Co-funded by the Erasmus+ Programme of the European Union

Company Case Study Form (WP3, Deliverable 3.1)

Explanation:

According to the Letters of Intent by the Associated Industry Partners, each university will be provided with **one practical company case study** for the courses which will start in the academic year 2019/2020.

Next steps:

1) Each university should **choose one course** for which it develops a case study together with a company representative (e.g. a practical problem/issue which companies in this area are facing and on which the students will work – supervised by their lecturer).

2) Please fill in the form below

Please note: In case a company case study is developed for a course, only one additional assignment is required (see course package form, section 8).

General information:

Title of the course (as specified in the reformed curriculum)	**RAU Financial Statement Analysis**
Name of the teacher	***Karen Nersesyan***
Title of the case study	Financial position and Income statement Analysis
Company with which the case study was developed	Plant of Pure Iron OJSC Armenia

Practical case study:

Explanation: Please outline the practical case study that the students are going to work on.

Introduction of the case / problem: Financial Statement Analysis is a method of reviewing and analyzing a company's accounting reports (financial statements) in order to gauge its past, present or projected future performance. This process of reviewing the financial statements allows for better economic decision making.

Globally, publicly listed companies are required by law to file their financial statements with the relevant authorities. For example, publicly listed firms in Armenia are required to submit their financial statements to the NASDAQ OMX Securities Exchange Armenia. Firms are also obligated to provide their financial statements in the annual report that they share with their stakeholders. As financial statements are prepared in order to meet requirements, the second step in the process is to analyze them effectively so that future profitability and cash flows can be forecasted. Main purpose of financial statement analysis is to utilize information about the past performance of the company in order to predict how it will fare in the future. Another important purpose of the analysis of financial statements is to identify potential problem areas and troubleshoot those.

For financial ratio analysis is select Plant of Pure Iron OJSC . Plant of Pure Iron OJSC (the "Company") is a legal successor of Clean Iron Development and Industrial Plant founded in 1968. In 1995 the Company was reorganized and renamed as Plant of Pure Iron OJSC.

The Company's principal activity is molybdenum concentrate processing into ferro-molybdenum and sintered molybdenum metal. In 2015 the Company started to provide molybdenum concentrate processing services. Till 2015 and during 2017 the Company also produced and sold its own ferro-molybdenum and sintered molybdenum metal.

1. **Assignment / task for the students:**

Based on the balance sheet and income statement, students should calculate the main indicators of liquidity, profitability, business activity, compare them with indicators of similar companies. The analysis of the above indicators should be carried out over a period of years.

Based on the results of the analysis, students should make recommendations for making decisions for users of financial statements.

Financial position statement

	Year ending **31.12.2016**	Year ending **31.12.2017**
Assets	(in thousands dram)	
Current Assets		
Cash and cash equivalents	761 287	671 781
Marketable Securities	996 074	7 798 267
Accounts Receivable	377 382	12 537 552
Inventories	1 344 336	743 003
Total Current Assets	**3 479 079**	**21 750 603**
Long-Term Assets		
Property & Equipment at cost	69 921 061	59 284 140
Less Accumulated Depreciation	10 210 500	15 120 101
Net Property & Equipment	59 710 561	44 164 039
Total Long-Term Assets	**59 710 561**	**44 164 039**
TOTAL ASSETS	**63 189 640**	**65 914 642**
Liabilities		
Current Liabilities		
Accounts Payable	160 104	123 595
Current tax payable		357 517
Taxes Payable	125 866	74 723
Other Current Liabilities	32 540	27 399
Current Portion of Longterm Debt	410	828 852
Total Current Liabilities	**318 920**	**1 412 086**
Long-Term Liabilities		
Bank credit	2 759 415	2 022 000
Total Long-Term Liabilities	**2 759 415**	**2 022 000**
TOTAL LIABILITIES	**3 078 335**	**3 434 086**
Equity		
Share capital	690 930	690 930
Fair value reserve	9 421 469	9 742 366
Retained Earnings	49 998 906	52 047 360
TOTAL EQUITY	**60 111 305**	**62 480 656**

Comrehensive income statement

	Year ending **31.12.2017**
Revenues	(in thousands dram)

Revenue	8 601 376
Allowance for Sales Returned	-
Net Sales Revenues	8 601 376
TOTAL SALES	**8 601 376**

Expenses

Cost of Goods Sold	4 935 082
Gross Profits	**3 666 294**
Operating Expenses:	
Selling & Marketing	282 652
General Administrative	795 697
Total Operating Expenses	1 078 349
Operating Income	**2 587 945**
Interest Expenses:	
Interest on Loans	850
Interest on Mortgage Bonds	2 310
Total Interest Expenses	3 160
Earnings Before Taxes	2 584 785
Tax	530 126
NET INCOME	**2 054 659**

Balance Sheet

Assets	**Year ending 31.12.2016**	**Year ending 31.12.2017**
	(% of Total Assets)	
Cash	1,20%	1,02%
Marketable Securities	1,58%	11,83%
Accounts Receivable	0,60%	19,02%
Inventories	2,13%	1,13%
Total Current Assets	**5,51%**	**33,00%**
Net Property & Equipment	94,49%	67,00%
TOTAL ASSETS	**100,00%**	**100,00%**
Liabilities		
Current Liabilities	0,50%	2,14%
Long-Term Liabilities	4,37%	3,07%

TOTAL LIABILITIES	**4,87%**	**5,21%**

Equity

TOTAL EQUITY	**95,13%**	**94,79%**
TOTAL LIABILITIES & EQUITY	**100,00%**	**100,00%**

Key Points per Review of the Common Size Balance Sheet:

1 The company is fairly liquid since current assets are 61% of total assets.
2 About 55% of all assets are tied up in either Accounts Receivable or Inventories. Therefore, it is very important to effectively manage these two assets on the Balance Sheet.
3 The company does not appear to be too overly leveraged in debt with a debt leverage below 60%

Income Statement

		Year ending 31.12.2017 (% of Total Net Sales)
NET SALES		**100,00%**
Cost of Goods Sold		57,38%
	Gross Margin	**42,62%**
Operating Expense		12,54%
	Operating Margin	**30,09%**
Interest Expense		0,04%
	Earnings Before Taxes	30,05%
Tax Expense		6,16%
	NET INCOME	**23,89%**

Key Points per Review of the Common Size Income Statement:

1 Cost of products sold represents 75% of all costs the company incurs
2 Operating costs appear to be modest at 14%
3 Return on Sales is rather low at 4.45%

RATIO ANALYSIS

Liquidity Ratios	**Year ending 31.12.2016**
1. Current Ratio = Current Assets / Current Liabilities	15,40
2. Acid Test or Quick Ratio = (Current Assets - Inventories - Prepaid Expenses) / Current Liabilities	14,88
3. Operating Cash Flow to Current Liabilities	1,83

Asset Management Ratios	
4. Accounts Receivable Turnover = Annual Credit Sales / Average Receivable Balance	1,33
5. Accounts Receivable Collection = 360 Days / Accounts Receivable Turnover	270,27
6. Inventory Turnover = Cost of Goods Sold / Average Inventory	4,73
7. Days Held in Inventory = 360 Days / Inventory Turnover	76,13
8. Fixed Asset Turnover = Sales / Average Net Fixed Assets	0,17
9. Total Asset Turnover = Sales / Average Total Assets	0,13

Leverage Ratios	
10. Debt Ratio = Total Debt / Total Assets	0,05
11. Debt to Equity Ratio = Total Debt / Total Equity	0,05
12. Times Interest Earned = Earnings Before Interest and Taxes / Interest	818,97

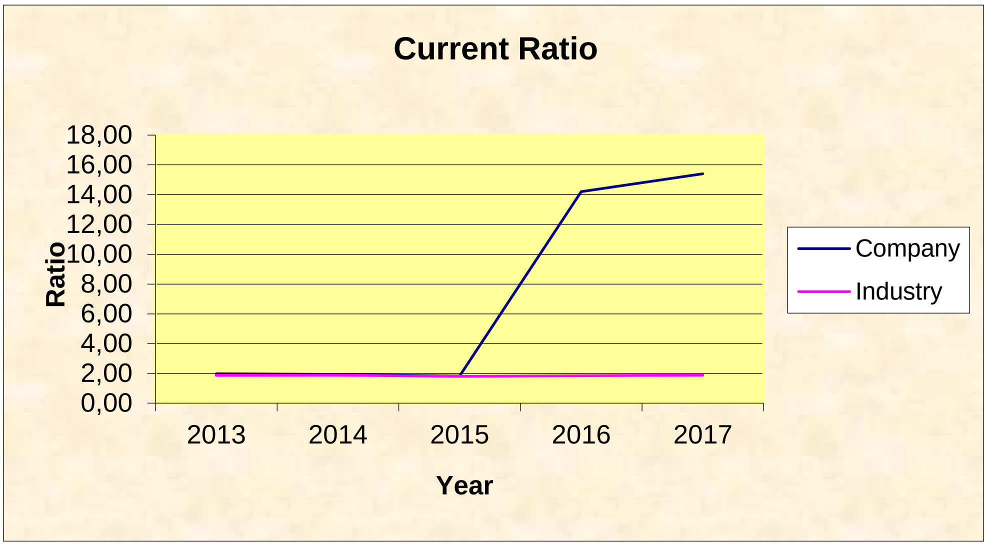
Profitability Ratios	
13. Gross Profit or Margin = (Sales - Cost of Goods Sold) / Sales	0,43
14. Operating Income Ratio = Operating Income / Sales	0,30

15. Return on Sales = Earnings after Taxes / Sales	0,24
16. Return on Investment = Earnings after Taxes / Average Total Assets	0,03
17. Return on Equity = Earnings after Taxes / Average Owners Equity	0,20

Industry Trend Analysis

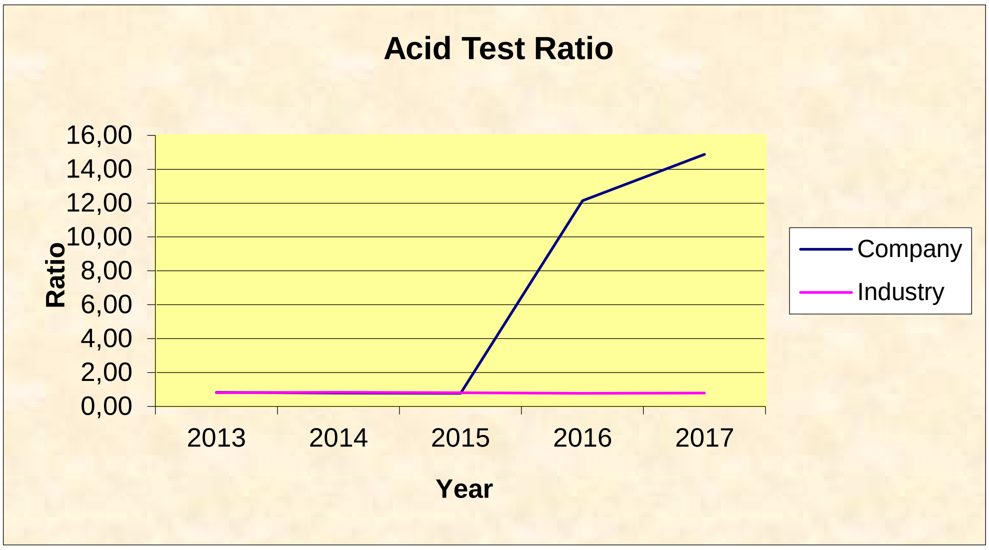
1. Current Ratio Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	1,97	1,94	1,82	14,21	15,40
Industry	1,86	1,88	1,80	1,84	1,88



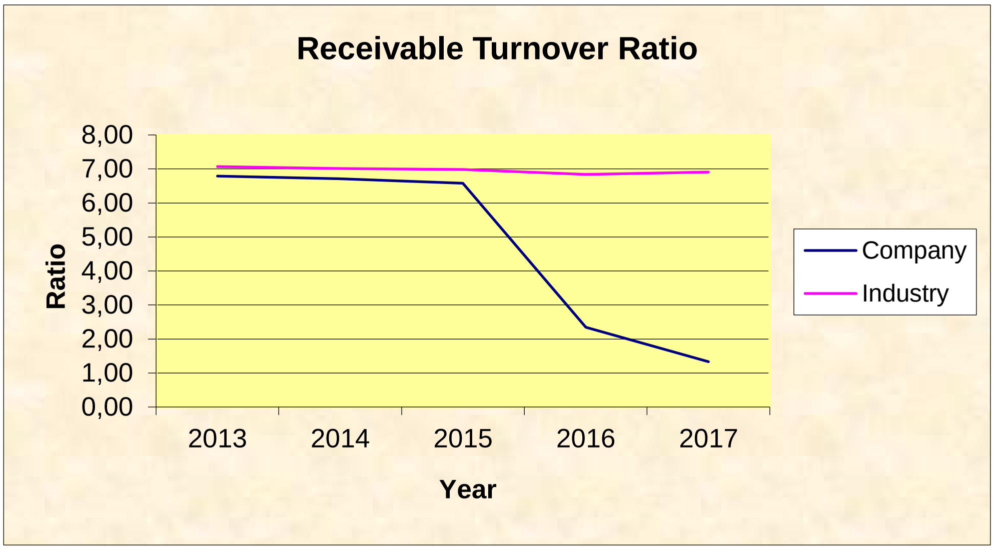
2. Acid Test or Quick Ratio Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,83	0,79	0,77	12,15	14,88
Industry	0,80	0,83	0,81	0,77	0,79



3. Accounts Receivable Turnover Comparison - 5 Years

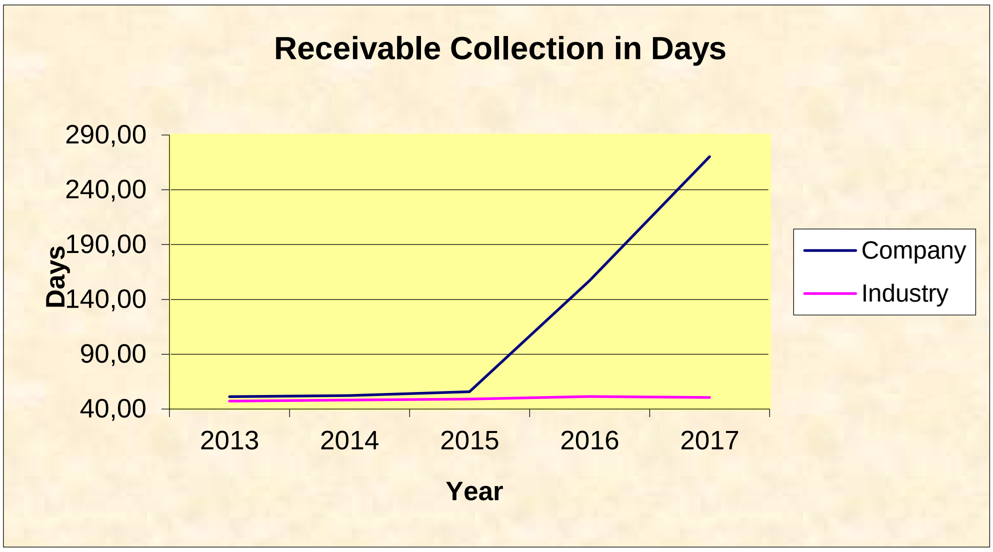
	2013	2014	2015	2016	2017
Company	6,79	6,71	6,58	2,34	1,33
Industry	7,07	7,01	6,98	6,84	6,91



4. Accounts Receivable Collection Comparison - 5 Years

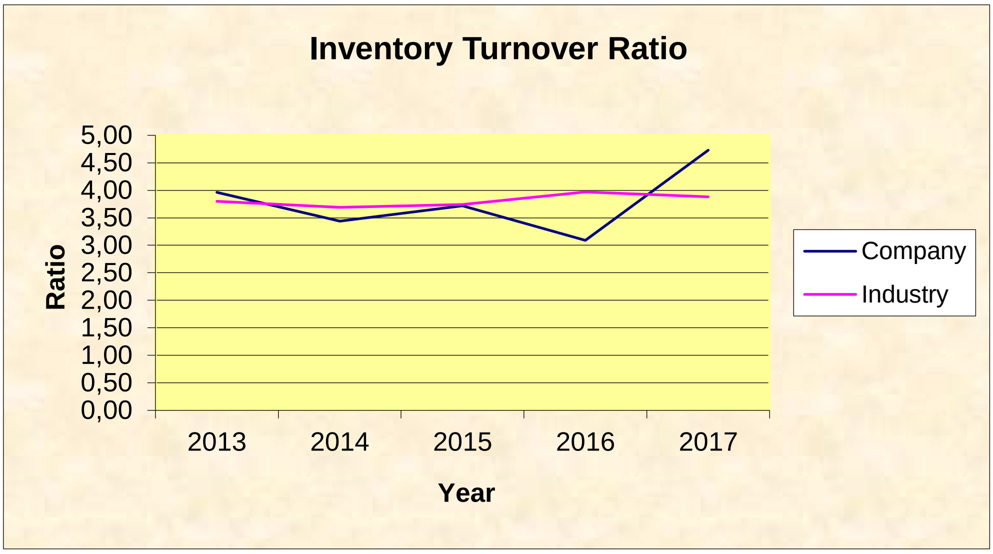
	2013	2014	2015	2016	2017
Company	51,30	52,41	55,73	157,08	270,2

					7
Industry	47,26	48,33	49,02	51,44	50,62



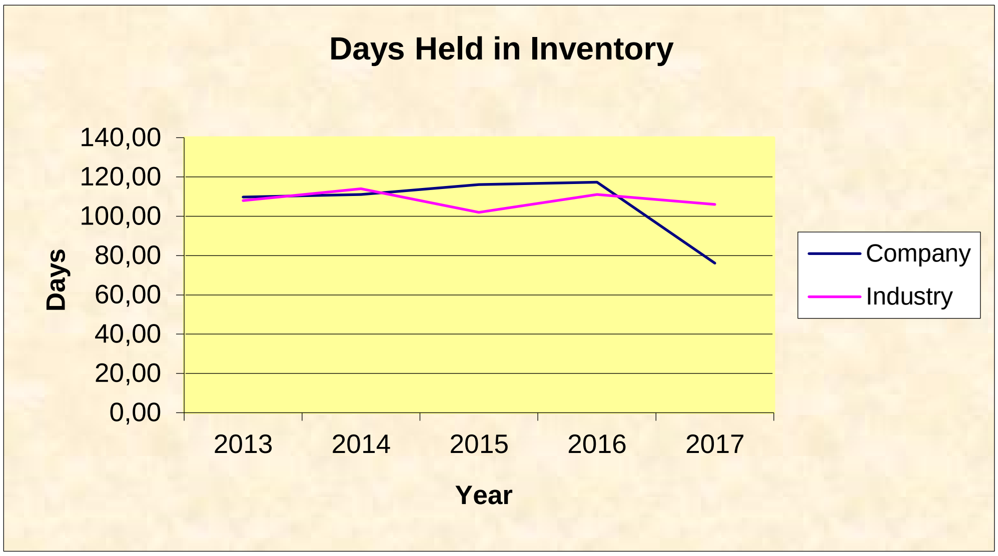
5. Inventory Turnover Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	3,96	3,44	3,72	3,09	4,73
Industry	3,80	3,69	3,74	3,97	3,88



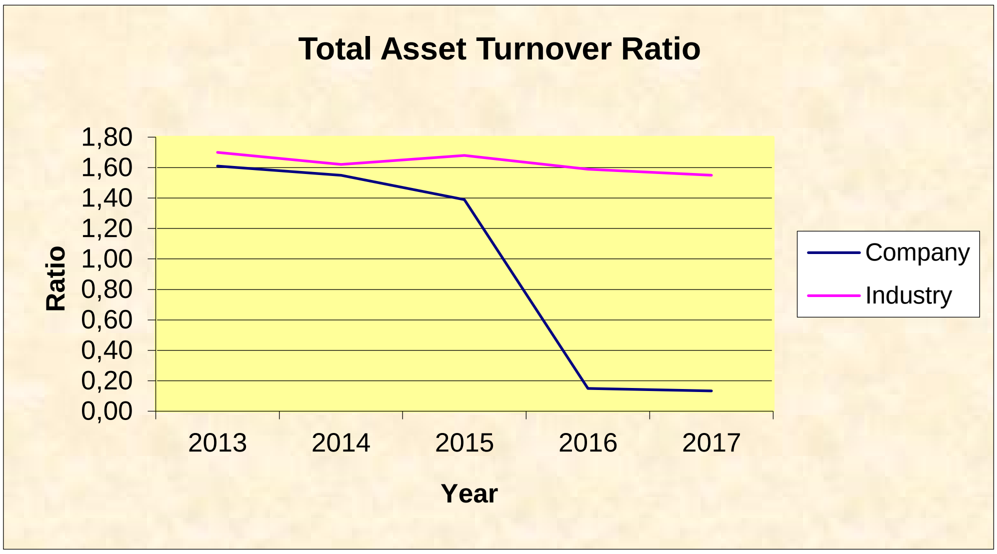
6. Days Held in Inventory Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	109,77	111,08	116,20	117,33	76,13
Industry	108,00	114,00	102,00	111,00	106,00



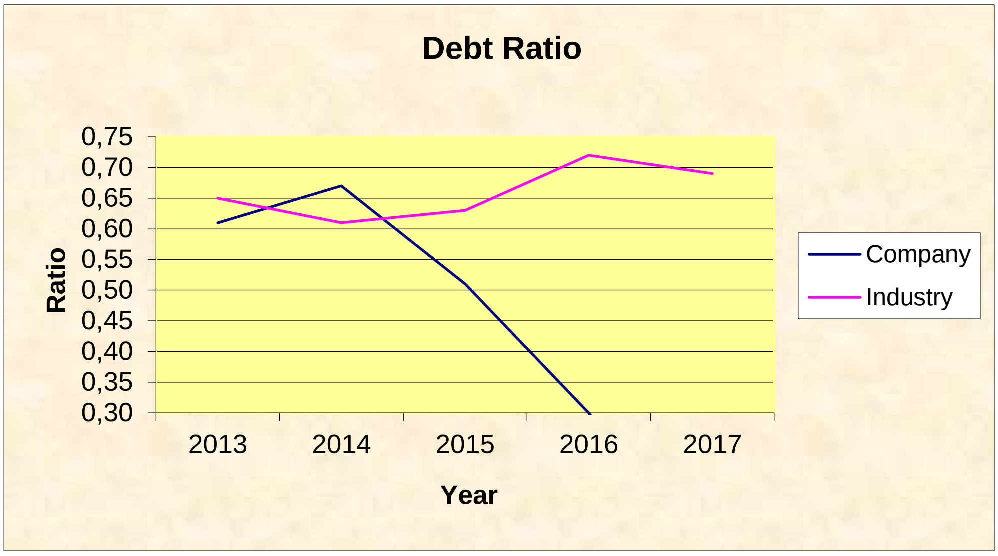
7. Total Asset Turnover Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	1,61	1,55	1,39	0,15	0,13
Industry	1,70	1,62	1,68	1,59	1,55



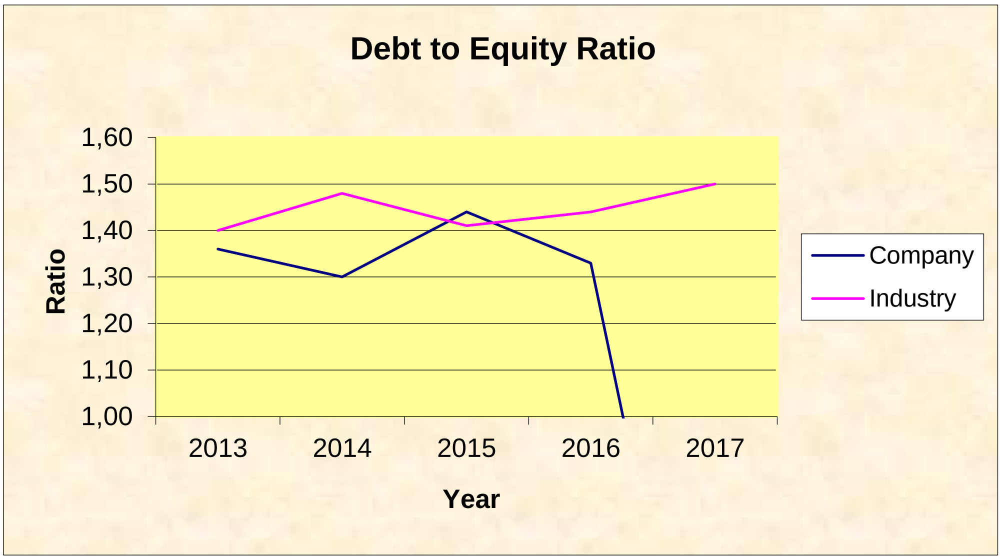
8. Debt Ratio Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,61	0,67	0,51	0,30	0,05
Industry	0,65	0,61	0,63	0,72	0,69



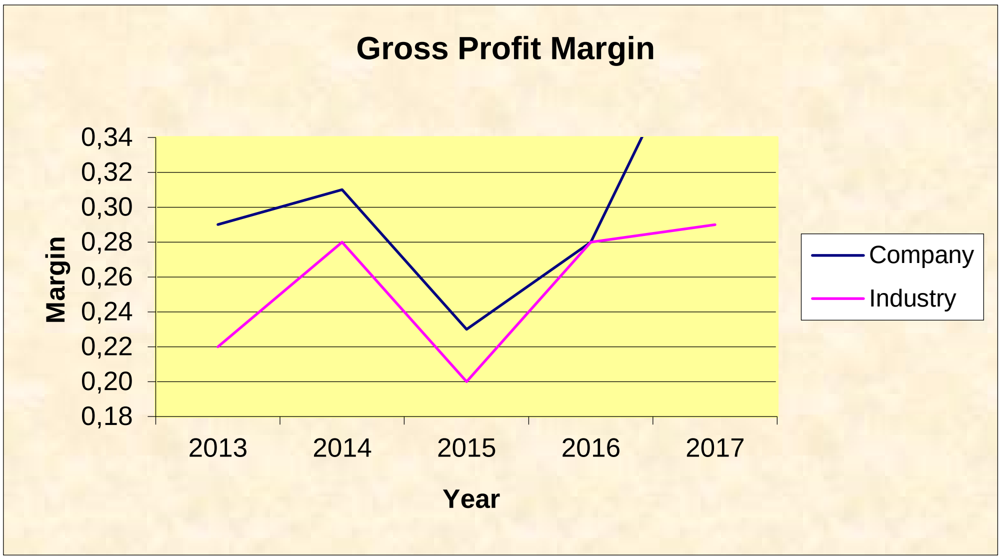
9. Debt to Equity Ratio
Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	1,36	1,30	1,44	1,33	0,05
Industry	1,40	1,48	1,41	1,44	1,50



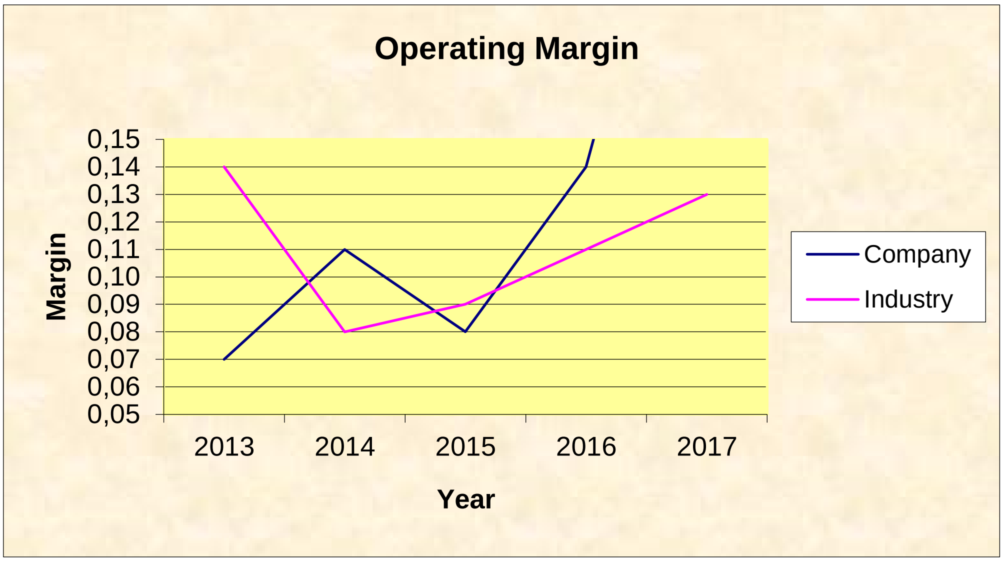
10. Gross Profit or Margin Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,29	0,31	0,23	0,28	0,43
Industry	0,22	0,28	0,20	0,28	0,29


Gross Profit Margin
Margin
0,34
0,32
0,30
0,28
0,26
0,24
0,22
0,20
0,18
2013
2014
2015
2016
2017
Year
Company
Industry

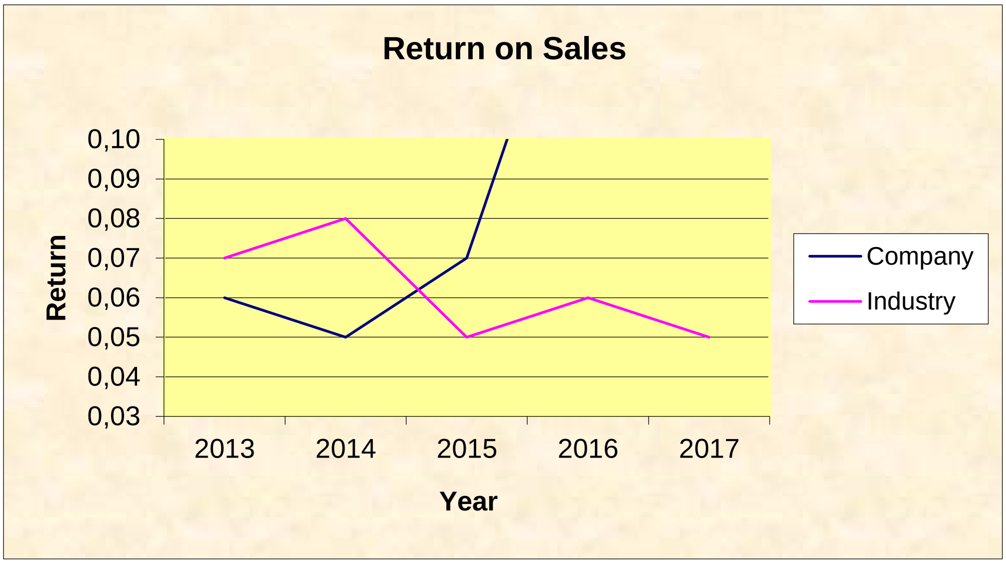
11. Operating Income Ratio Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,07	0,11	0,08	0,14	0,30
Industry	0,14	0,08	0,09	0,11	0,13



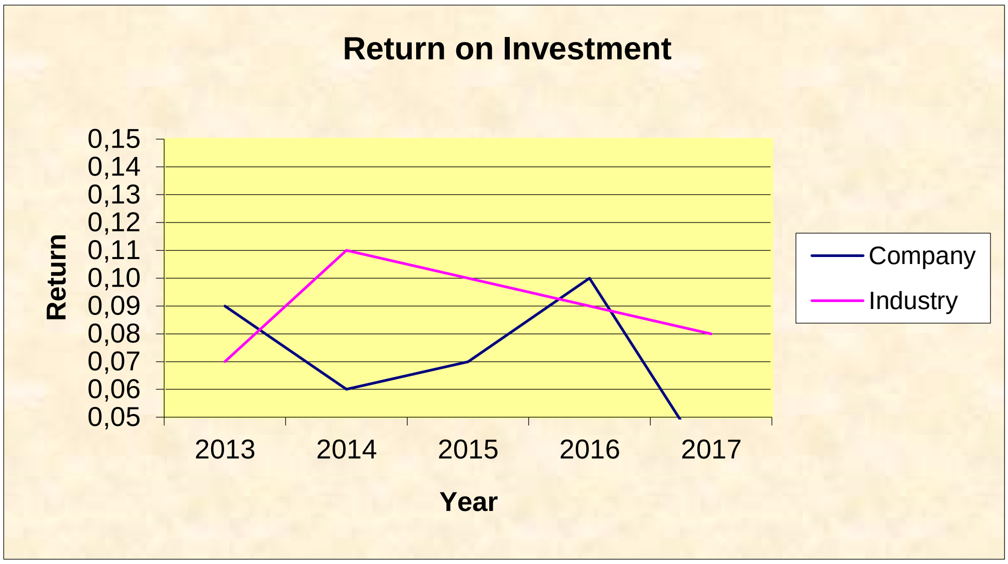
12. Return on Sales Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,06	0,05	0,07	0,16	0,24
Industry	0,07	0,08	0,05	0,06	0,05



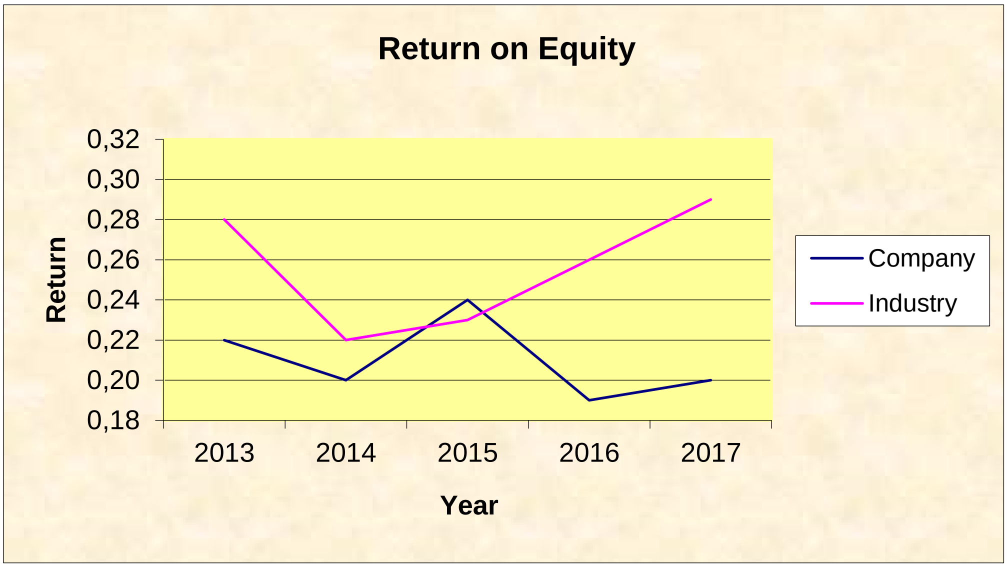
13. Return on Investment
Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,09	0,06	0,07	0,10	0,03
Industry	0,07	0,11	0,10	0,09	0,08



14. Return on Equity Comparison - 5 Years

	2013	2014	2015	2016	2017
Company	0,22	0,20	0,24	0,19	0,20
Industry	0,28	0,22	0,23	0,26	0,29



Cost of Capital is an important benchmark by which you should evaluate long term investments.

1. Identify the interest bearing debt on the Balance Sheet:

Notes Payable @ 10%
Mortgage Bonds @ 9.58%

2. Calculate the effective rate by deducting out the tax rate since interest is deductible:

Tax Rate per Balance Sheet	40,00%		
Notes Payable @ 10%	10,00%	60,00%	**6,00%**
Mortgage Bonds @ 9.58%	9,58%	60,00%	**5,75%**

3. Calculate the cost of equity using the Capital Asset Pricing Model:

a.	Risk Free Rate of Return - 10 Year Treasury Bonds	3,50%
b.	Beta Risk Factor for Stock of Company	1,22
c.	Market Portfolio Returns	13,50%
	Rate of Return for Stock	**15,70%**

4. Assign market values to each of the components of capital and calculate the Weighted Average Cost of Capital:

	Cost of Capital		Market Values	Percents	Weighted Cost of Cap
Notes Payable	6,00%	$	6 000	9%	0,55%
Mortagage Bonds	5,75%	$	15 000	23%	1,31%
Stock (Equity)	15,70%	$	45 000	68%	10,70%
		$	66 000	100%	**12,56%**

Investments need to generate a rate greater than