39.20

Source: Euromonitor International

Appendix 6: Income Statement

In million euros	2010	2011	2012	2013	2014
Net sales	7,081	7,643	8,215	8,575	7,945
Cost of sales	-2,863	-3,033	-3,169	-3,224	-2,958
Gross margin after logistics expenses	4,218	4,610	5,047	5,351	4,987
Advertising and promotion expenses	-1,262	-1,441	-1,571	-1,644	-1,503
Contribution after advertising & promotion expenses	2,956	3.169	3,476	3,707	3,484
Structure costs	-1,160	-1,260	-1,362	-1,476	-1,428
Profit from recurring operations	1,795	1,909	2,114	2,231	2,056
Other operating income	234	121	45	101	60
Other operating expenses	-322	-177	-190	-214	-300
Operating profit	1,707	1,852	1,969	2,119	1,817
Financial expenses	-524	-531	-570	-579	-561
Financial income	17	72	22	25	76
Interest (expense) income	-507	-459	-548	-554	-485
Earnings Before tax	1201	1395	1421	1,566	1332
Corporate income tax	-223	-318	-247	-374	-305
Share of net profit/ (loss) of associates	1	2	0	1	0
Net profit from continuing operations	978	1,077	1,174	1,191	1,027
Net profit from discontinued operations	0	0	0	0	0
NET PROFIT	978	1,077	1,174	1,191	1,027
Including:					
attributable to non-controlling interests	27	32	27	19	11
attributable to equity holders of the Parent	951	1045	1146	1172	1016
Earnings per share – basic (in euros)	3.62	3.98	4.36	4.45	3.86
Earnings per share – diluted (in euros)	3.59	3.94	4.32	4.4	3.82
Net earnings per share from continuing operations - basic (in euros)	3.62	3.98	4.36	4.45	3.86
Net earnings per share from continuing operations - diluted (in euros)	3.59	3.94	4.32	4.4	3.82

Appendix 7: Balance Sheet

In euro million	2009	2010	2011	2012	2013	2014
Non-current assets						
Intangible assets	11,310	12,364	11,291	12,234	11,780	11,542
Goodwill	4,888	5,393	5,041	5,126	4,973	4,907
Property, plant & equipment	1,757	1,823	1,805	1,923	1,942	2,016
Biological assets	75	116	111	126	133	150
Non-current financial assets	105	118	178	192	357	349
Investments in associates	3	6	6	18	16	15
Deferred tax assets	1,111	1,307	1,459	2,035	1,771	1,926
Non - current derivative instruments	-	20	56	116	59	63
Non-current assets	19,250	21,148	19,947	21,770	21,030	20,968
Current assets						
Inventories	3,725	4,007	3,875	4,295	4,484	4,861
Operating receivables	936	944	904	1,197	1,159	1,051
Income tax receivables	58	37	40	29	27	37
Other receivables - Other current assets	185	218	136	179	209	194
Current derivative instruments	23	12	130	34	209	26
				-		
Cash and cash equivalents Current asset	520 5,446	701 5,918	774 5,748	787 6,522	597 6,499	477 6,646
						_
Assets held for sale	178	42	4	52	8	2
Total assets	24,875	27,107	25,669	28,343	27,537	27,616
Shareholders' equity						
Share capital	401	410	410	111	111	411
•	-	410		411	411	3,052
Additional paid-in capital	3,019	3,022	3,034	3,049	3,052	,
Retained earnings and currency translation adjustments	3,065	4,739	4,795	5,947	6,379	7,142
Net profit attributable to equity holders of the parent	945	951	1,045	1,146	1,172	1,016
Shareholders' equity - attributable to equity holders of the parent	7,431	9,122	9,284	10,553	11,014	11,621
Non-controlling interests	185	216	190	166	165	157
Total shareholders' equity	7,615	9,337	9,474	10,719	11,179	11,778
Non-current liabilities						
Non-current provisions	521	691	607	641	587	564
Provisions for pensions and other long-term employee benefits	405	408	348	607	565	569
Deferred tax liabilities	2,217	2,500	2,657	3,107	2,924	3,041
Bonds	2,540	2,893	4,657	8,044	6,949	6,844
Non-current derivative instruments	427	375	275	259	152	85
Other non-current financial liabilities	8,315	6,925	4,729	1,252	763	830
Total non-current liabilities	14,425	13,792	13,272	13,910	11,940	11,933
Current liabilities						
Current provisions	312	312	265	178	163	251
Operating payables	1,759	1,871	1,884	1,526	1,546	1,463
Income tax payables	101	104	91	129	127	56
Other current liabilities	209	224	293	896	924	887
Other current financial liabilities	366	317	323	727	567	290
Bonds -current	-	934	82	153	1,001	929
Current derivative instruments	28	212	14	97	89	29
Total current liabilities	2,774	3,975	2,953	3,707	4,418	3,905
Liabilities held for sale	60	2	0	7	0	0
Total liabilities and shareholders' equity	24,875	27,107	25,699	28,343	27,537	27,616

Appendix 8: Analytical Income Statement

In million Euros	2009	2010	2011	2012	2013	2014
Net sales	7203	7,081	7643	8215	8575	7945
Cost of sales	-2995	-2,863	-3033	-3169	-3224	-2958
Advertising and promotion expenses	-1237	-1,262	-1441	-1571	-1644	-1503
Structure costs	-1125	-1,160	-1260	-1362	-1476	-1428
Other operating income		234	121	45	101	60
Other operating expenses		-322	-177	-190	-214	-300
Share of net profit/ (loss) of associates	0	1	2	0	1	0
EBIT	1846	1709	1855	1968	2119	1816
Taxes on EBIT	187	317	423	342	506	416
NOPAT	1659	1392	1432	1626	1613	1400
Financial expenses		-524	-531	-570	-579	-561
Financial income		17	72	22	25	76
Net financial expenses (before tax)	-691	-507	-459	-548	-554	-485
Tax shield	70	94	105	95	132	111
Net financial expenses (after tax)	-621	-413	-354	-453	-422	-374
Net profit from continuing operations after tax	1038	979	1078	1173	1191	1026
Net profit from discontinued operations	8	0	0	0	0	0
Net group profit	1046	979	1078	1173	1191	1026
Net profit attributable to non-controlling interests	21	27	32	27	19	11
Net proift attributable to the holders of the parent company	945	952	1046	1146	1172	1015
Depreciation and Amortization	347	272	202	182	259	365
EBITDA	2193	1981	2057	2150	2378	2181

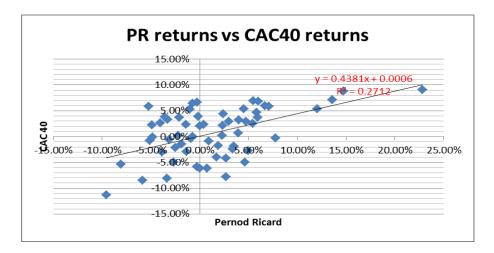
Appendix 9: Analytical Balance Sheet

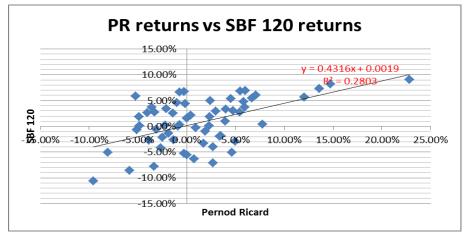
In million euros	2010	2011	2012	2013	2014
Intangible assets	12,364	11291	12234	11780	11542
Goodwill	5,393	5041	5126	4973	4907
Property, plant & equipment	1,823	1805	1923	1942	2016
Biological assets	116	111	126	133	150
Investments in associates	6	6	18	16	15
Deferred tax assets	1,307	1459	2035	1771	1926
Total non-current operating assets	21009	19713	21462	20615	20556
	21005	15/15	21402	20015	20550
Inventories	4,007	3875	4295	4484	4861
Operating receivables	944	904	1197	1159	1051
Income tax receivables	37	40	29	27	37
Other receivables - Other current assets	218	136	179	209	194
Operating cash	14	15	16	12	10
Total current operating assets	5220	4970	5716	5891	6153
	601	607	6.4.4	507	
Non-current provisions	691	607	641	587	564
Provisions for pensions and other long-term employee benefits	408	348	607	565	569
Deferred tax liabilities	2,500	2657	3107	2924	3041
Total non-current operating liabilities	3,599	3612	4355	4076	4174
Current provisions	312	265	178	163	251
Operating payables	1,871	1884	1526	1546	1463
Income tax payables	104	91	129	127	56
Other current liabilities	224	293	896	924	887
Total current operating liabilities	2,511	2533	2729	2760	2657
	2,311	2333	2725	2700	2037
Operating Assets	26229	24683	27178	26506	26709
Operating Liabilities	6110	6145	7084	6836	6831
Invested Capital	20119	18538	20094	19670	19878
		1 - 2	100		~ ~ ~
Non-current financial assets	118	178	192	357	349
Non - current derivative instruments	20	56	116	59	63
Total non-current financial assets	138	234	308	416	412
Current derivative instruments	12	19	34	23	26
Cash and cash equivalents adjusted (Excess cash)	687	759	771	585	467
Assets held for sale	42	4	52	8	2
Total current financial assets	741	782	857	616	495
Interest-bearing assets	879	1,016	1,165	1,032	907
Total shareholders' equity	9,337	9474	10719	11179	11778
Bonds	2,893	4657	8044	6949	6844
Non-current derivative instruments	375	275	259	152	85
Other non-current financial liabilities	6,925	4729	1252	763	830
Total non-current financial liabilities	10,193	9661	9555	7864	7759
Other current financial liabilities	317	323	727	567	290
Bonds -current	934	82	153	1001	929
Current derivative instruments	212	14	97	89	29
Liabilities held for sale	212	0	97 7	0	29
				-	1248
Total current financial liabilities	1465	419	984	1657	1248
Interest-bearing debt	11658	10080	10539	9521	9007
			0074	0400	8100
Net-interested bearing debt	10779	9064	9374	8489	0100
	10779 20116	9064 18538	20093	8489 19668	19878

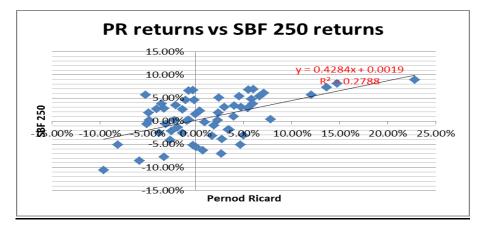
Appendix 10: Beta Regression Analysis

Pernod Ricard			CAC 40			SBF 250			SBF 120		
Date	Adj Close	Return%	Date	Adj Close	Return%	Date	Adj Close	Return%	Date	Adj Close	Return%
6/30/2009	40.22		6/30/2009	3140.44		6/30/2009	2233.07		6/30/2009	2283.66	
7/1/2009	49.4	22.82%	7/1/2009	3426.27	9.10%	7/1/2009	2432.1	8.91%	7/1/2009	2490.75	9.07%
8/3/2009	49.27	-0.26%	8/3/2009	3653.54	6.63%	8/3/2009	2595.52	6.72%	8/3/2009	2657.89	6.71%
9/1/2009	49.18	-0.18%	9/1/2009	3795.41	3.88%	9/1/2009	2712.55	4.51%	9/1/2009	2775.79	4.44%
10/1/2009	51.46	4.64%	10/1/2009	3607.69	-4.95%	10/1/2009	2575.07	-5.07%	10/1/2009	2634.38	-5.09%
11/2/2009	51.46	0.00%	11/2/2009	3680.15	2.01%	11/2/2009	2613.02	1.47%	11/2/2009	2676.73	1.61%
12/1/2009	54.29	5.50%	12/1/2009	3936.33	6.96%	12/1/2009	2789.32	6.75%	12/1/2009	2859.47	6.83%
1/4/2010	52.84	-2.67%	1/4/2010	3739.46	-5.00%	1/4/2010	2675.75	-4.07%	1/4/2010	2739.31	-4.20%
2/1/2010	50.14	-5.11%	2/1/2010	3708.8	-0.82%	2/1/2010	2657.74	-0.67%	2/1/2010	2721.5	-0.65%
3/1/2010	56.97	13.62%	3/1/2010	3974.01	7.15%	3/1/2010	2850.31	7.25%	3/1/2010	2919.27	7.27%
4/1/2010	57.95	1.72%	4/1/2010	3816.99	-3.95%	4/1/2010	2759.18	-3.20%	4/1/2010	2821.85	-3.34%
5/3/2010	56.02	-3.33%	5/3/2010	3507.56	-8.11%	5/3/2010	2545.12	-7.76%	5/3/2010	2602.18	-7.78%
6/1/2010	57.98	3.50%	6/1/2010	3442.89	-1.84%	6/1/2010	2498.74	-1.82%	6/1/2010	2553.7	-1.86%
7/1/2010	54.96	-5.21%	7/1/2010	3643.14	5.82%	7/1/2010	2641.13	5.70%	7/1/2010	2702.05	5.81%
8/2/2010	56.45	2.71%	8/2/2010	3490.79	-4.18%	8/2/2010	2538.24	-3.90%	8/2/2010	2595.42	-3.95%
9/1/2010	56.05	-0.71%	9/1/2010	3715.18	6.43%	9/1/2010	2705.1	6.57%	9/1/2010	2766.39	6.59%
10/1/2010	58.3	4.01%	10/1/2010	3833.5	3.18%	10/1/2010	2796.15	3.37%	10/1/2010 11/1/2010	2858.82	3.34%
11/1/2010 12/1/2010	58.13 65.13	-0.29% 12.04%	11/1/2010 12/1/2010	3610.44	-5.82% 5.38%	11/1/2010 12/1/2010	2649.77 2800.66	-5.24% 5.69%		2707.65 2861.15	-5.29%
1/3/2011	64.46	-1.03%	1/3/2010	3804.78 4005.5	5.28%	1/3/2010	2928.35	4.56%	12/1/2010 1/3/2011	2993.15	5.67% 4.61%
2/1/2011	61.85	-4.05%	2/1/2011	4005.5	2.62%	2/1/2011	3005.88	2.65%	2/1/2011	3071.81	2.63%
3/1/2011	61.01	-4.05%	3/1/2011	3989.18	-2.95%	3/1/2011	2928.12	-2.59%	3/1/2011	2990.73	-2.64%
4/1/2011	62.82	2.97%	4/1/2011	4106.92	2.95%	4/1/2011	3015.46	2.98%	4/1/2011	3079.11	2.96%
5/2/2011	64.94	3.37%	5/2/2011	4006.94	-2.43%	5/2/2011	2958.83	-1.88%	5/2/2011	3019.76	-1.93%
6/1/2011	62.92	-3.11%	6/1/2011	3982.21	-0.62%	6/1/2011	2940.24	-0.63%	6/1/2011	3001.58	-0.60%
7/1/2011	64.62	2.70%	7/1/2011	3672.77	-7.77%	7/1/2011	2732.81	-7.05%	7/1/2011	2789.48	-7.07%
8/1/2011	58.43	-9.58%	8/1/2011	3256.76	-11.33%	8/1/2011	2443.91	-10.57%	8/1/2011	2493.66	-10.60%
9/1/2011	55	-5.87%	9/1/2011	2981.96	-8.44%	9/1/2011	2233.9	-8.59%	9/1/2011	2280.3	-8.56%
10/3/2011	63.11	14.75%	10/3/2011	3242.84	8.75%	10/3/2011		8.06%	10/3/2011	2466.11	8.15%
11/1/2011	66.24	4.96%	11/1/2011	3154.62	-2.72%	11/1/2011	2341.03	-3.02%	11/1/2011	2394.29	-2.91%
12/1/2011	67.77	2.31%	12/1/2011	3159.81	0.16%	12/1/2011	2344.44	0.15%	12/1/2011	2397.44	0.13%
1/2/2012	69.41	2.42%	1/2/2012	3298.55	4.39%	1/2/2012	2462.46	5.03%	1/2/2012	2516.41	4.96%
2/1/2012	73.45	5.82%	2/1/2012	3452.45	4.67%	2/1/2012	2579.85	4.77%	2/1/2012	2636.25	4.76%
3/1/2012	74.15	0.95%	3/1/2012	3423.81	-0.83%	3/1/2012	2573.29	-0.25%	3/1/2012	2628.97	-0.28%
4/2/2012	74.16	0.01%	4/2/2012	3212.8	-6.16%	4/2/2012	2429.23	-5.60%	4/2/2012	2482.48	-5.57%
5/1/2012	74.71	0.74%	5/2/2012	3017.01	-6.09%			-6.35%	5/2/2012	2325.09	-6.34%
6/1/2012	79.69	6.67%	6/1/2012	3196.65	5.95%	6/1/2012	2397.42	5.38%	6/1/2012	2452.65	5.49%
7/2/2012	83.48	4.76%	7/2/2012	3291.66	2.97%	7/2/2012	2468.91	2.98%	7/2/2012	2526.66	3.02%
8/1/2012	81.72	-2.11%	8/1/2012	3413.07	3.69%	8/1/2012	2552.99	3.41%	8/1/2012	2612.63	3.40%
9/3/2012	83.29	1.92%	9/3/2012	3354.82	-1.71%		2528.44	-0.96%	9/3/2012	2586.78	-0.99%
10/1/2012	79.2	-4.91%		3429.27		10/1/2012	2575.15		10/1/2012	2635.8	1.90%
11/1/2012	83.9		11/1/2012	3557.28		11/1/2012	2670.61		11/1/2012	2734.8	3.76%
12/3/2012	84.27	0.44%		3641.07		12/3/2012	2728.5			2792.99	2.13%
1/1/2013	88.86	5.45%	1/2/2013	3732.6	2.51%	1/1/2013	2804.82	2.80%	1/1/2013	2869.49	2.74%
2/1/2013	95.79	7.80%	2/1/2013	3723	-0.26%	2/1/2013	2815.55	0.38%	2/1/2013	2880.35	0.38%

3/1/2013	93.69	-2.19%	3/1/2013	3731.42	0.23%	3/1/2013	2820.16	0.16%	3/1/2013	2886.45	0.21%
4/1/2013	90.59	-3.31%	4/2/2013	3856.75	3.36%	4/1/2013	2896.33	2.70%	4/1/2013	2966.33	2.77%
5/1/2013	89.33	-1.39%	5/2/2013	3948.59	2.38%	5/1/2013	2970.55	2.56%	5/1/2013	3041.94	2.55%
6/3/2013	82.1	-8.09%	6/3/2013	3738.91	-5.31%	6/3/2013	2819.37	-5.09%	6/3/2013	2886.39	-5.11%
7/1/2013	87.04	6.02%	7/1/2013	3992.69	6.79%	7/1/2013	3013.85	6.90%	7/1/2013	3086.83	6.94%
8/1/2013	85.42	-1.86%	8/1/2013	3933.78	-1.48%	8/1/2013	2973.8	-1.33%	8/1/2013	3043.95	-1.39%
9/2/2013	89.27	4.51%	9/2/2013	4143.44	5.33%	9/2/2013	3133.28	5.36%	9/2/2013	3207.13	5.36%
10/1/2013	86.07	-3.58%	10/1/2013	4299.89	3.78%	10/1/2013	3249.03	3.69%	10/1/2013	3324.75	3.67%
11/1/2013	81.92	-4.82%	11/1/2013	4295.21	-0.11%	11/1/2013	3253.45	0.14%	11/1/2013	3328.26	0.11%
12/2/2013	81.31	-0.74%	12/2/2013	4295.95	0.02%	12/2/2013	3262.93	0.29%	12/2/2013	3337.34	0.27%
1/1/2014	78.19	-3.84%	1/2/2014	4165.72	-3.03%	1/1/2014	3178.89	-2.58%	1/1/2014	3246.84	-2.71%
2/3/2014	83.74	7.10%	2/3/2014	4408.08	5.82%	2/3/2014	3371.46	6.06%	2/3/2014	3442.71	6.03%
3/3/2014	82.97	-0.92%	3/3/2014	4391.5	-0.38%	3/3/2014	3373.1	0.05%	3/3/2014	3442.87	0.00%
4/1/2014	84.94	2.37%	4/1/2014	4487.39	2.18%	4/1/2014	3433.22	1.78%	4/1/2014	3505.67	1.82%
5/1/2014	88.32	3.98%	5/2/2014	4519.57	0.72%	5/1/2014	3466.41	0.97%	5/1/2014	3539.79	0.97%
6/2/2014	86.11	-2.50%	6/2/2014	4422.84	-2.14%	6/2/2014	3391.92	-2.15%	6/2/2014	3463.41	-2.16%







Results	CAC 40	SBF 250	SBF 120
Beta	0.61909	0.65092	0.64935
Beta Rounded	0.62	0.65	0.65
SE (beta)	0.048	0.048	0.048
R2	0.271	0.279	0.280
Beta Range	0.352-0.885	0.375-0.926	0.375-0.922

Source: Own creation based on data extracted from Yahoo Finance

Appendix 11: Common–Size Analysis

Common Size Analysis	2010	2011	2012	2013	2014
Net sales	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of sales	-40.43%	-39.68%	-38.58%	-37.60%	-37.23%
Gross Margin	59.57%	60.32%	61.42%	62.40%	62.77%
Advertising and promotion expenses	-17.82%	-18.85%	-19.12%	-19.17%	-18.92%
Structure costs	-16.38%	-16.49%	-16.58%	-17.22%	-17.97%
Other operating income	3.30%	1.58%	0.55%	1.17%	0.76%
Other operating expenses	-4.55%	-2.32%	-2.31%	-2.62%	-3.78%
Share of net profit/ (loss) of associates	0.01%	0.03%	0.00%	0.01%	0.00%
Operating Costs	-75.88%	-75.76%	-76.04%	-75.45%	-77.14%
Operating Margin/EBIT	24.14%	24.27%	23.96%	24.56%	22.86%
Taxes on EBIT	4.48%	5.53%	4.16%	5.90%	5.23%
NOPAT	19.65%	18.74%	19.79%	18.81%	17.62%
Financial expenses	-7.40%	-6.95%	-6.94%	-6.75%	-7.06%
Financial income	0.24%	0.94%	0.27%	0.29%	0.96%
Net financial expenses (before tax)	-7.16%	-6.01%	-6.67%	-6.46%	-6.10%
Tax shield	1.33%	1.37%	1.16%	1.54%	1.40%
Net financial expenses (after tax)	-5.83%	-4.64%	-5.51%	-4.92%	-4.71%
Net profit from continuing operations after tax	13.82%	14.10%	14.28%	13.89%	12.92%
Net profit from discontinued operations	0.00%	0.00%	0.00%	0.00%	0.00%
Net group profit	13.82%	14.10%	14.28%	13.89%	12.92%
Net group profit (Rounding Errors)	13.81%	14.09%	14.29%	13.98%	12.93%
Net profit attributable to non-controlling interests	0.38%	0.42%	0.33%	0.22%	0.14%
Net proift attributable to the holders of the parent company	13.43%	13.67%	13.95%	13.87%	12.79%
Depreciation and Amortization	5.42%	3.13%	2.39%	3.81%	5.39%
EBITDA	29.56%	27.40%	26.34%	28.52%	28.24%

Source: Own creation

Appendix 12: Index Analysis

Analytical Income Statement	2010	2011	2012	2013	2014
Net sales	100.00%	107.94%	116.01%	121.10%	112.20%
Cost of sales	100.00%	105.94%	110.69%	112.61%	103.32%
Advertising and promotion expenses	100.00%	114.18%	124.48%	130.27%	119.10%
Structure costs	100.00%	108.62%	117.41%	127.24%	123.10%
Other operating income	100.00%	51.71%	19.23%	43.16%	25.64%
Other operating expenses	100.00%	54.97%	59.01%	66.46%	93.17%
Share of net profit/ (loss) of associates	100.00%	200.00%	0.00%	100.00%	0.00%
EBIT	100.00%	108.54%	115.16%	123.99%	106.26%
Taxes on EBIT	100.00%	133.26%	107.80%	159.48%	131.04%
NOPAT	100.00%	102.91%	116.83%	115.90%	100.61%
Financial expenses	100.00%	101.34%	108.78%	110.50%	107.06%
Financial income	100.00%	423.53%	129.41%	147.06%	447.06%
Net financial expenses (before tax)	100.00%	90.53%	108.09%	109.27%	95.66%
Tax shield	100.00%	111.15%	101.18%	140.55%	117.97%
Net financial expenses (after tax)	100.00%	85.83%	109.66%	102.14%	90.57%
Net profit from continuing operations after tax	100.00%	110.11%	119.86%	121.70%	104.84%
Net profit from discontinued operations					
Net group profit	100.00%	110.11%	119.86%	121.70%	104.84%
Net profit attributable to non-controlling interests	100.00%	118.52%	100.00%	70.37%	40.74%
Net proift attributable to the holders of the parent company	100.00%	109.87%	120.42%	123.16%	106.66%
Depreciation and Amortization	100.00%	74.26%	66.91%	95.22%	134.19%
EBITDA	100.00%	103.84%	108.53%	120.04%	110.10%

Source: Own creation

Appendix 13: Realistic, Optimistic and Pessimistic Forecast Assumptions

Realistic Forecast Assumptions	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue growth	-1.69%	7.94%	7.48%	4.38%	-7.35%	4%	4%	4%	4%	4%	2.0%
EBITDA/Revenue	27.98%	26.91%	26.17%	27.73%	27.45%	28.5%	28.5%	28.5%	28.5%	28.5%	28.5%
Depreciation/Intangible and tangible assets	1.56%	1.25%	1.06%	1.57%	2.23%	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%
Interest rate	4.64%	4.26%	6.05%	5.91%	5.71%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%
Tax rate	19%	23%	17%	24%	23%	23%	23%	23%	23%	23%	23%
Intangible and tangible assets/Revenue	245.87%	210.66%	208.24%	192.87%	206.19%	200%	200.00%	200.00%	200.00%	200.00%	200.00%
NWC/Revenue	38.26%	31.89%	36.36%	36.51%	44.00%	38.00%	38.00%	38.00%	38.00%	38.00%	38.00%
NIBD/Invested Capital	53.58%	48.90%	46.65%	43.16%	40.75%	40%	40%	40%	40%	40%	38%

Optimistic Forecast Assumptions	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue growth	-1.69%	7.94%	7.48%	4.38%	-7.35%	5%	5%	5%	5%	5%	2.0%
EBITDA/Revenue	27.98%	26.91%	26.17%	27.73%	27.45%	29.5%	29.5%	29.5%	29.5%	29.5%	29.5%
Depreciation/Intangible and tangible assets	1.56%	1.25%	1.06%	1.57%	2.23%	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%
Interest rate	4.64%	4.26%	6.05%	5.91%	5.71%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%
Tax rate	19%	23%	17%	24%	23%	23%	23%	23%	23%	23%	23%
Intangible and tangible assets/Revenue	245.87%	210.66%	208.24%	192.87%	206.19%	195%	195%	195%	195%	195%	195%
NWC/Revenue	38.26%	31.89%	36.36%	36.51%	44.00%	38.00%	38.00%	38.00%	38.00%	38.00%	38.00%
NIBD/Invested Capital	53.58%	48.90%	46.65%	43.16%	40.75%	40%	40%	40%	40%	40%	38%

Pessimistic Forecast Assumptions	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue growth	-1.69%	7.94%	7.48%	4.38%	-7.35%	2%	2%	2%	2%	2%	1.0%
EBITDA/Revenue	27.98%	26.91%	26.17%	27.73%	27.45%	27.45%	27.45%	27.45%	27.45%	27.45%	27.45%
Depreciation/Intangible and tangible assets	1.56%	1.25%	1.06%	1.57%	2.23%	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%
Interest rate	4.64%	4.26%	6.05%	5.91%	5.71%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%
Tax rate	19%	23%	17%	24%	23%	23%	23%	23%	23%	23%	23%
Intangible and tangible assets/Revenue	245.87%	210.66%	208.24%	192.87%	206.19%	206.19%	206.19%	206.19%	206.19%	206.19%	206.19%
NWC/Revenue	38.26%	31.89%	36.36%	36.51%	44.00%	38.00%	38.00%	38.00%	38.00%	38.00%	38.00%
NIBD/Invested Capital	53.58%	48.90%	46.65%	43.16%	40.75%	40%	40%	40%	40%	40%	38%

Appendix 14: Realistic Pro-Forma Statement

Income Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	7081	7643	8215	8575	7945	8263	8593	8937	9295	9666	9860
Operating expenses	-5100	-5586	-6065	-6197	-5764	-5908	-6144	-6390	-6646	-6911	-7050
EBITDA	1981	2057	2150	2378	2181	2355	2449	2547	2649	2755	2810
Depreciation and Amortization	-272	-202	-182	-259	-365	-254	-264	-274	-285	-297	-303
EBIT	1709	1855	1968	2119	1816	2101	2185	2273	2364	2458	2507
Tax on EBIT	-317	-423	-342	-506	-416	-483	-503	-523	-544	-565	-577
NOPAT	1392	1432	1626	1613	1400	1618	1683	1750	1820	1893	1931
Net financial expenses before tax	-507	-459	-548	-554	-485	-405	-393	-409	-425	-442	-368
Tax shield	94	105	95	132	111	93	90	94	98	102	85
Net Income	979	1078	1173	1191	1026	1306	1380	1435	1492	1552	1647
Balance Sheet	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Assets											
Total non-current operating assets	21009	19713	21462	20615	20556						
Total non-current operating liabilities	3,599	3612	4355	4076	4174						
Intangible and Tangible assets	17,410	16101	17107	16539	16382	16526	17187	17874	18589	19333	19719
Total current operating assets	5220	4970	5716	5891	6153						
Total current operating liabilities	2511	2533	2729	2760	2657						
Net Worning Capital	2709	2437	2987	3131	3496	3140	3265	3396	3532	3673	3747
Invested Capital	20,119	18538	20094	19670	19878	19665	20452	21270	22121	23006	23466
Liabilities											
Equity beginning of period	7615	9337	9474	10719	11179	11778					
Net Income	979	1078	1173	1191	1026	1306	1380	1435	1492	1552	1647
Comprehensive income/exepnse	743	-941	72	-731	-427						
Equity end of period	9,337	9474	10719	11179	11778						
NIBD	10779	9064	9374	8489	8100	7866	8181	8508	8848	9202	8917
Cash flow statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NOPAT	1392	1432	1626	1613	1400	1618	1683	1750	1820	1893	1931
Depreciation and Amortization	272	202	182	259	365	254	264	274	285	297	303
ΔWC	-176	272	-549	-144	-365	356	-126	-131	-136	-141	-73
Net Investments	-1,160	1107	-1188	309	-208	-397	-925	-962	-1000	-1040	-689
FCFF	328	3013	71	2037	1193	1830	896	932	969	1008	1471
New Net financial liabilities	-141	-1714.54	309.26	-884.8	-389.4	-233	315	327	340	354	-285
Net financial expenses after tax	413	354	453	422	374	312	303	315	328	341	283
FCFE	-226	944	-73	730	429	1285	908	944	982	1021	902

Appendix 15: Optimistic Pro-Forma Statement

Income Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	7081	7643	8215	8575	7945	8342	8759	9197	9657	10140	10343
Operating expenses	-5100	-5586	-6065	-6197	-5764	-5881	-6175	-6484	-6808	-7149	-7292
EBITDA	1981	2057	2150	2378	2181	2461	2584	2713	2849	2991	3051
Depreciation and Amortization	-272	-202	-182	-259	-365	-250	-262	-275	-289	-304	-310
EBIT	1709	1855	1968	2119	1816	2211	2322	2438	2560	2688	2742
Tax on EBIT	-317	-423	-342	-506	-416	-509	-534	-561	-589	-618	-631
NOPAT	1392	1432	1626	1613	1400	1703	1788	1877	1971	2070	2111
Net financial expenses before tax	-507	-459	-548	-554	-485	-405	-389	-408	-429	-450	-378
Tax shield	94	105	95	132	111	93	89	94	99	104	87
Net Income	979	1078	1173	1191	1026	1391	1488	1563	1641	1723	1820
Balance Sheet	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Assets	2010	2011	LUIL	2015		2015	2010	202/	2010		2020
Total non-current operating assets	21009	19713	21462	20615	20556						
Total non-current operating liabilities	3,599	3612	4355	4076	4174						
Intangible and Tangible assets	17,410	16101	17107	16539	16382	16267	17081	17935	18832	19773	20169
Total current operating assets	5220	4970	5716	5891	6153						
Total current operating liabilities	2511	2533	2729	2760	2657						
Net Worning Capital	2709	2437	2987	3131	3496	3170	3329	3495	3670	3853	3930
Invested Capital	20,119	18538	20094	19670	19878	19437	20409	21430	22501	23626	24099
Liabilities											
Equity beginning of period	7615	9337	9474	10719	11179	11778					
Net Income	979	1078	1173	1191	1026	1391	1488	1563	1641	1723	1820
Comprehensive income/exepnse	743	-941	72	-731	-427						
Equity end of period	9,337	9474	10719	11179	11778						
NIBD	10779	9064	9374	8489	8100	7775	8164	8572	9001	9451	9158
Cash flaw statement	2010	2011	2012	2012	2014	2015	2010	2017	2010	2010	2020
Cash flow statement NOPAT	2010 1392	2011 1432	2012 1626	2013 1613	2014 1400	2015 1703	2016 1788	2017 1877	2018 1971	2019 2070	2020 2111
Depreciation and Amortization	272	202	1826	259	365	250	262	275	289	304	310
	-176	202	-549	-144	-365	325	-159	-166	-175	-183	-77
Net Investments	-1,160	1107	-1188	309	-208	-135	-139	-100	-175	-185	-705
FCFF	328	3013	-1188 71	2037	-208 1193	-133 2143	-1070 816	-1129 857	-1180 900	-1243 945	1638
New Net financial liabilities		-1714.54	309.26	-884.8	-389.4	-325	389	408	429	450	-293
Net financial expenses after tax	413	354	453	422	374	312	299	314	330	430 347	291
FCFE	-226	944	-73	730	429	1506	905	951	998	1048	1054

Appendix 16: Pessimistic Pro-Forma Statement

Income Statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	7081	7643	8215	8575	7945	8104	8266	8431	8600	8772	8860
Operating expenses	-5100	-5586	-6065	-6197	-5764	-5879	-5997	-6117	-6239	-6364	-6428
EBITDA	1981	2057	2150	2378	2181	2225	2269	2314	2361	2408	2432
Depreciation and Amortization	-272	-202	-182	-259	-365	-256	-262	-267	-272	-278	-280
EBIT	1709	1855	1968	2119	1816	1968	2007	2048	2089	2130	2152
Tax on EBIT	-317	-423	-342	-506	-416	-453	-462	-471	-480	-490	-495
NOPAT	1392	1432	1626	1613	1400	1515	1546	1577	1608	1640	1657
Net financial expenses before tax	-507	-459	-548	-554	-485	-405	-396	-404	-412	-420	-343
Tax shield	94	105	95	132	111	93	91	93	95	97	79
Net Income	979	1078	1173	1191	1026	1204	1241	1266	1291	1317	1393
Balance Sheet	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Assets											
Total non-current operating assets	21009	19713	21462	20615	20556						
Total non-current operating liabilities	3,599	3612	4355	4076	4174						
Intangible and Tangible assets	17,410	16101	17107	16539	16382	16710	17044	17385	17732	18087	18268
Total current operating assets	5220	4970	5716	5891	6153						
Total current operating liabilities	2511	2533	2729	2760	2657						
Net Worning Capital	2709	2437	2987	3131	3496	3079	3141	3204	3268	3333	3367
Invested Capital	20,119	18538	20094	19670	19878	19789	20185	20589	21000	21420	21635
Liabilities											
Equity beginning of period	7615	9337	9474	10719	11179	11778					
Net Income	979	1078	1173	1191	1026	1204	1241	1266	1291	1317	1393
Comprehensive income/exepnse	743	-941	72	-731	-427						
Equity end of period	9,337	9474	10719	11179	11778						
NIBD	10779	9064	9374	8489	8100	7916	8074	8235	8400	8568	8221
Cash flow statement	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NOPAT	1392	1432	1626	1613	1400	1515	1546	1577	1608	1640	1657
Depreciation and Amortization	272	202	182	259	365	256	262	267	272	278	280
Δ₩С	-176	272	-549	-144	-365	416	-62	-63	-64	-65	-33
Net Investments	-1,160	1107	-1188	309	-208	-584	-596	-608	-620	-632	-461
FCFF	328	3013	71	2037	1193	1604	1150	1173	1196	1220	1443
New Net financial liabilities	-141	-1714.54	309.26	-884.8	-389.4	-184	158	161	165	168	-347
Net financial expenses after tax	413	354	453	422	374	312	305	311	317	323	264
FCFE	-226	944	-73	730	429	1108	1004	1024	1044	1065	832

Appendix 17: Budget Evaluation

Budget Evaluation - ROIC	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Realistic	6.92%	7.73%	8.09%	8.20%	7.04%	8.23%	8.23%	8.23%	8.23%	8.23%	8.23%
Optimistic	6.92%	7.73%	8.09%	8.20%	7.04%	8.76%	8.76%	8.76%	8.76%	8.76%	8.76%
Pessimistic	6.92%	7.73%	8.09%	8.20%	7.04%	7.66%	7.66%	7.66%	7.66%	7.66%	7.66%

Appendix 18: Valuation – Optimistic Scenario

DCF model - in million of euros	2015 e	2016 e	2017 e	2018 e	2019 e	2020 e
FCFF	2143	816	857	900	945	1,638
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Discount Factor	0.95	0.90	0.85	0.80	0.76	
Present value, FCFF	2,029	731	727	723	719	
Present Value of FCFF in forecast horizon	4,929					
Present Value of FCFF in terminal period	34,435					
Estimated enterprise value	39,364					
NIBD	8,100					
Estimated market value of equity	31,264					
Number of Shares - millions	265					
Estimated share price on 24.09.2014	117.79					

EVA Model - in million of euros	2015 e	2016 e	2017 e	2018 e	2019 e	2020 e
NOPAT	1,703	1,788	1,877	1,971	2,070	2,111
Invested Capital, begging of the period	19,878	19,437	20,409	21,430	22,501	23,626
ROIC	8.57%	9.20%	9.20%	9.20%	9.20%	8.93%
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Cost of Capital	1,117	1,092	1,147	1,204	1,265	1,328
EVA	586	695	730	767	805	783
Discount Factor	0.94	0.88	0.85	0.80	0.76	
Present Value EVA	550	615	620	616	612	
Invested Capital, begging of the period	19,878					
Present Value of EVA in forecast horizon	3,013					
Present Value of EVA in terminal period	16,460					
Estimated enterpise value	39,364					
NIBD	8,100					
Estimated market value of equity	31,264					
Number of shares - millions	265					
Estimate share price on 24.09.2014	117.79					

Appendix 19: Valuation – Pessimistic Scenario

DCF model - in million of euros	2015 e	2016 e	2017 e	2018 e	2019 e	2020 e
FCFF	1604	1150	1173	1196	1220	1,443
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Discount Factor	0.95	0.90	0.85	0.80	0.76	
Present value, FCFF	1,519	1031	996	961	928	
Present Value of FCFF in forecast horizon	5,435					
Present Value of FCFF in terminal period	23,756					
Estimated enterprise value	29,191					
NIBD	8,100					
Estimated market value of equity	21,091					
Number of Shares - millions	265					
Estimated share price on 24.09.2014	79.46					

EVA Model - in million of euros	2015 e	2016 e	2017 e	2018 e	2019 e	2020 e
NOPAT	1,515	1,546	1,577	1,608	1,640	1,657
Invested Capital, begging of the period	19,878	19,789	20,185	20,589	21,000	21,420
ROIC	7.62%	7.81%	7.81%	7.81%	7.81%	7.73%
WACC	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Cost of Capital	1,117	1,112	1,134	1,157	1,180	1,204
EVA	398	434	442	451	460	453
Discount Factor	0.94	0.88	0.85	0.80	0.76	
Present Value EVA	374	383	375	363	350	
Invested Capital, begging of the period	19,878					
Present Value of EVA in forecast horizon	1,846					
Present Value of EVA in terminal period	7,459					
Estimated enterpise value	29,190					
NIBD	8,100					
Estimated market value of equity	21,091					
Number of shares - millions	265					
Estimate share price on 24.09.2014	79.46					