Applied corporate finance assignment

Halim Mediouni Valerio Paolucci Andrea Cafarella Giacomo Treppiedi Aslanbek Apsov





I. Company overview









Pernod Ricard is a worldwide player in the alcoholic beverages market. It produces wines, spirits and some non-alcoholic drinks; it is the second world's largest wine and spirits organisation. The company has a strong global presence (**Risk element geographical diversification**). Pernod Ricard's portfolio allows it to always be in line with new trends while investing in the most promising segments and brands (**Risk element diversified product portfolio**).

Constellation Brands



Constellation Brands is an American company based in New York that produces, imports, markets and sells beer, wine and spirits. It operates mainly in the American continent (97.2% in the USA) and to a lesser/minor extent in Canada, Mexico, New Zealand and Italy. Constellation brands is the leading imported beer company in the US. market (they have 9 of 15 top selling imported beer brands, with Mondelo and Corona that are the first and the second most selling in the USA). They are also the leaders in high-end wine and spirits in the U.S. market. It provides its products to wholesale distributors, retailers, on-premise locations, and state alcohol beverage control agencies. Revenue from: beer (6B \$), wine (2B \$) and spirits (369M \$)

Monster Beverage







Monster Beverage is a multinational beverage company specializing in energy drinks (holding nearly 39% of the \$5.7 billion US energy drink market), soft drinks and alternative beverages including: Monster Energy, Relentless, Full Throttle, NOS, Mother, Burn, Predator, Reign and Forme.

Keurig Dr. Pepper Inc.



Keurig Dr Pepper, formerly Keurig Green Mountain (2014-2018) and originally Green Mountain Coffee Roasters (1981-2014) is a leading beverage company and the 8th largest food & beverage company in the U.S. It operates as a beverage company in the United States and internationally through four segments: Coffee Systems, Packaged Beverages, Beverage Concentrates, and Latin America Beverages.

Heineken



Heineken is a Dutch brewing company, the largest in the country and the second largest in the world, the company produces over 300 international and local beer brands

II. Corporate governance analysis

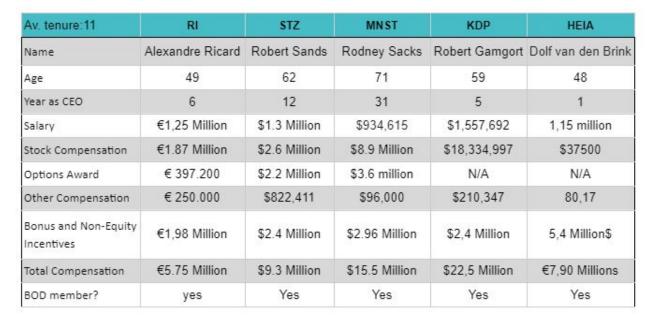
⇒ Shareholder value

*EPS TTM	RI	STZ	MNST	KDP	HEIA
Price (5 Yr change)	218.88%	51,80%	99.80%	-58,00%	36,88%
Basic EPS '21	\$5.93	9,14\$	\$2.89*	\$1.23*	\$2.32*
Payout Ratio % 5-Yr Avg	62%	24,67%	-	62,59%	35,71%
(ROIC - WACC)	-0,60%	2,63%	20,60%	-2,01%	2,15%













- All firms have an appropriate compensation policy designed to manage agency risk, reduce conflict of interests, and align the medium/long term performances with CEO compensation.
- Monster CEO has held his position for more than 30 years, but Rodney's total compensation (\$15.56M) is above average for companies of similar size in the US market.
- HEIA has hired the new CEO only one year ago, but he has a long experience within
- Alexandre Ricard has connections with the main shareholder (Ricard Family), this aspect may represent an issue for its independence.



Board of directors





BOD	RI	STZ	MNST	KDP	HEIA
Size	13	13	10	14	10
Insiders	7	10	9	7	4
CEOs (at other companies)	1	2	N/A	3	2
# Memb. link w/Company	8	-	-	-	2820
Shares owned by the chairman	0,0605% (€32.35M)	5,73% (\$2.38)	0.63% (3.337.575)	0.32% (161.7M)	0,0008% (4.379)
Average Age	53.5 yo	61.5 yo	68 yo	61 yo	54 yo
Average Tenure	3.3 yrs	3.1 yrs	7.0 yrs	3.3 yrs	3.2 yrs

- The firm's BODs are composed of a sufficient number of members to ensure a correct functioning and limit conflict of interest. (Average board size is 9.2 members)
- In 4 firms (STZ, RI, MNST, KDP), the CEO is also the chairman of the board. This aspect could create conflicts of interest. Only HEIA has a chairman that is not also the CEO.
- The director of the RI and STZ Board of Directors has family ties to the founding family, which can be harmful to the independence of the board.
- All 5 companies have an appropriate board member compensation policy aimed at: increasing the transparency towards shareholders and Supervisory Authorities, preventing conflicts of interest, and reducing exposure to reputational risks.



Corporate social responsibility

Corporate Social Responsibility (CSR) allows businesses to enact positive change. It's when companies choose to do what's right not only for their bottom line but also to build customer trust. Consumers feel that when they use a product of a socially responsible company, they are doing their part.

The companies analyzed place gender diversity at the center of their reputational policy, which can also be seen in the composition of the board of directors. With the exception of the MNST, KDP, the issue of cultural diversity is also central.

Memb. of BOD	RI	STZ	MNST	KDP	HEIA
# Women	46,15%	30,77%	20,00%	42,86%	20,00%
# Foreigners	30,77%	38,46%	0,00%	0,00%	30,00%

CSR key element	RI	STZ	MNST	KDP	HEIA
Anti-waste water programs	Х	Х	X	-	-
Responsible consumption P.	X	Х	-	Х	Х
Circular Making Programs	X	X	X	-	Х
Gender Equity programs	Х	Х	-	-	-
Disadvantaged Communities	Х	Х		Х	N/A
Pros Biodiversity Programs	Х	-	-	S. - .	-







Degiro's ESG quick score





Score (A=best score)	RI	STZ	MNST	KDP	HEIA
Acc. controversies	53,06% (B-)	53,24% (B-)	53,24% (B-)	53,24% (B-)	53,24% (B-)
Anti competition controversies	58,94% (B)	59,08% (B)	59,08% (B)	59,08% (B)	0,00% (D-)
Audit Committee expertise	74,48% (B+)	6,36% (D-)	74,39% (B+)	6,36% (D-)	74,39% (B+)
Audit Committee Independence	61,03% (B)	55,09% (B-)	55,09% (B-)	55,09% (B-)	19,87% (D+)
Board Background and Skills	50,00% (C+)	50,06% (B-)	50,06% (B-)	50,06% (B-)	50,00% (C+)
Board Culture Diversity	55,34% (B-)	47,00% (C+)	0,00% (D-)	83,89% (A)	46,61% (C+)
Board Functions Policy	83,22% (A-)	0,00% (D-)	59,64% (B)	0,00% (D-)	0,00% (D-)
Board Gender Diversity	61,61% (B)	84,28% (A)	11,20% (D)	67,68% (B+)	83,13% (A-)
Board Member Compensation	50,44% (B-)	50,42% (B-)	50,40% (B-)	50,41% (B-)	50,43% (B-)
Board Structure Policy	53,22% (B-)	50,16% (B-)	50,16% (B-)	50,16% (B-)	51,80% (B-)
CEO-Chairman Separation	0,00% (D-)	0,00% (D-)	0,00% (D-)	0,00% (D-)	56,62% (B-)
Governance	60,92% (B)	10,28% (D)	60,46% (B)	47,20% (C+)	64,35% (B)
Community (Social)	41,75% (C+)	87,36% (A)	33,51% (C)	68,68% (B+)	81,31% (A-)
Environment	83,13% (A-)	33,67% (C)	17,70% (D+)	74,66% (B+)	75,36% (A-)
ESG	70,27% (B+)	34,83% (C)	40,39% (C)	63,17% (B)	73,19% (B+)

As the tables show, KDP is the worst company in terms of CSR projects and ESG rating (Governance, Environment and Social). The company's low commitment in these terms could lead to brand deterioration and reduced business over time.

III. Stockholder analysis

In this section, we attempt to identify the marginal investors in an effort to understand whether the basic assumptions of the CAPM method are applicable.

% of free float	RI	STZ	MNST	KDP	HEIA
Type of Share	Common	Common	Common	Common	Common
Quantity	262M	195M	529M	1.42B	576M
Free Float	197M	N/A	376.88M	775.77M	237,87M
Institutional	42%	75,50%	65.1%	40,80%	82,90%
General Public	36.4%	9,30%	6.1%	11,10%	6,70%
Priv. Companies	13,30%	5,50%	7.9%	(41,8%) *VC/PE	-
Public Companies	7.6%	-	19.3%	5,30%	
Individual Insiders	0.8%	9,80%	1.5%	1,00%	0,70%
State or Government	-	0,04%	0.03%	0,02%	0,03%

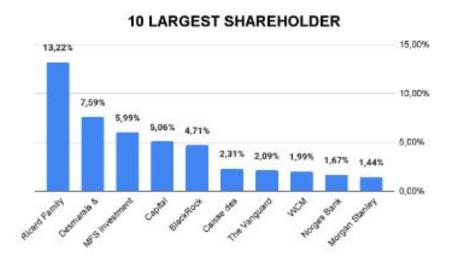
In the event that marginal investors are well diversified institutional investors, the assumption behind the CAPM is satisfied.





III. Stockholder analysis

Ri is the only company that has a shareholder base worthy of further analysis given its distinctiveness. The company of the founding family represents the major shareholder, with a risk participation of 13.22%.



The largest investors in our companies are long-term investors. Revenues, regular dividends, relative stability during recessionary economic cycles and the reputation of the management are the main reasons for the long term positioning of the major investors.





IV. Risk and return

The purpose of this section is to understand the risk profile of the companies, estimate risk parameters and the hurdle rates for the firms.

Calculating top-down betas

	RI	STZ	MNST	KDP	HEIA
Standard deviation ER	2,87%	4,40%	6,94%	7,29%	2,97%
Beta slope (5 years)	0,695	1,2498	0,9974	0,63	0,75
R squared	0,372	0,596	0,845	0,400	0,890
Alpha (Intercept)	0,00026	-0,001737	0,000168	-4,620833333	0,00239
Jensen's Alpha (Annualized)	0,87%	-0,15%	0,02%	N/A	0,19%
Reference index	MSCI	S&P 500	S&P 500	S&P 500	SP500

For all our companies we determined the Beta through a regression of the individual weekly prices against a specific market index for each company from 2016 to 2021.









Intercept

As shown in the table the RI has recorded the highest (positive) Jensen's alpha, in other terms RI's stock performed better than expected by the market. The only company that shows a negative J.A. is STZ in other terms it has underperformed the market.

→ Slope

RI, KDP and HEIA have shown a beta below the average Market risk (Beta = 1) that is not surprising looking at the average beta of the industries (soft and alcoholic). Low beta of these companies can be explained by the stability of their businesses. STZ and MNST have shown higher values of beta,

⇒ <u>R2</u>

After analyzing the numbers, we notice that the beverage industry is not materially affected by the market-related risk (with the exception of HEIA and MNST). It should be noted that the regression R squares for RI, STZ and KDP are relatively low compared with the other firms, which implies that the movements of the price of these companies are more independent from the market than other companies.

COST OF CAPITAL	RI (€)	STZ (\$)	MNST (\$)	KDP (\$)	HEIA (€)
Risk Free Rate	0,25%	0,20%	0,20%	0,20%	0,25%
Rating	Baa1	Baa3	N/A	Baa2	Baa1
Average risk Free Rate	0,60%	0,50%	0,60%	0,50%	0,60%
Interest expenses	277 millions	386 millions	7 millions	597 millions	497 millions
Tax rate	28%	27%	23,60%	27%	31,90%
Credit spread	0,61%	N/A	NA	NA	NA
Cost of debt (after taxes)	2,14%	3,60%	3,20%	4,20%	3,76%
Share price	212,7	235\$	92,33\$	35,62\$	95,66€
Dividend growth	9,75%	N/A	NA	13%	NA
Cost of Equity	7.5%	7,60%	7,60%	8,8%	6,90%
Cost of Capital	6,80%	6,75%	6,75%	7,75%	6%

Note: The credit rating for MNST is synthetic as the company does not have an outstanding credit rating from a certified rating agency at this time.







Bottom up beta





	RI	STZ	MNST	KDP	HEIA
D/E ratio	64%	48,61%	21%	108%	1,09%
Marginal Tax Rate	28%	27%	23,60%	27%	30%
Company levered β	0,73	1,27	0,672	0,47	0,84
Company unlevered β	0,70	1,07	0,653	0,39	1,28

By viewing the industry average levered betas and unlevered betas provided by damodaran, we found that the levered and unlevered risk values of HEIA, STZ are higher than the industry averages values. In addition, STZ and HEIA are the companies where leverage has the largest impact on risk. The other companies have relatively low levered and unlevered beta compared to industry averages.



Cost of capital

- HEIA has the lowest WACC value (only 3,95) in comparison with the other firms (that have a WACC ranging from 6,75% to 7,75%).
- Also in this case KDP has the highest WACC. Looking at its capital structure the higher capital cost is due mainly to the greater return that bondholders require.







KEY TAKEAWAYS

- A rating is a judgement given by a rating agency on whether or not a company is able to pay its debts. In this case, STZ has the worst rating (Baa3), compared to the other companies. Nevertheless, it remains a relatively safe investment in which institutional investors (such as large investment banks) can also direct their capital.
- KDP and HEIA have the highest interest expenses (597 M / 497 M) compared to the companies analysed. On the other hand, MNST has the lowest interest expenses: it is just 5M.
- The cost of debt after taxes, which is the company's cost of debt after taking taxes into account, is higher for KDP (4,20%) while STZ. MNST and HEIA have quite similar values between 3.20% and 3.76%.
- RI has the lowest cost of debt of all the compared companies, which stands at only 2.14%. In other terms lenders consider the french spirits giant as a less risky borrower.

Cost of equity

- According to Revenues breakdown (some assumptions) RI shows an ERP of 4,39. The analysis is conducted in euro so we've taken in consideration the German risk free rate of 0,20%. Using the RI's bottom up beta that we've we've calculated a cost of equity of 7.50%
- In our set of companies the company KDP has the highest COE. HEIA instead has the lowest one.

V. Measuring investment returns

- MNST has a consistent spread return compared to other companies. MNST has also the most robust ROE despite it having the lowest leverage.
- STZ, MNST, HEIA have a ROIC greater than the WACC, then value is being created as the firm invests in profitable projects.
- STZ has a ROE's value that is less than COE; this means that the management is not creating value. KDP and HEIA also have a negative value, but it is significantly more negative than STZ's return spread. In this case, the management is consistently reducing value.
- KDP is the only firm that has a negative EVA. Negative value of EVA depends on the high amount of invested capital.
- Despite the pandemic effects in terms of reduction of sales
 RI increased its cash flows per share.

	RI (€)	STZ (\$)	MNST (\$)	KDP (\$)	HEIA (€)
EBIT (millions)	2.423,00	2.888,00	1.787,00	2.789,00	2.019,00
Net Income	1.305,00	1.998,00	1,41	1.325,00	2,43
Tax Rate	28%	27%	23,60%	27%	32,80%
BV of debt (Average 2 years)	9.260	11.863	19,83	14.854	16.258
BV of equity (Average 2 years)	14.400	27.105	4.668	23.543	1.477
Cash (Average 2 years)	2000	461	989	178	2911
ROE					
ROE	9,08%	7,37%	28,10%	5,63%	7,81%
Cost of Equity	7,50%	7,60%	7,50%	8,80%	6,80%
ROE - COE	1,58%	-0,23%	20,60%	-3,17%	-3,04%
ROA					
ROA	4,16%	4,72%	24.83%	2,66%	2,59%
ROIC					
After-tax ROIC	6,20%	9,38%	24,20%	5,74%	6,10%
WACC	6,80%	6,75%	7,50%	7,75%	3,95%
Return (ROIC - WACC)	-0,60%	2,63%	16,70%	-2,01%	2,15%
NOPAT	1744,56	2108,24	1376	2143,28	1.464,00
Invested Capital	24.129	22.470	5.674,83	37.317	35.139
EVA (million)	103,79	591,515	950,387	-748,78	76,01
FCFF 2020	830	1833	1315	1802	2039
FCFF 2021	1628	1981	N/A	2232	N/A
DELTA FCFF	798	128	N/A	430	N/A
FCF per share	7,84	5,44	2,48	1,57	3,37
Capex	370	864,6	94	694	1640
Capex delta 2yrs	+28	158	-18	121	461

VI. Capital structure choices and optimal capital structure

	RI	STZ	MNST	KDP	HEIA
Tax Benefit					
Marginal Tax Rate	28%	27%	23,60%	27%	30%
EBITDA (billions)	\$2,65	\$3,50	\$1,84	\$3,90	\$4,29
Firm Value (billions)	\$62,63	\$54,65	\$46,35	\$64,21	\$70,01
EBITDA/Value	4,23%	6,40%	3,97%	6,07%	6,13%
Discipline					
Institutional Holdings	1,26%	81,18%	64,44%	47,81%	0,17%
(industry average)	44,43%	44,43%	25,32%	25,32%	44,43%
Bankruptcy Cost					
Revenue Volatility	29.10%	4,90%	13,20%	7,60%	8,30%
Credit Rating	BBB+	BBB	N/A	Baa2/P2	Baa1

EBITDA (earnings before interests, taxes, depreciation and amortization) is used to measure the company's income without taking into account the costs of interest, taxes, depreciation or amortisation: it expresses the real result of the company's business

	RI	STZ	MNST	KDP	HEIA
Current Debt Ratio	53,11%	48,61%	17,62%	52,13%	66,93%
Current WACC	6,80%	6,75%	6,75%	7,75%	6%
Optimal Capital Mix	D (40%) E (60%)	D (60%) E (40%)	D (10%) E (90%)	D (50%) E (50%)	D (50%) E (50%)
Minimum WACC	5,36%	5,20%	7,16%	6,50%	5,33%

In principle, the higher the EBITDA/Value ratio for an entity, the more capacity the company has to take on debt.

- As we expected, the STZ has the highest EBITDA/Value Ratio and also the highest Debt ratio.
- Following this principle our analysis has shown that MNST has the lowest debt ratio
- As shown previously the marginal investors in our set of companies are diversified institutional, we do not foresee concrete disciplinary issues associated with increasing debt.
- STZ has the nearest current D ratio to its optimal value.
- RI's Debt current ratio is higher than the optimal one.

VIII. Dividend policy

	RI	STZ	MNST	KDP	HEIA.AS
Dividends LEY	€ 704,00	N/A	0€		€ 583,00
Payout ratio 2020/21	62%	80,53%	0%	55.79%	35,71%
Payout Ratio % 5-Yr Avg	83%	49,72%	0%	35,17%	51,28%
Av. Payout Ratio (Sector)	41,58%	41,58%	74.19%	74.19%	41,58%
Dividend Yield	1,5%/yr	1,33%/yr	0%	2.10%	1,07%
Latest Dividend	€ 1,79	\$0,76	0\$	\$ 0.1875	1,05%
Dividend paid (av. 5yr)	€ 1,70	3,04\$	0\$	\$ 0.63	€ 0,90
Cash paid as % of FCFE	45%	N/A	47%		
1 Year Div. Growth Rate (TTM)	17.29%	7,85%	0%	13%	-5,77%
Div. Growth Rate (Avg. 5 Year)	45.71%	15,12%	0%		
FCFF 2020/2021 (Millions)	1.628,00	1.961,00	1.315,00	2.232,00	1.635,00
Buybacks (Avg. 5 Year)	142,70	569,54	1004,04	N/A	27,75

- All the companies pay regular dividends with the exception of MNST.
- As shown in the previous table 5 years payout ratio, we can see that RI has the highest one, which means RI distributes 83% of its earnings as dividends to its shareholders.
- MNST returns value to shareholders only through its significant buyback programs.
- Our analysis shows that STZ and RI return value to shareholders via both stock buybacks and dividends, KDP via dividends only and MNST via buybacks only.
- STZ pays dividends every 4 months (amounting to \$0.76 per share per month) to their stockholders.