UNIVERSITY
NOVA
INFORMATION
MANAGEMENT

Bachelor's degree in Information Management

Financial Analysis and Management Control

Company Financial Analysis

BioCosmetics

Luis Silvano (r20201479)

Pedro Sousa (r20201611)

Mónica Ventura (r20201603)

Sohan Rajput (r20201621)

Matilde Teles (r20201527)

December 2021/2022

Index

List of Tables

Table Index

Map Index

Graph Index

Introduction

BioCosmetics is a company engaged in natural organic cosmetics, founded in 2012 by John Doe and Jane Doe. The main objective is promoting a consumer's healthy lifestyle with their services and products. The company belongs to the tertiary sector, its purpose consisted by offering to consumers natural and organic products as well as online services (skin and hair online consults, with BioCosmetics experts) where clients are guided by professional staff, which principal goal is recommending the right products that better suits each client needs.

With this report, we will conclude if we should accept the BioCosmetics job offer, we are going to analyse the ratios from the market of the (U.S) companies and we will do the analysis of the BioCosmetics in the market, observing the statements of their balance sheet, income statement and their ratios.

Observing Germany Beauty and Personal Care Products market, between 2016 and 2026 it's verified a compound annual growth rate of (4.8%) regarding the COVID-19 impact and besides, Germany have the highest value of Cosmetic and Personal Care in Europe in both years (2010 and 2019). In 2019 with (14.05 EURO millions) and in 2010 with (11,43 EURO millions). The concurrence of BioCosmetics it will be taken by Art Deco, Zoeva and Sans Soucis. Their speciality is facial care, sustainable products.

1. Common Size Statements

Balance Sheet ($000)	2017		2018		2019	
Cash	1512,000	0,068	1176,000	0,036	1097,000	0,023
Accounts receivable	6237,000	0,281	10271,000	0,312	15919,000	0,334
Inventories	4536,000	0,204	7838,000	0,238	12570,000	0,264
Prepaid expenses	3780,000	0,170	5140,000	0,156	6840,000	0,143
Total current assets	16065,000	0,723	24425,000	0,742	36426,000	0,764
Gross fixed assets	6300,000	0,284	9080,000	0,276	12918,000	0,271
Accumulated depreciation	2050,000	0,092	2958,000	0,090	4250,000	0,089
Net fixed assets	4250,000	0,191	6122,000	0,186	8668,000	0,182
Intangible assets	567,000	0,026	588,000	0,018	605,000	0,013
All other noncurrent assets	1323,000	0,060	1790,000	0,054	1985,000	0,042
Total Assets	**22205,000**	**1,000**	**32925,000**	**1,000**	47684,000	**1,000**

Notes payable	1205,000	0,054	3243,000	0,098	6323,000	0,133
Current maturities--L.T.D.	1008,000	0,045	1460,000	0,044	2246,000	0,047
Accounts payable	3570,000	0,161	5958,000	0,181	9955,000	0,209
Income taxes payable	84,000	0,004	336,000	0,010	336,000	0,007
Accruals	1995,000	0,090	3360,000	0,102	5016,000	0,105
Total current liabilities	7862,000	0,354	14357,000	0,436	23876,000	0,501
Long-term debt	2940,000	0,132	6100,000	0,185	9350,000	0,196
Total Liabilities	**10802,000**	**0,486**	**20457,000**	**0,621**	**33226,000**	**0,697**
Common stock	3360,000	0,151	3360,000	0,102	3360,000	0,070
Paid-in capital	2100,000	0,095	2100,000	0,064	2100,000	0,044
Retained earnings	5943,000	0,268	7008,000	0,213	8998,000	0,189
Total stockholders' equity	**11403,000**	**0,514**	**12468,000**	**0,379**	**14458,000**	**0,303**
Total liabilities & equity	**22205,000**	**1,000**	**32925,000**	**1,000**	**47684,000**	**1,000**

Market price per common share	**17,250**	**...**	**17,710**	…	**18,430**	…

Table 1 : Income Statement (BiocCosmetics)

Income Statement ($000)	2017		2018		2019	
Sales revenue	**50400,000**	**100%**	**65100,000**	**100%**	**81312,000**	**100%**
Cost of goods sold	**35431,000**	**70,30%**	**45872,000**	**70,46%**	**57098,000**	**70,22%**
Gross profit	14969,000	29,70%	19228,000	29,54%	24214,000	29,78%
. Gen. & Adm. and Selling	12331,000	24,47%	15099,000	23,19%	17296,000	21,27%
. Depreciation	630,000	1,25%	908,000	1,39%	1292,000	1,59%
Total operating expense	12961,000	25,72%	16007,000	24,59%	18588,000	22,86%
Operating income (EBIT)	**2008,000**	**3,98%**	**3221,000**	**4,95%**	**5626,000**	**6,92%**
Interest expense	335,000	0,66%	756,000	1,16%	1343,000	1,65%
Earnings before taxes (EBT)	**1673,000**	**3,32%**	**2465,000**	**3,79%**	**4283,000**	**5,27%**
Income taxes (34%)	569,000	1,13%	838,000	1,29%	1456,000	1,79%
Net income	**1104,000**	**2,19%**	**1627,000**	**2,50%**	**2827,000**	**3,48%**

Dividends paid	314,000	…	562,000	…	837,000	…

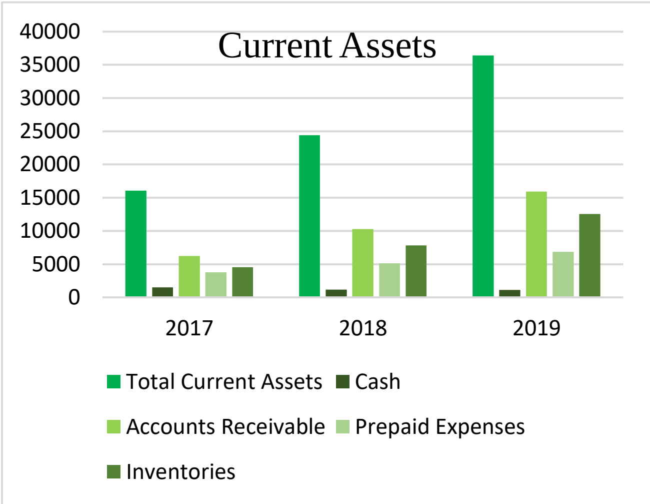
2. Ratio Calculations Biocosmetics

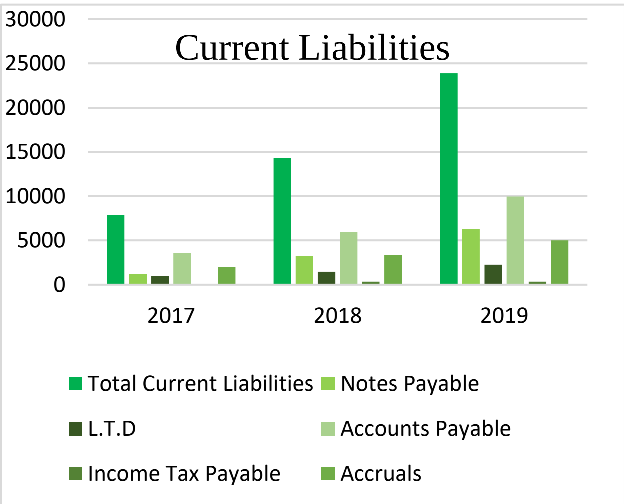
2.1 Liquidity Ratios

Current Ratio = Current Assets/Current Liabilities

CR_{2017} = 16065/7862 = 2.04 | CR_{2018} = 24425/14357 = 1.7 | CR_{2019} = 36426/23876 = 1.53

- Observing the Current Ratio from (2017, 2018 and 2019) we conclude on Current Assets of each ratio, who influences always more is "Accounts Receivable and Inventories". In the year 2017, "Accounts Receivable and Inventories" influenced (48%), in 2018 was (55%) and for last, in 2019 was (59%).



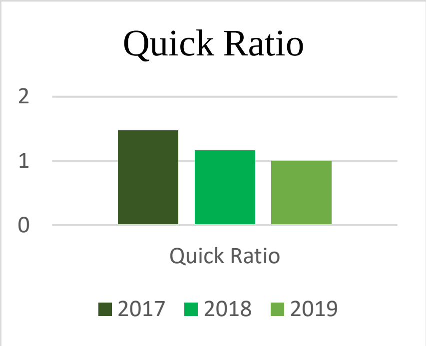


- Current Liabilities, who haves a bigger percentage is always "Accounts Payable and Accruals". In the year (2017), "Accounts Payable and Accruals" influenced (25%), in (2018) was (28%) and for last, in (2019) was (32%). **In three years, they all have adequate ratios because they are all between (1.5 and 4) in their final values.**

Quick Ratio = (Current Assets-Inventory)/Current Liabilities

QR_{2017} = (16065-4536) /7862 = 1.47 | QR_{2018} = (24425-7838) /14357 = 1.16 |

QR_{2019} = (36426-12570) /23876 = 1.0



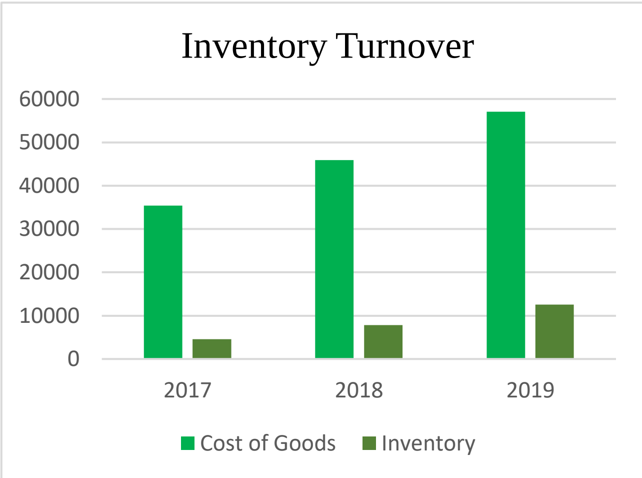
- Observing the Quick Ratio "it is the least liquid current asset" over the years (2017 to 2019) we conclude the ratio, is decreasing. **The 3 Acid Test Ratios are good ratios, because they are between (1 and 2) in their final values. So, we can conclude BioCosmetics does not have an unacceptable Quick Ratios.**

2.2 *Activity Ratios*

Inventory Turnover = Cost of Goods Sold/Inventory (times)

ITR_{2017} = 35431/4536 = 7.81 | ITR_{2018} = 45872/7838 = 5.85 | ITR_{2019} = 57098/12570 = 4.54

- Observing the Inventory Turnover, we can assume the ratios are decreasing over the years (2017 to 2019)**, so is less inventory moving through our firm. So, BioCosmetics does not have problems as (reduce inventory, stock outages, or not enough variety of merchandise and lower our overall revenues).**



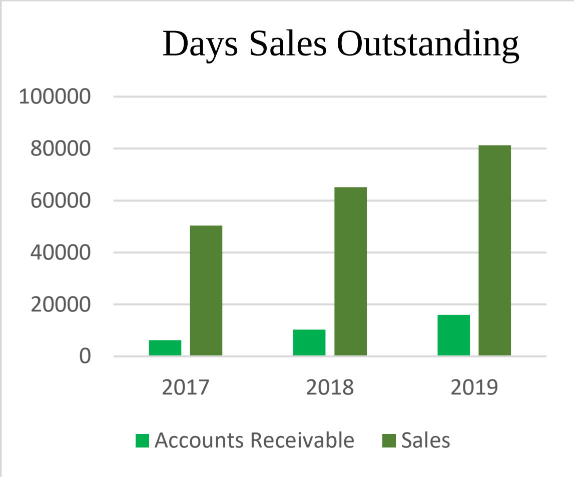
*Days of Inventory Turnover = 365/IT (days)

ITR_{2017} = 46.7 | ITR_{2018} = 62.4 | ITR_{2019} = 80.4

Days Sales Outstanding = Accounts Receivable/(Sales/365) (days)

DSO_{2017} = 6237/ (50400/360) = 45.17 | DSO_{2018} = 10271/ (65100/365) = 57.59 |

DSO_{2019} = 15919/ (81312/365) = 71.46

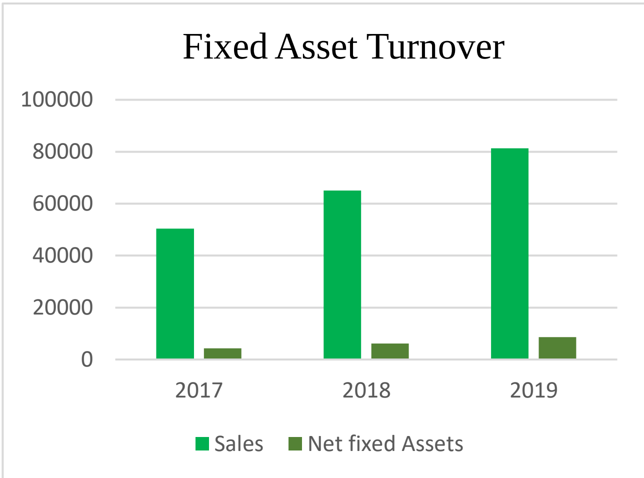


- Observing Days Sales Outstanding, we understand over the years (2017 to 2019) the ratios of Days Sales Outstanding is being higher, means that haves a huge financing costs and bad debt expenses. **Concluding this company over the years, is taking a long time to collect their revenues**.

Fixed Asset Turnover = Sales/Net Property, Plant & Equipment (times)

FAT_{2017} = 50400/4250 = 11.86 | FAT_{2018} = 65100/6122 = 10.63 | FAT_{2019} = 81312/8668 = 9.38

- Observing Fixed Asset Turnover, we realize over the years (2017 to 2019) the Fixed Asset Turnover ratios are decreasing, this means **the company is not doing well generating high sales with limited capital invested.**

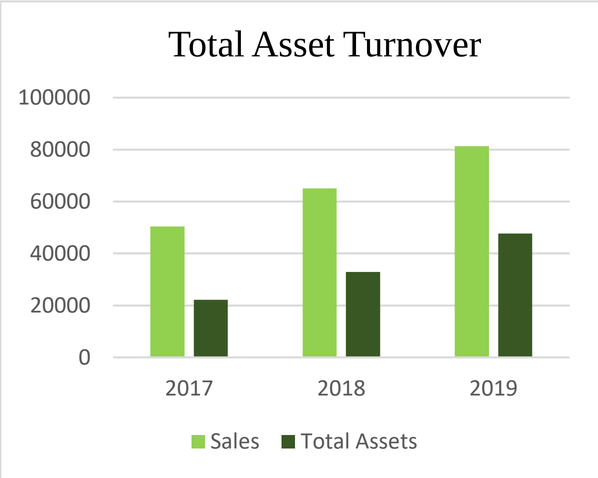


*Days of Inventory Turnover = 365/IT (days)

FAT_{2017} = 30.8 | FAT_{2018} = 34.3 | FAT_{2019} = 38.9

Total Asset Turnover = Sales/Total Assets (times)

TAT_{2017} = 50400/22205 = 2.27 | TAT_{2018} = 65100/32925 = 1.98 | TAT_{2019} = 81312/47684 = 1.7



- Observing Total Asset Turnover ratios, we conclude over the years (2017 to 2019) the Total Asset Turnover ratios are decreasing, **so that means the company is generating low levels of sale on investments in assets.**

*Days of Inventory Turnover = 365/IT (days)

TAT_{2017} = 160.8 | TAT_{2018} = 184.3 | TAT_{2019} = 214.7

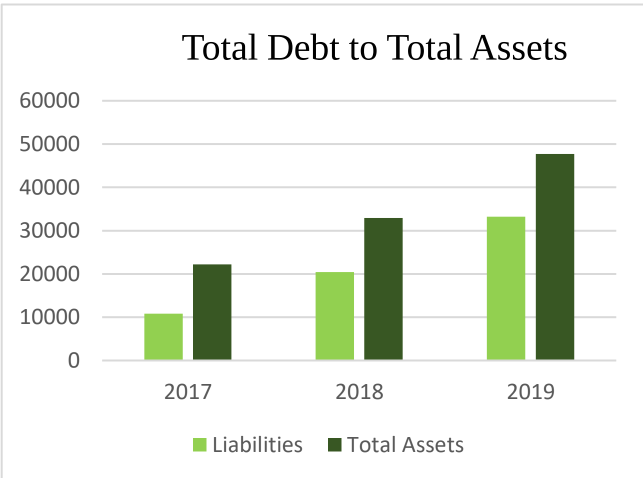
2.3 Debt Management Ratios

Total Debt to Total Assets = Liabilities/Assets (%)

TD/TA_{2017} = 10802/22205 = 0.49 | TD/TA_{2018} = 20457/32925 = 0.62 |

TD/TA_{2019} = 33226/47684 = 0.7

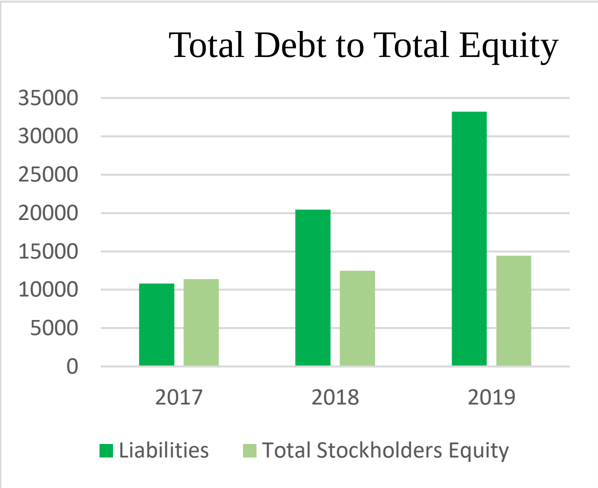
- Observing Total Debt to Total Assets ratios, we understand over the years (2017 to 2019) the ratios Total Debt to Total Assets are increasing, **so that means the company is increasing their risk in financing mix.**



Total Debt to Total Equity = Liabilities/Owners' Equity (%)

TD/OE_{2017} = 10802/11403 = 0.95 | TD/OE_{2018} = 20457/12468 = 1.64 |

TD/OE_{2019} = 33226/14458 = 2.3

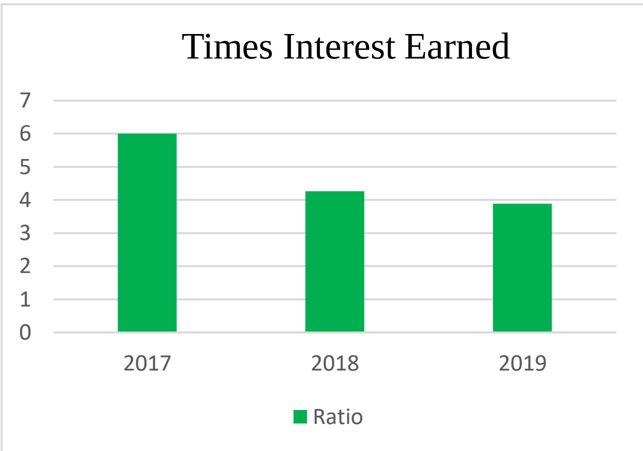


- Observing Total Debt to Total Equity, we understand over the years (2017 to 2019) the Total Debt to Total Equity ratios are increasing, **so that means the company is increasing their risk, having account the Equity.**
- We can observe in the year (2017) the Liabilities and Total Stockholders' Equity, had almost same values, that means in that year the company didn't risk.
- About the year (2018 and 2019) we could see the values of Liabilities and Total Stockholders' Equity are not so similar this means, in that both years the BioCosmetics risked.

Times Interest Earned = EBIT/Interest (times)

TIE_{2017} = 2008/335 = 6 | TIE_{2018} = 3221/756 = 4.26 | TIE_{2019} = 5626/1343 = 3.89

- Observing Times Interest Earned, we realize over the years (2017 to 2019) the Times Interest Earned ratios are decreasing, but they are all acceptable ratios because they are all above from (2) in their end values, **means the company is always afford paying their interest payments, so will not be forced to bankruptcy.**

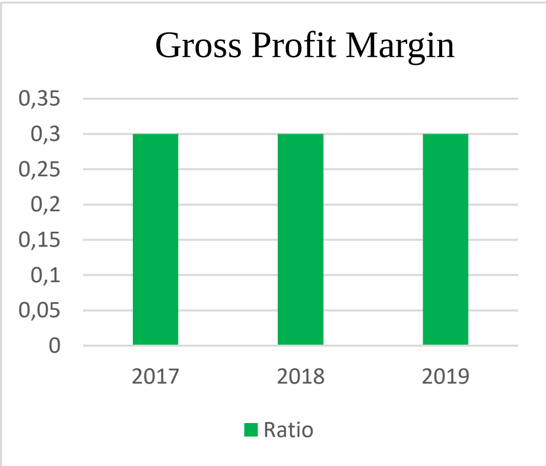


2.4 Profitability Ratios

Gross Profit Margin = (Sales-Cost of Goods Sold)/Sales (%)

GPM_{2017} = (50400-35431) /50400 = 0.3 | GPM_{2018} = (65100-45872) /65100 = 0.3 |

GPM_{2019} = (81312-57098) /81323 = 0.3

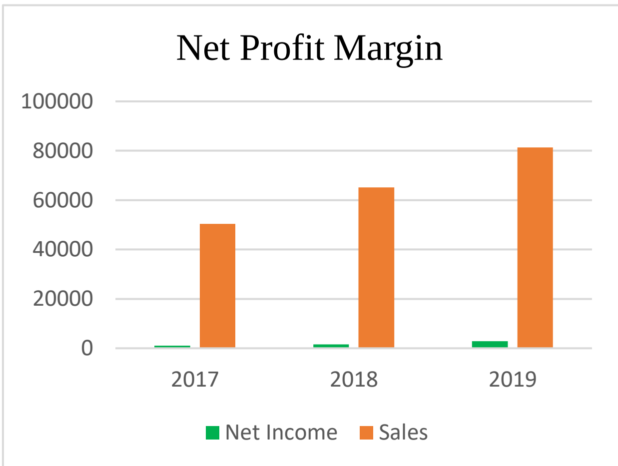


- Observing Gross Profit Margin, we understand over the years (2017 to 2019) the Gross Profit Margin ratios are constant, this means BioCosmetics had the same percentage of profit margin on theirr inventory belonging the years. **It is positive for BioCosmetics, but in long term it could be problem if this ratio starts decreasing.**

Net Profit Margin = Net Income/Sales (%)

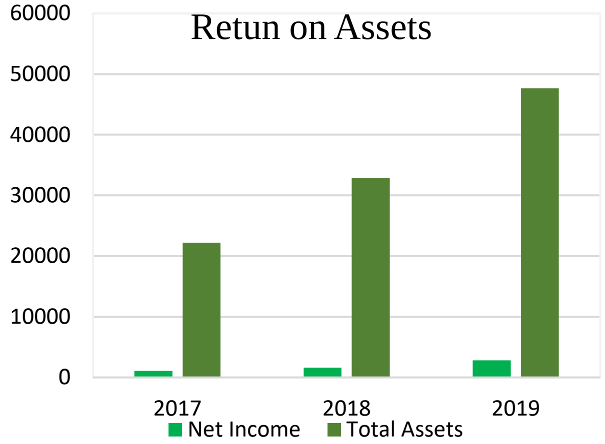
NPM_{2017} = 1104/50400 = 0.02 | NPM_{2018} = 1627/65100 = 0.02 | NPM_{2019} = 2827/81312 = 0.03

- Observing Net Profit Margin, we understand in the years (2017 and 2018) both ratios are equal to (0.02%) and in the year (2019) was (0.03%). The ratios are small, because in each year we have a big influence from Sales, with high values. **So, that means the company generates less for their shareholders.**



Return on Assets = Net Income/Total Assets (%)

ROA_{2017} = 1104/22205 = 0.05 | ROA_{2018} = 1627/ 32925 = 0.05 | ROA_{2019} = 2827/47684 = 0.06

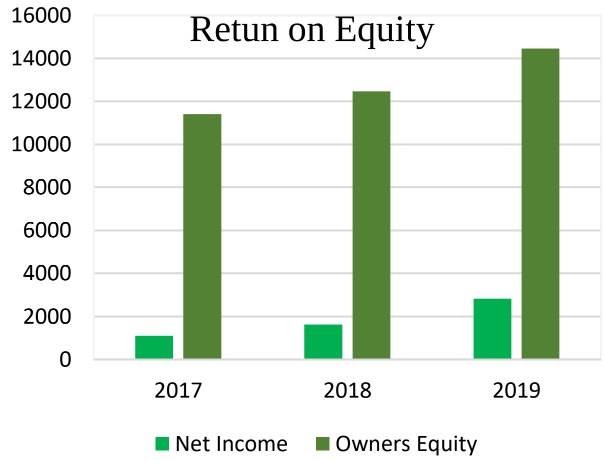


- Observing Return on Assets, we understand in the years (2017 and 2018) both ratios are equal to (0.05%) and in the year (2019) was (0.06%). All Return on Assets ratios, they have a small value, because in all years the Total Assets is huge. **So, this means BioCosmetics haves a low profit, from their asset's investments.**

Return on Equity = Net Income/Owners' Equity (%)

ROE_{2017} = 1104/11403 = 0.1 | ROE_{2018} = 1627/ 12468 = 0.13 | ROE_{2019} = 2827/14458 = 0.2

- Observing Return on Equity, we conclude over the years (2017, to 2019) the Return on Equity ratios are increasing, but they are increasing with low percentages. **So, this means the shareholders contributed to BioCosmetics. The company is making a low profit by the shareholders investments.**

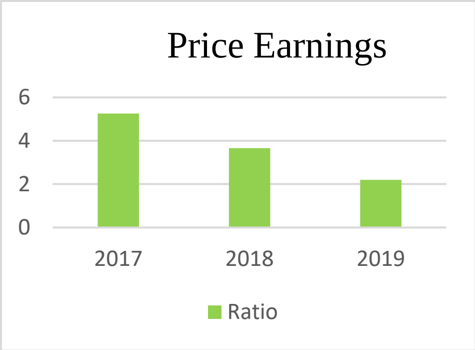


2.5 Market Values Ratios

Price/Earnings Ratio = Market Price per Share/EPS

PE_{2017} = 17.25/ (1104000/336000) = 5.25 | PE_{2018} = 17.71/ (1627000/336000) = 3.66

PE_{2019} = 18.43/ (2827000/336000) = 2.19



- Observing Price Earnings, we realize over the years (2017 to 2019) the Price Earnings ratios are decreasing, **so we can conclude belonging the years the company is decreasing their money per share, is losing their value in market per share.**

Market/Book Ratio = Market Price per Share/Book Value per Share

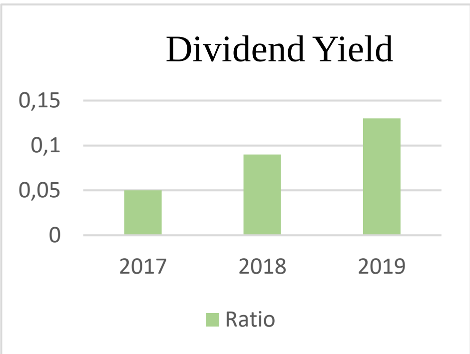
M/B_{2017} = 17.25/10= 1.25 | M/B_{2018} = 17.71/10 = 1.771 | M/B_{2019} = 18.43/10 =1.843

- Observing Market Book Ratio, we realize over the years (2017 to 2019) the Market Book ratios are increasing, but have's small values. **This means the value of the BioCosmetics is cheaper, is not necessarily good invest in the company.**

Dividend Yield = Dividend per Share/Market Price per Share (%)

DY_{2017} = (314000/336000)/17.25 = 0.054 | DY_{2018} = (562000/336000)/17.71 = 0.094

DY_{2019} = (837000/336000)/18.43 = 0.135



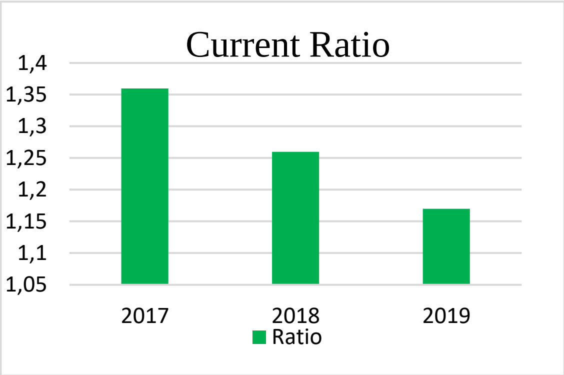
- Observing Dividend Yield, we conclude over the years (2017 to 2019) the Dividend Yield ratios are increasing, it is a not high percentage. That means the company is paying their dividends.

3. Ratios of the Market: "Perfumes, Cosmetics and Other Toilet Preparations: average industry financial ratios U.S. listed companies"

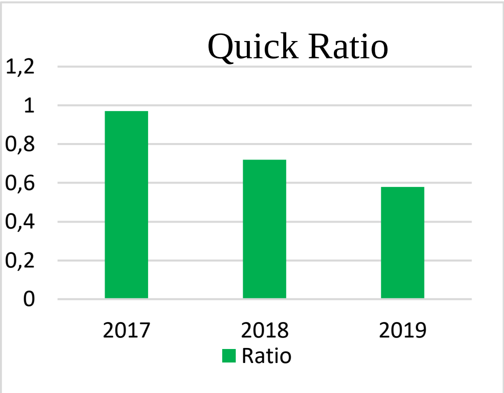
3.1 Liquidity Ratios

CR_{2017} = 1.36 CR_{2018} = 1.26 **CR2019 = 1.17**

- Observing the Current Ratio over the years (2017 to 2019) we conclude the ratios are decreasing and the values from Current Ratio are lower than (1.5). So, this means any of current asset's ratios, is not acceptable.



QR_{2017} = 0.97 QR_{2018} = 0.72 **QR2019 = 0.58**

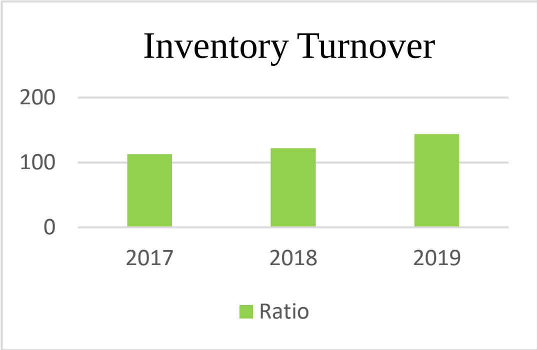


- Observing the Quick Ratio over the years (2017 until 2019) we conclude the market haves a decreasing Quick Ratios. **The 3 Acid Test Ratios are not acceptable ratios, because they are not between (1 and 2) in their final values.**

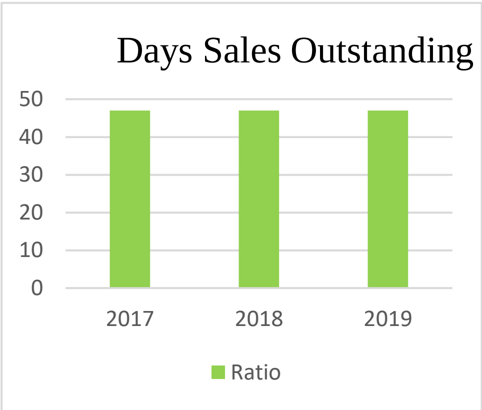
3.2 Activity (days) Ratios

ITR_{2017} = 113 ITR_{2018} = 122 **ITR2019 = 144**

- Observing the Inventory Turnover ratios, we realize they are increasing over the years (2017 to 2019), **we can conclude the market haves a huge inventory moving in U.S companies.**



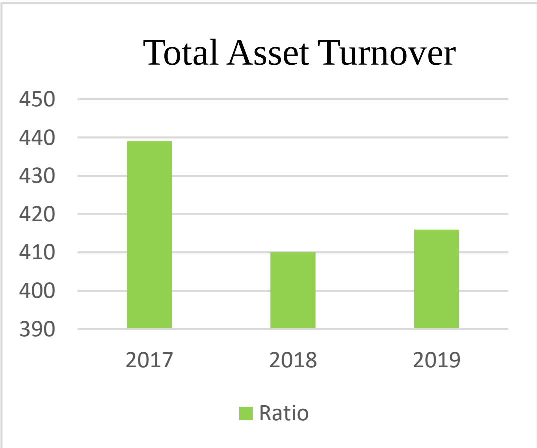
DSO_{2017} = 47 DSO_{2018} = 47 **DSO2019 = 47**



- Observing the Days Sales Outstanding ratio, we realize they are equal over the years (2017 to 2019), means that haves always the same financing costs and bad debt expenses. **Concluding in these companies over the years, they are taking the same time to collect their revenues**.

TAT_{2017} = 439 TAT_{2018} = 410 **TAT2019 = 416**

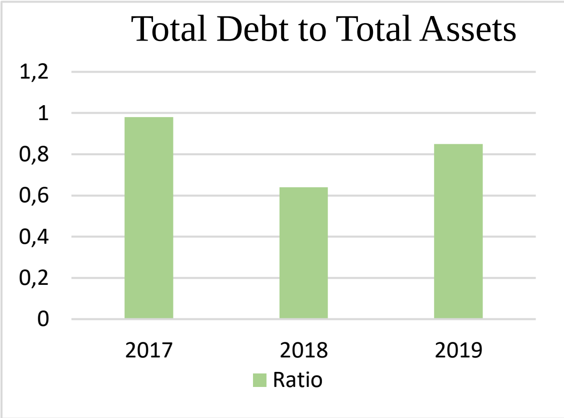
- Observing Total Asset Turnover, we conclude in the years (2017 and 2018) the ratio Total Asset Turnover is decreasing, **so that means the companies are generating low levels of sale on investments in assets,** but in the year (2018 to 2019) it occurred an increase on ratio, the companies **generated a higher level of sale on investments in assets**.



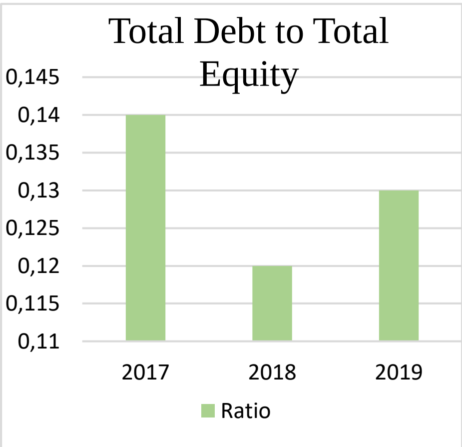
3.3 Debt Management Ratios

$TD/TA_{2017} = 0.98$ $TD/TA_{2018} = 0.64$ **TA/TD2019 = 0.85**

- Observing Total Debt to Total Assets, we realize in the years (2017 to 2018) we had a decrease in Total Debt to Total Assets**, so the market reduced their risk in financing mix**, but in the years (2018 to 2019) the ratio Total Debt to Total Assets increased, **so that means the companies are increasing their risk in financing mix.**



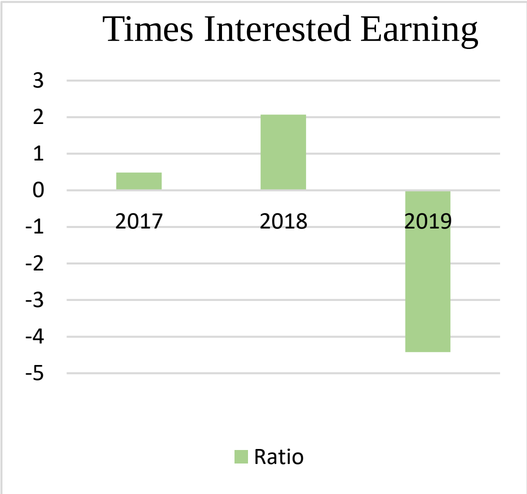
$TD/OE_{2017} = 0.14$ $TD/OE_{2018} = 0.12$ **TD/OE2019 = 0.13**



- Observing Total Debt to Total Equity, we realize in the years (2017 to 2018) the Total Debt to Total Equity ratio is decreasing, so in those years **the company reduced their risk having account Equity,** but in the years (2018 to 2019) the ratio increased, **so that means the company increased their risk, having account the Equity.**

TIE_{2017} = 0.49 TIE_{2018} = 2.07 **TIE2019 = -4.42**

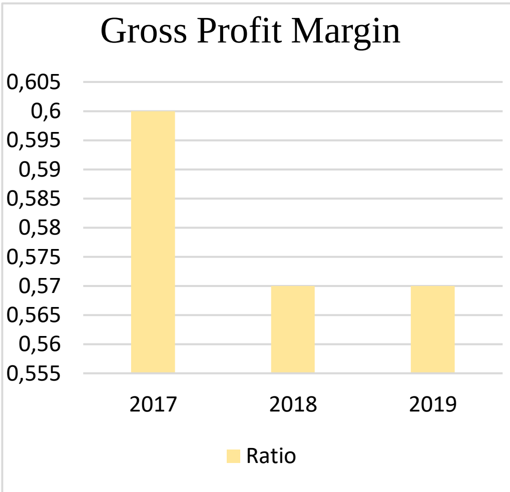
- Observing Times Interest Earned, we understand in the years (2017 to 2018) the Times Interest Earned ratio increased, **means the company is always afford paying their interest payments**, but in the years (2018 to 2019) the Times Interest Earned ratio decreased, **means the market is not always afford paying their interest payments, so will be forced to bankruptcy. We also conclude the ratios of the years (2017 and 2019) are less than (2). So, these ratios are not acceptable.**



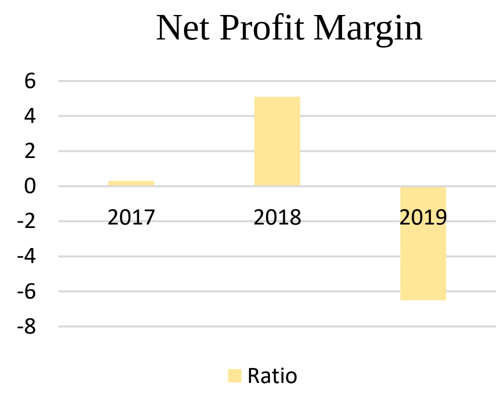
3.4 Profitability Ratios

GPM_{2017} = 60.4% GPM_{2018} = 57% **GPM2019 = 57.8%**

- Observing Gross Profit Margin, we realize in the years (2017 to 2018) the Gross Profit Margin ratio is decreasing**, less profit margin on market inventory belonging the years**, but in the years (2018 to 2019) we had an increasing (0,08%) in Gross Profit Margin ratio, this means the **market had a higher profit margin on inventory between these two last years.**



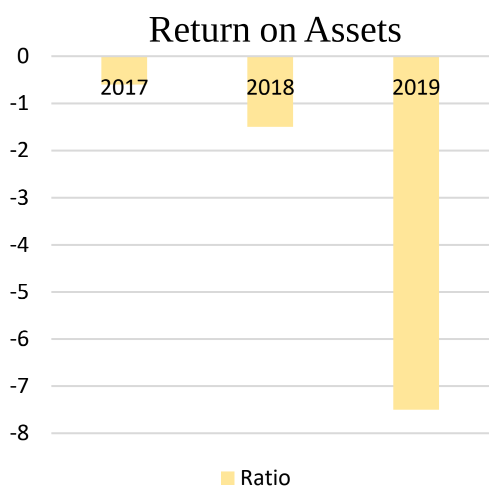
NPM_{2017} = 0.3% NPM_{2018} = 5.1% **NPM2019 = -6.5%**



• Observing Net Profit Margin, we conclude in the years (2017 to 2018) the ratio increased (4.8%) this means in those years, we had an increase on generating for shareholders, but in the years (2018 to 2019) the ratio decreased (11,6%) we had a huge decrease generating for shareholders.

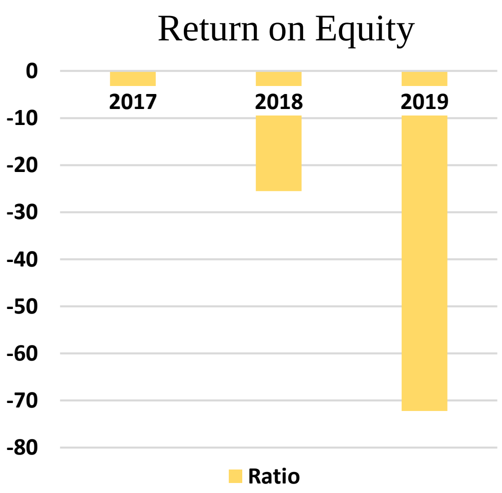
ROA_{2017} = -0.6% ROA_{2018} = 1.5% **ROA2019 = -7.5%**

- Observing Return on Assets, we conclude in the years (2017 to 2019) we had a decrease (6.9%), so this **means the companies is not having profit from assets invested, only more costs.**



ROE_{2017} = -3.9% ROE_{2018} = -25.5% **ROE2019 = -72.2%**

- Observing Return on Equity, we realize over the years (2017 to 2019) the Return on Equity ratio is decreasing. **So, this means the shareholders are not contributing to market of the companies U.S, they are not making much profit by the shareholders investments.**



4. Conclusion from Biocosmetics and Market

- Observing the ratios from the company BioCosmetics, we can conclude haves adequate current ratios and quick ratios, haves less inventory moving through the firm, over the years, is taking a long time to collect their revenues, is not doing well generating high sales with limited capital invested, is generating low levels of sale on investments in assets, is increasing their risk in financing mix, is always afford paying their interest payments, so will not be forced to bankruptcy, had the same profit margin on inventory, generates less for their shareholders, is having a low profit from our asset's investments, belonging the years the company is decreasing their money per share, is losing their value in market per share and is not necessarily good invest in the company.

- Observing the ratios of the Market from list of companies (U.S.) we can conclude, from current and Acid ratios, we don´t have acceptable ratios, the market haves a huge inventory moving in U.S companies, haves always the same financing costs and bad debt expenses. Concluding this company over the years, is taking the same time to collect their revenues, they also increase the risk in financing mix, the companies are not always afford paying their interest payments, haves more than (50%) profit margin ratio on market inventory, generates less for shareholders, they are not having profit from assets invested, only more costs and the shareholders are not contributing to market of the companies (U.S).

5. BioCosmetics Analysis (2)

To find the Common Size strengths and weaknesses of BioCosmetics. We will analyse the common size statements.

In the Common Size Income Statement, the first thing we notice is the decrease of the Selling and General and Administrative expenses from (24.5% in 2017 to 21.3% in 2019) which is a strength, with this decrease over the years, will have an increase on net income. It is important to note the **Cost of Goods Sold where constant at around 70%** of the sales in the three years, this isn't a strength nor a weakness, but it means that it won't influence the change of Net Income, in the percentage of Sales. The **low increase on Earning Before Taxes and Net Income** as percentage of Sales are due to the decrease of Selling General and Administrative. We can consider that although the Net Income was only (2.2% in 2017, 2.5% in 2018, and 3.5% in 2019) as percentage of Sales, this change in absolute values was more than twice, going from (1104 in 2017 to 2827 in 2019) this change is hardly seen in the percentage of Sales, because of the increase in absolute values of Sales and Cost of Goods Sold. **Thus, from the Common Size Income statement, we can confirm a strength from the decrease of Selling and D&A expenses, because it influenced the increase of the Net Income.**

Next, we will analyse the Common Size Balance Sheet, the first thing **we can be aware of is a decrease in Cash**, going from (6.8% in 2017 to 2.3% in 2019) this happened because we had a huge increase in liabilities, and the cash outflow was bigger than the cash inflows. **But overall, this can be a big weakness.** On Assets Balance Sheet, we can **observe a small increase in Accounts Receivable and in the Inventory,** this can be disturbing. Observing the Accounts Receivable, we had an increase (28% of Assets in 2017 for 33% in 2018), which may be due to higher sales, if **25% of sales are done in credit**, our because fewer customers are paying their bills on time, leading to more bad debt expense or higher collection costs. For now, we can't tell which explanation is causing the increase in Accounts Receivable from the Common Statement Balance Sheet, so we will take an important note about this case and then see, how this situation stands through the analysis. The same thing happens in the Inventory, is difficult to say if the increase is a weakness or not just by looking at it in the Balance Sheet. It can either be a strength because it means they can handle the increase in sales or weakness due to out-of-date inventory that also takes up a large portion of a firm's assets. Also, about Net Fixed Assets they kept constant through the years (around 19% of the Total Assets) even with the increase of Accounts Receivable and Inventory. Therefore, **is necessary more investigation to achieve a final conclusion about the current assets of BioCosmetics, but for now we can see more weaknesses than strengths.**

About the liabilities, we can see an increase in the percentage of assets, from (49% in 2017, to 62% in 2018 and 70% in 2019). This is not necessarily a bad thing, but it is something that might be a concern, overall, **this indicates higher risk levels**, which can be good because the bad debt can increase the profits, but it is certainly a note with high risk. Besides that, the Notes

Payable shows a big jump, from (5.4% of the assets in 2017, to 10% in 2018 and to 13% in 2019). This is probably **to finance the current assets so there is no need to be concerned, so is likely to be neither a strength nor a weakness, but suggest higher risks.**

And finally, the drop in the Stockholders' equity which is merely the flip side to the increase in Total Liabilities, and therefore the Common Stock, Paid-in capital and Retained Earnings show a drop also in percentage of assets, through the years. Which is not a good thing, but not so serious.

Moving on to the Ratio analysis:

First there is the Liquidity ratios**,** watching we can easily say that **both ratios suffered from the huge increase of the liabilities over the years**, (with Current Ratio going from 2.04 in 2017 to 1.53 in 2019 and the Quick Ratio from 1.47 to 1), but although they are low because of that, they are still a little higher than the average of the industry, the Current Ratio of BioCosmetics is around 1.53 in 2019, compare to 1.17 of the industry averages, and the Quick Ratios is about twice the industry average.

Moving to the Activity Ratios we have the Inventory Turnover Ratio, this has **been increasing over the years**, (in the year 2017 the Inventory Turnover ratio was 7.81, in the year 2018 was 5.85 and for last, in 2019 was 4.54), meaning that has been decreasing, which **is not necessary a good** and can be related to the slight increase in the inventory. But we can say that this decrease is not important, because converting to days, this means that in 2019 it took to the BioCosmetics 80 days to sell/use the inventory, which is very good comparing to the average industry, around 144 days. About the Days Sales Outstanding ratio, we notice some problems, **through the years the Days Sales Outstanding is increasing** meaning that is taking more time for BioCosmetics to collect the sales, this is a bit worry because over the years the average of the industry has been constant around the 47 days. This means it takes about 26 days longer on average to collect each dollar in sales. This can mean that either we have a lot of customers that aren't paying on time and may end up with higher levels of bad debts or that we have to offer more favourable credit terms to customers to keep sales from dropping. **Neither are good so this is definitively a weakness**. Concerning Fixed Asset Turnover and Total Asset Turnover are improving and it's very positive because the company needs it, but even with the big increase over the years, it is still too low compared to the average industry.

Next, we have the Debt Management Ratios, which are quite troublesome. The Total Debt to Total Assets and Total Debt to Total Equity **ratios are increasing way too much over the years**. On one hand, the Total debt to Total Assets went from (49% in 2017 to 70% in 2019), an increase of more than 20%, while the average industry is close to 90%, even **if the BioCosmetics Total Debt to Total Assets is lower**, it is still a big increase to be concerned. On the other hand, there is the Total Debt to Owner Equity **which also increased a lot**, from (95% in 2017 up to 230% in 2019), **a huge increase** and even bigger if compared with the average of the industry (13%). Then we also have the Times Interest Earned Ratio, that **is been decreasing** over the years, but is still way higher than the industry average and it's still in a good spot since it can provide the firm a "little cushion" against the off years. So, in the situation the firm is now, it depends on the next years, because if BioCosmetics experience an off-year or more, it's likely to lead to bankruptcy or, at least, severe financial problems. **Overall, this is not a weakness neither a strength but is still a big financial risk although compared with the average industry BioCosmetics is still in "good waters", meaning that this risk might be necessary to survive the industry.**

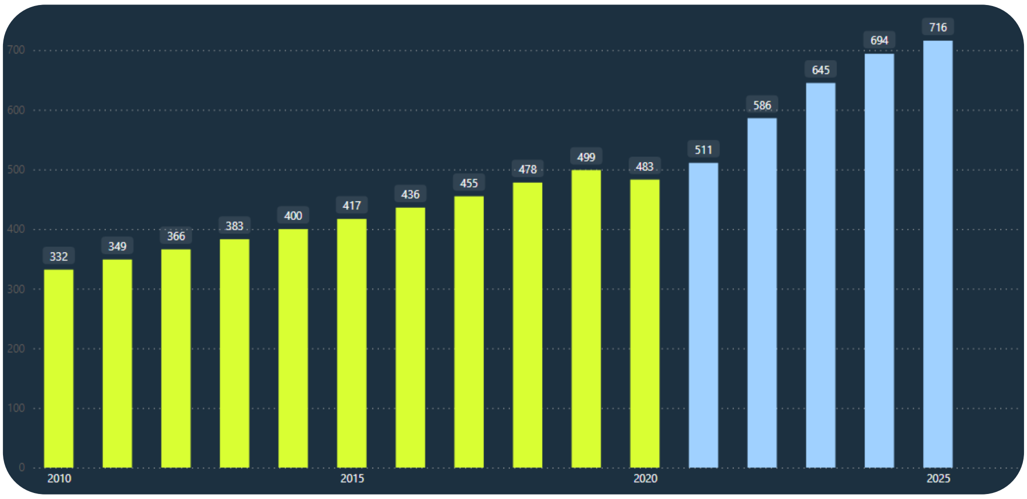
The profitability ratios are all showing an interesting pattern, **first in the trend analysis, the Gross Profit Margin, Net Profit Margin and Return on Assets are constant behaviour over the 3 years**, even with the slight increase of the Cost of Goods Sold, as seen in the Common Size income statement. The only **one that changes the most is the Return on Equity**, which goes from (10% in 2017 to 20% in 2019), this is a big change that is **explained by the increase in Net Income higher than the increase in Equity**. We can say that this change is overall a good situation to be at, compared with the average industry, their Net Profit Margin, Return on Assets and Return on Equity ratios **are negative which means a negative net income.** This again proves that is possible that the problems of previous ratios can be due to industry issues and not really company issues. **So, seeing the industry situation BioCosmetics is in a good place in terms of profits, meaning that the risks that they are taking are paying off.**

Finally, about the market value ratios, first we are going to approach the Price Earnings ratio. The Price Earnings Ratio **shows a significant decrease** from 2017, to 2018 and then 2019 (5.25, 3.66, and 2.19 respectively) this is not necessarily a bad thing, because it means either that the company is currently being undervalued or that the company is doing exceptionally well relative to its past trends. And seeing what made that decrease we can say surely that this decrease was due to the big increase of Net Profit against the slow increase of the Market Price per Share, so we can say that the **company is doing well relatively past trends, that is a strength**. About the Market Value to Book Value (MV/BV) it shows a slight increase, which means the stocks are getting expensive, and the company can expect a slight growth, so we think is a **slight strength.** And finally, the Dividend Yield, it shows a **small increase over the years**, going from (5% in 2017 to 13% in 2019). This is due to a bigger increase of the dividends than the increase in price of each share. Again, this is not a bad thing, it means the **BioCosmetics stocks are providing more income, but it also means greater risks.**

Before we move on to the analysis of the market is important to refer some inflows and outflows of the cash statement in 2018 and 2019. As inflows we have the Net Income, the increase in Accounts Payables, Depreciations and Expenses. As outflows we have the increase in Account Receivable and increase of the inventory. The greater outflows against the inflows are the reasons behind the decreases in cash in 2018 and in 2019. **It is not necessarily bad because it may mean the BioCosmetics is growing but the company can't keep having bigger expenses than gains.**

6. Market Analysis

Cosmetic and Personal Care Market Evolution



Graph 1 : CPC market (USD billion)

- Observing the bar chart "CPC market in millions of USD", which focus on the period from 2010 to 2025, we realise that the CPC market, has been growing over the years. Then in the year 2020, occurred a decrease from revenues of cosmetic and personal care (a decrease on sales of 16 billion of dollars). The prevision for the next years is that the CPC market will grow over the years, from 511 USD billions to 716 USD billions in 2025.

CPC in Europe, U.S and Continent Influence

- In the map (Map 1) on the right side, we can see where CPC's market is localized and has more influence. The biggest one is Asia, that represents 48% of the market. The next one is North America with 24% of the market and the third biggest is Europe with 18%. The continent that least represents the CPC's market is Africa with only 3%.

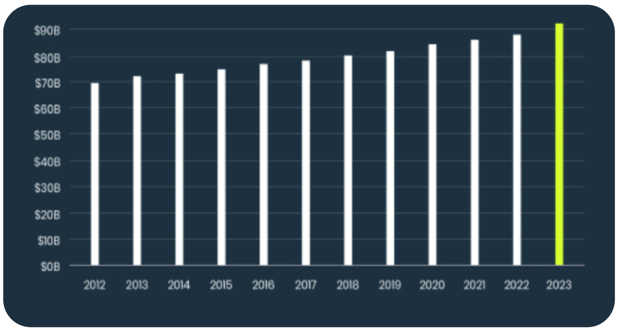
Map 1 : Global view of the CPC's market (%)

Graph 3 : CPC in Europe (EUR)

Graph 2 : CPC per capita in Europe (EUR billion)

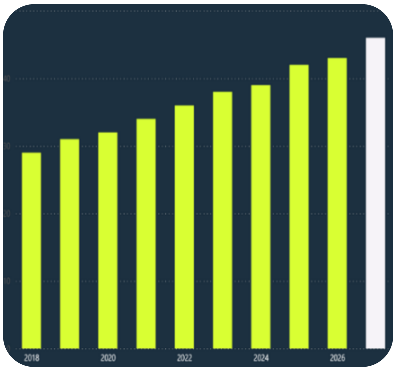
- Related to CPC in Europe and their per capita, Norway and Switzerland are the European countries where each people, in average, spend more in CPC's products, with 232€ and 229€, respectively. But Germany is the country where the CPC is the biggest, the market is around (14.05 million € in 2019 and with 11.43 million € in 2010). The UK with a value of (10.66 million € in 2019 and with 10.56 million € in 2010). The country where the CPC's market has the smallest impact is Czech Republic, with a 68 €/year and a total 0.14 million euros.

- Is important to notice also, the increase in the total sales of the CPC industry, over the years in US. Its growing over the years at a good rhythm and is expected to keep growing until 2023.

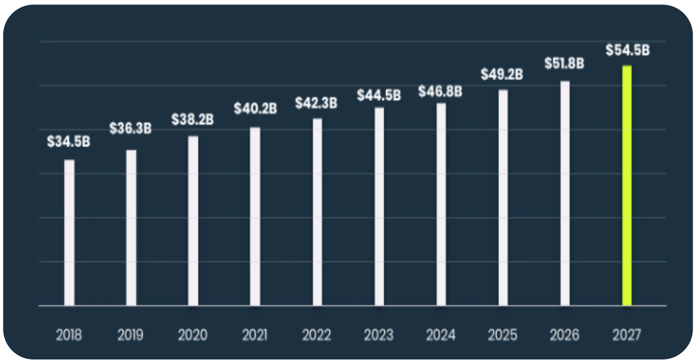


Graph 4 : Total Sales in US, in CPC industry (USD billion)

NOC segment Evolution



Graph 5 : NOC Market (USD billion)



Graph 6 : Global Market Value for NOC (USD billion)

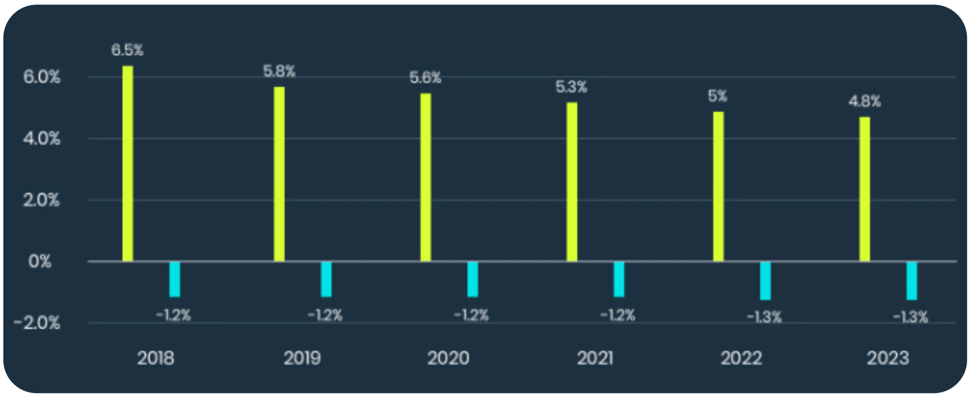
- As we can see in the graphs, the NOC's market is growing a lot over the years, and it is expected to keep growing. Not only the sales are increasing over the years, but also the market value of the segment of Natural and Organic Cosmetics is increasing, going from 34.5 billion dollars in 2018 to an expect value of 54.5 billion dollars in 2027.

- For last, looking for Market Evaluation we can understand the countries that have a lower percentage (United Kingdom, Sweden and France) of the market have a bigger CAGR (Compound Annual Growth Rate) with 20%, 16,57% and 18,07%, respectively. This means basically these countries are the ones that are expected to grow more in the next years, and the best to invest on. The countries where the market is already big, the future growth will be smaller and the investment less grateful.

	NOC (million euros)	% of market	Expected CAGR to 2027
Germany	2,599	19%	4,80%
Italy	1,654	16%	8,00%
Spain	0,784	11%	9%
France	0,731	6%	18,07%
Sweden	0,514	5%	16,57%
UK	0,258	2%	20%

Table 2 : NOC's Market Evaluation (EUR millions)

Percent Change in Online vs Offline Sales Channels Sales Channels



Graph 7 : Percent Change in Online vs Offline Sales Channel (%)

- Observing the Percent Change in Online vs Offline Sales Channel, we can conclude that the consumers more and more are opting to do their purchases online. This seen by the increase in online sales, which each year is smaller and smaller (from 6.5% in 2018 to 4.8% in 2023), against the constant decrease of the offline sales.

Conclusion

In summary, there are some strengths and the same for weakness.

We cannot ignore that there are strengths, among which, the decrease of Selling and D&A expenses, because it influenced the increase of the Net Income, and relatively past trends, so the company is doing great. And the fact that the market of Cosmetic and Personal Care is a growing industry, as well as the Natural Organic Cosmetics segmentation.

But one of the most distinguishable weaknesses is in the Days Sales Outstanding ratio, this is causing some problems, that is taking more time for BioCosmetics to collect the sales. Another thing to mention in terms of weaknesses is the level of risk that the company is taking. This is not completely a weakness, but we can't ignore that if the BioCosmetics had a great year, compared with a Market of the companies (U.S).

We also think that regarding the pandemic situation all kinds of markets are becoming very unstable, and this is probably, a big problem for any industry, including BioCosmetics, but we will accept the work, because the Market of the companies (U.S) had a worst results (does not had acceptable Current and Acid ratios, they increase their risk in financing, the companies are not always afford paying their interest payments) than BioCosmetics.

In conclusion, we decided to accept the job because despite the company being in good financial condition for now, it is worth accept because it compensates for the risks , and although this may be necessary to save the industry, we agreed that these risks compensate our investment and time.

References

German Simplified. (n.d.). Retrieved from Top 10 German Cosmetic Brands You Should Know: https://germany-simplified.com/blog/top-10-german-cosmetic-brands-you-should-know/

Mordor Intelligence. (n.d.). Retrieved from GERMANY BEAUTY AND PERSONAL CARE PRODUCTS - GROWTH, TRENDS, COVID-19 IMPACT, AND FORECASTS (2021 - 2026): https://www.mordorintelligence.com/industry-reports/germany-cosmetics-products-market-industry

Roberts, R. (2021, September 28). *COMMON THREAD*. Retrieved from 2021 Beauty Industry Trends & Cosmetics Marketing: Statistics and Strategies for Your Ecommerce Growth: https://commonthreadco.com/blogs/coachs-corner/beauty-industry-cosmetics-marketing-ecommerce

Rosen, E. (2016, June 13). *Gartner*. Retrieved from Top 10 Beauty Brands in Germany: https://www.gartner.com/en/marketing/insights/daily-insights/top-10-beauty-brands-in-germany