Financial Report Analysis

on the Information Technology (IT) Sector

Prepared as part of the course

ECON F212: Fundamentals of Finance and Accounts

Under the Supervision of
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Introduction

This project analyzes the general performance of three major players in the automobile industry. The automobile industry comprises a wide range of companies and organizations involved in the design, development, manufacturing, marketing, and selling of motor vehicles. It is one of the world's largest industries by revenue. This sector has grown on account of its traditional strengths in casting, forging and precision machining, fabricating (welding, grinding, and polishing), and cost advantages (on account of availability of abundant, low-cost skilled labor), and significant foreign direct investment (FDI) inflows.

Financial analysis of the companies in this sector is done using financial ratios. A comparative study of all three companies is done with respect to each ratio considered here in order to evaluate the business' performance.

Tech Mahindra

Tech Mahindra is an Indian multinational information technology services and consulting company. Part of the Mahindra Group, the company is headquartered in Pune and has its registered office in Mumbai. Tech Mahindra is a US$6.0 billion company with over 158,000 employees across 90 countries. The company was ranked #5 in India's IT firms and overall #47 on Fortune India 500 list for 2019. On 25 June 2013, Tech Mahindra announced the completion of a merger with Mahindra Satyam. Tech Mahindra has 1262 active clients as of June 2022. Tech Mahindra Limited has entered into a share subscription agreement to acquire 26% equity shares in Upendra Singh Multi Transmission Private Limited. The acquisition would enable the Company to procure 1.5 MW of Solar Energy for its captive consumption at its facilities located in Noida, UP.

- Statement of Income & Gains and Expenditure & Losses [Profit and Loss Statement]

TECH MAHINDRA Income Statement 2021-22

No. of Mths Year Ending		12 Mar-21*	12 Mar-22*	% Change
Net Sales	Rs m	378,551	446,460	17.9%
Other income	Rs m	7,871	11,420	45.1%
Total Revenues	Rs m	386,422	457,880	18.5%
Gross profit	Rs m	67,963	79,903	17.6%
Depreciation	Rs m	14,577	15,204	4.3%
Interest	Rs m	1,740	1,626	-6.6%
Profit before tax	Rs m	59,517	74,493	25.2%
Tax	Rs m	15,999	18,220	13.9%
Profit after tax	Rs m	43,518	56,273	29.3%
Gross profit margin	%	18.0	17.9	
Effective tax rate	%	26.9	24.5	
Net profit margin	%	11.5	12.6	

- Statement of Sources and Application of Funds [Balance Sheet]

TECH MAHINDRA Balance Sheet as on March 2022

No. of Mths Year Ending		12 Mar-21*	12 Mar-22*	% Change
Networth	Rs m	243,943	264,769	8.5
Current Liabilities	Rs m	102,775	125,048	21.7
Long-term Debt	Rs m	1,658	1,420	-14.4
Total Liabilities	Rs m	387,647	440,516	13.6
Current assets	Rs m	252,599	244,557	-3.2
Fixed Assets	Rs m	135,048	195,959	45.1
Total Assets	Rs m	387,647	440,516	13.6

- Cash flow Statement : Souce -EquityMaster

TECH MAHINDRA Cash Flow Statement 2021-22

Particulars	No. of months	12	12	% Change
	Year Ending	Mar-21	Mar-22	
Cash Flow from Operating Activities	Rs m	80,938	52,853	-34.7%
Cash Flow from Investing Activities	Rs m	-54,501	4,815	-
Cash Flow from Financing Activities	Rs m	-29,869	-46,666	-
Net Cash Flow	Rs m	-3,263	10,985	-

SAP SE

SAP SE is a German multinational software company based in Walldorf, Baden-Württemberg. It develops enterprise software to manage business operations and customer relations. The company is the world's leading enterprise resource planning (ERP) software vendor. SAP is the largest non-American software company by revenue, the world's third-largest publicly traded software company by revenue, and the second largest German company by market capitalization. Apart from ERP software the company also sells database software and technology (particularly its own brands), cloud-engineered systems, and other ERP software products, such as human capital management (HCM) software, customer relationship management (CRM) software (also known as customer experience), enterprise performance management (EPM) software, product lifecycle management (PLM) software, supplier relationship management (SRM) software, supply chain management (SCM) software, business technology platform (BTP) software and programming environment SAP AppGyver for business.

- Statement of Sources of Application of Funds [Balance Sheet]

Balance Sheet Currency in EUR. All numbers in thousa

Breakdown	12/30/2021
› Total Assets	71,169,000
› Total Liabilities Net Minority Int...	29,646,000
› Total Equity Gross Minority Inte...	41,523,000
Total Capitalization	48,097,000
Common Stock Equity	38,853,000
Capital Lease Obligations	2,143,000
Net Tangible Assets	3,797,000
Working Capital	3,908,000
Invested Capital	51,857,000
Tangible Book Value	3,797,000
Total Debt	15,147,000
Net Debt	4,106,000
Share Issued	1,228,479
Ordinary Shares Number	1,179,579
Treasury Shares Number	48,900

- Statement of Income & Gains and Expenditure & Losses

Income Statement

Currency in EUR. All numbers in thousands

Breakdown	TTM	12/30/2021	12/30/2020	12/30/2019	12/30/2018
> Total Revenue	30,414,000	27,842,000	27,338,000	27,553,000	24,708,000
Cost of Revenue	8,721,000	7,946,000	7,886,000	8,355,000	7,462,000
Gross Profit	21,695,000	19,897,000	19,453,000	19,199,000	17,246,000
> Operating Expense	17,149,000	15,083,000	12,832,000	13,596,000	11,523,000
Operating Income	4,546,000	4,814,000	6,621,000	5,603,000	5,723,000
> Net Non Operating Interest Inc...	18,000	2,174,000	776,000	198,000	-47,000
> Other Income Expense	-273,000	-141,000	-176,000	-1,204,000	-75,000
Pretax Income	4,290,000	6,847,000	7,220,000	4,596,000	5,600,000
Tax Provision	1,468,000	1,471,000	1,938,000	1,226,000	1,511,000
> Net Income Common Stockhold...	3,197,000	5,256,000	5,145,000	3,321,000	4,083,000
Diluted NI Available to Com Stock...	3,197,000	5,256,000	5,145,000	3,321,000	4,083,000
Basic EPS	-	4.56	4.35	2.80	3.42
Diluted EPS	-	4.56	4.35	2.80	3.42
Basic Average Shares	-	1,179,579	1,182,000	1,194,000	1,194,000
Diluted Average Shares	-	1,179,579	1,182,000	1,194,000	1,194,000
Total Operating Income as Reported	4,428,000	4,656,000	6,623,000	4,473,000	5,703,000
Total Expenses	25,870,000	23,029,000	20,718,000	21,951,000	18,985,000
Net Income from Continuing & Dis...	3,197,000	5,256,000	5,145,000	3,321,000	4,083,000
Normalized Income	3,241,731	5,340,797	5,255,532	3,924,259	3,795,380
Interest Income	1,545,000	3,123,000	1,473,000	787,000	371,000
Interest Expense	1,527,000	949,000	697,000	589,000	418,000
Net Interest Income	18,000	2,174,000	776,000	198,000	-47,000
EBIT	5,817,000	7,796,000	7,917,000	5,185,000	6,018,000
EBITDA	7,709,000	-	-	-	-
Reconciled Cost of Revenue	8,721,000	7,946,000	7,886,000	8,355,000	7,462,000
Reconciled Depreciation	1,892,000	1,775,000	1,831,000	1,872,000	1,362,000
Net Income from Continuing Oper...	3,197,000	5,256,000	5,145,000	3,321,000	4,083,000
Total Unusual Items Excluding Goo...	-68,000	-108,000	-151,000	-823,000	394,000
Total Unusual Items	-68,000	-108,000	-151,000	-823,000	394,000
Normalized EBITDA	7,777,000	9,679,000	9,899,000	7,880,000	6,986,000
Tax Rate for Calcs	0	0	0	0	0
Tax Effect of Unusual Items	-23,269	-23,203	-40,468	-219,741	106,380

- Cash Flow Statement: Source Yahoo finance

Cash Flow

Currency in EUR. All numbers in thousands

Breakdown	TTM	12/30/2021	12/30/2020	12/30/2019	12/30/2018
> Operating Cash Flow	4,867,000	6,223,000	7,194,000	3,496,000	4,303,000
> Investing Cash Flow	-3,057,000	-3,063,000	-2,986,000	-7,021,000	-3,066,000
> Financing Cash Flow	-3,243,000	-56,000	-3,997,000	102,000	3,283,000
> End Cash Position	6,511,000	8,898,000	5,311,000	5,314,000	8,627,000
Capital Expenditure	-992,000	-800,000	-816,000	-817,000	-1,458,000
Issuance of Capital Stock	-	-	-	-	0
Issuance of Debt	118,000	1,680,000	2,132,000	3,622,000	6,368,000
Repayment of Debt	-1,435,000	-2,326,000	-2,808,000	-1,712,000	-1,407,000
Repurchase of Capital Stock	-1,500,000	0	-1,492,000	0	0
Free Cash Flow	3,875,000	5,423,000	6,378,000	2,679,000	2,845,000

Genians Inc.

Genians, Inc. operates as a system software development company. The Company provides network access control solutions and IT security services. Genians also manufactures built-in wireless adapters. Genians serve the government, the military, energy, finance, healthcare, and educational sectors.

1) Statement of Income & Gains and Expenditure & Losses

Currency: KRW	Q3 '20	Q4 '20	Q1 '21	Q2 '21	Q3 '21	Q4 '21	Q1 '22	TTM
Total revenue	6.24B	9.78B	4.74B	6.52B	6.27B	14.39B	5.67B	32.85B
YoY growth	–	–	–	+6.91%	+0.36%	+47.09%	+19.61%	
› Cost of goods sold	−2.06B	−4.11B	−2.03B	−2.45B	−2.31B	−5.93B	−2.20B	−12.89B
Gross profit	4.18B	5.67B	2.71B	4.07B	3.96B	8.46B	3.46B	19.95B
YoY growth	–	–	–	+34.40%	−5.35%	+49.29%	+28.04%	
› Operating expenses (ex...	−3.45B	−3.04B	−3.21B	−2.99B	−3.29B	−4.22B	−3.62B	−14.11B
Operating income	733.12M	2.63B	−506.42M	1.08B	670.26M	4.24B	−151.79M	5.84B
YoY growth	–	–	–	+836.26%	−8.58%	+61.48%	+70.03%	
› Non-operating income,...	26.97M	146.57M	916.43M	218.04M	440.94M	266.85M	307.28M	1.23B
Pretax income	760.10M	2.77B	410.00M	1.30B	1.11B	4.51B	155.49M	7.07B
YoY growth	–	–	–	+1573.34%	+46.19%	+62.57%	−62.08%	
Equity in earnings	–	−31.47M	−10.98M	−17.18M	−58.17M	2.77M	−64.29M	−136.87M
Taxes	56.38M	88.58M	114.97M	−102.31M	−29.12M	−1.05B	134.05M	−1.05B
Non-controlling/minority ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	–
After tax other income/e...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	–
Net income before discon...	816.48M	2.83B	513.99M	1.18B	1.02B	3.45B	225.25M	5.88B
Discontinued operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	–

Net income	816.48M	2.83B	513.99M	1.18B	1.02B	3.45B	225.25M	5.88B
YoY growth	–	–	–	+514.85%	+25.41%	+22.10%	-56.18%	
Dilution adjustment	0.00	0.00	0.00	0.00	1.00	13.47M	0.00	13.47M
Preferred dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	–
Diluted net income availa...	816.48M	2.83B	513.99M	1.18B	1.02B	3.47B	225.25M	5.90B
Basic earnings per share (...	95.07	330.58	60.07	138.12	119.66	401.22	25.52	684.53
YoY growth	–	–	–	+525.64%	+25.87%	+21.37%	-57.51%	
Diluted earnings per shar...	92.92	330.58	58.61	134.62	116.55	388.52	25.52	665.21
YoY growth	–	–	–	+521.64%	+25.44%	+17.53%	-56.45%	
Average basic shares outs...	8.59M	8.56M	8.56M	8.56M	8.56M	8.61M	8.83M	–
Diluted shares outstanding	8.79M	8.56M	8.77M	8.78M	8.78M	8.92M	8.83M	–
EBITDA	972.91M	2.82B	-320.18M	1.27B	858.57M	4.43B	34.88M	6.59B
YoY growth	–	–	–	+1267.33%	-11.75%	+57.24%	+110.89%	
EBIT	733.12M	2.63B	-506.42M	1.08B	670.26M	4.24B	-151.79M	5.84B
YoY growth	–	–	–	+836.26%	-8.58%	+61.48%	+70.03%	
Total operating expenses	5.51B	7.16B	5.25B	5.44B	5.60B	10.15B	5.82B	27.01B

2) Balance Sheet

Currency: KRW	Q3 '20	Q4 '20	Q1 '21	Q2 '21	Q3 '21	Q4 '21	Q1 '22
Total assets	41.70B	44.12B	43.24B	43.56B	44.42B	52.70B	49.13B
YoY growth	–	–	–	+8.47%	+6.52%	+19.45%	+13.61%
Total liabilities	9.27B	9.19B	7.86B	6.92B	6.71B	11.58B	8.81B
YoY growth	–	–	–	-13.76%	-27.69%	+25.93%	+12.11%
Total equity	32.43B	34.93B	35.39B	36.64B	37.71B	41.12B	40.32B
YoY growth	–	–	–	+14.03%	+16.30%	+17.74%	+13.94%
Total liabilities & shareholders' e...	41.70B	44.12B	43.24B	43.56B	44.42B	52.70B	49.13B
Total debt	269.73M	235.92M	217.59M	251.70M	237.46M	224.40M	210.04M
Net debt	-19.37B	-20.15B	-22.99B	-22.39B	-20.00B	-19.58B	-22.75B
Book value per share	3.78K	4.08K	4.14K	4.28K	4.41K	4.66K	4.57K

3)Cash Flow Statement

Currency: KRW	Q3 '20	Q4 '20	Q1 '21	Q2 '21	Q3 '21	Q4 '21	Q1 '22	TTM
Cash from operating...	-550.02M	515.14M	3.93B	-956.24M	-283.57M	3.01B	2.81B	4.59B
YoY growth	–	–	–	-129.55%	+48.44%	+485.02%	-28.51%	
Cash from investing ...	1.28B	383.50M	-2.51B	-65.65M	456.56M	-2.21B	-2.12B	-3.94B
YoY growth	–	–	–	+94.73%	-64.35%	-676.18%	+15.25%	
Cash from financing...	-573.25M	-135.93M	-141.28M	-40.17M	-43.62M	-43.15M	-40.58M	-167.52M
YoY growth	–	–	–	+96.38%	+92.39%	+68.26%	+71.28%	
Free cash flow	-573.18M	494.54M	3.88B	-1.02B	-312.76M	2.99B	2.76B	4.41B
YoY growth	–	–	–	-131.86%	+45.44%	+503.62%	-28.91%	

Source: Trading view

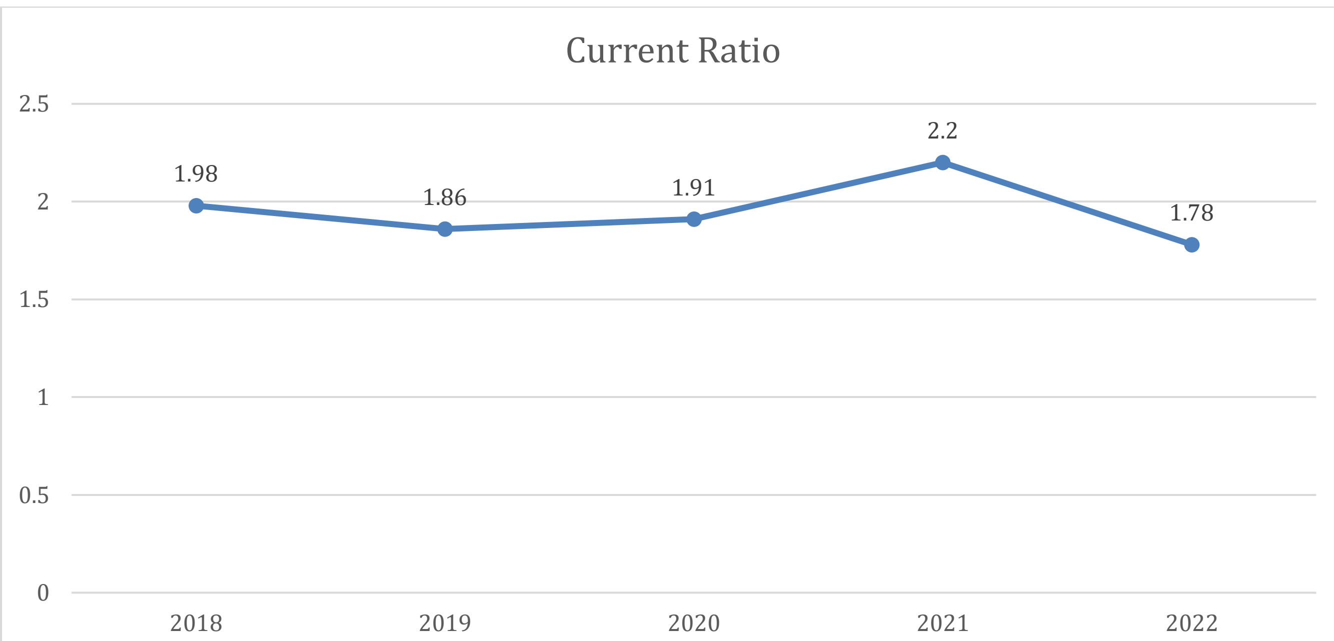
RATIO ANALYSIS

LIQUIDITY AND SOLVENCY ANALYSIS

❖ Current Ratio

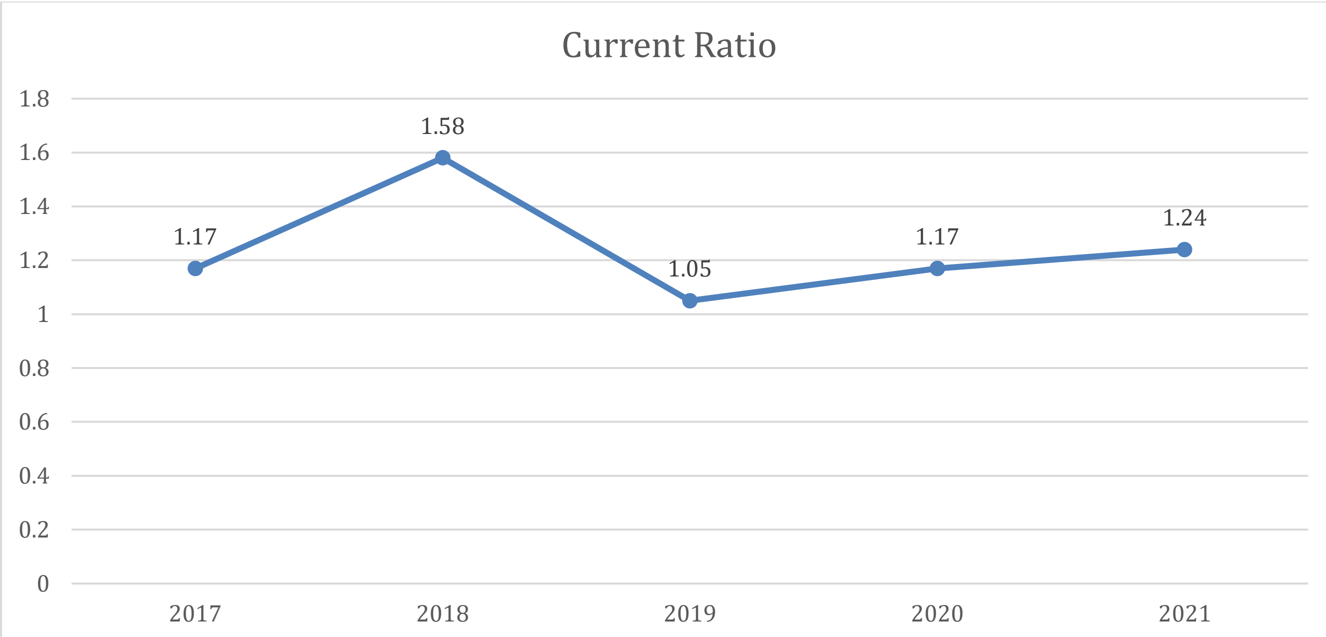
The current ratio measures a company's ability to pay off short-term liabilities with current assets. A high current ratio indicates liquidity or short-term solvency. However, it may also indicate that the company is not efficiently using cash(or its assets) and other short-term assets, missing out on profitable investment opportunities.

a. Tech Mahindra



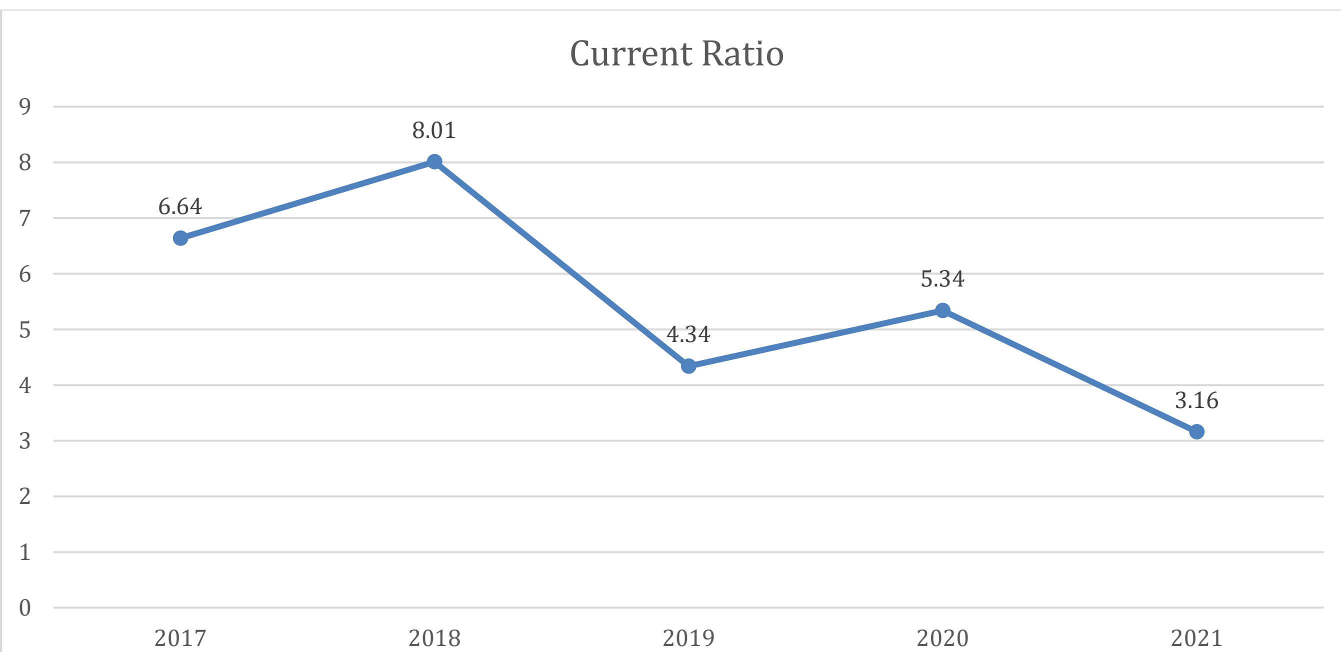
It can be observed that the current ratio for Tech Mahindra has been decreasing gradually from 2017 till 2019. It underwent an increase from 2019 up until 2021 where it reached its highest point in five years at 2.19 and dipped to 1.78 by 2022. The current ratio has been above 1.7 consistently, this implies that the liquidity position of the company has been good and the firm is able to pay its current liability in time without facing difficulties. However, in 2021, the current ratio crossed 2. This might also indicate that Tech Mahindra was not investing in its current assets efficiently.

b. SAP SE



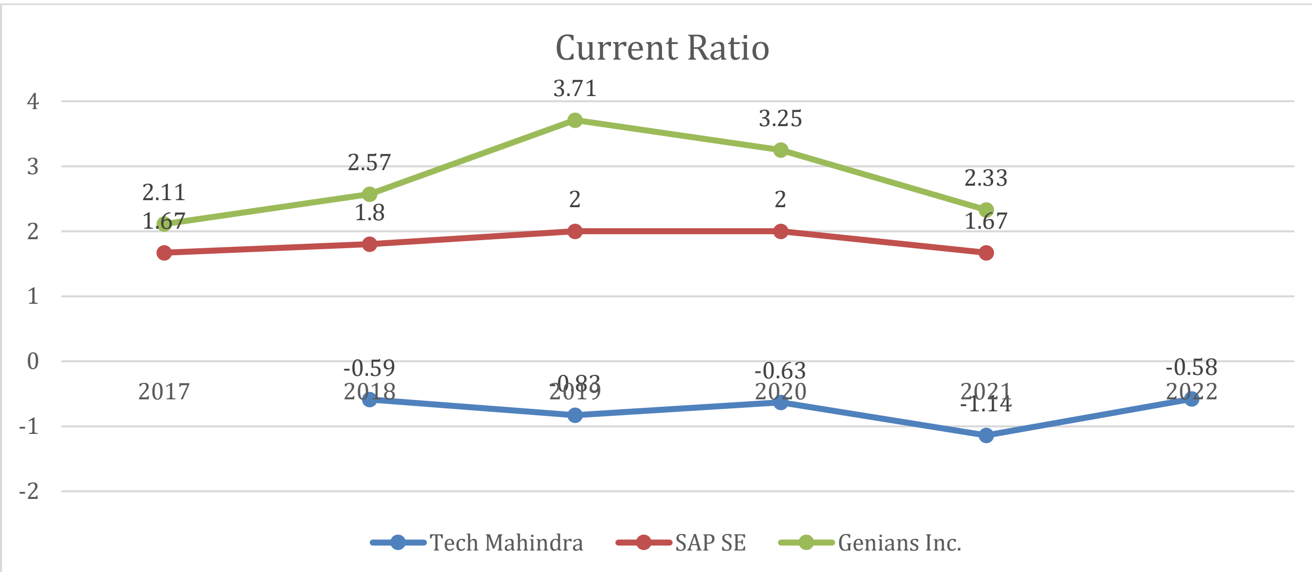
From the chart, we can see that, in SAP SE there was a swift increase in the current ratio from 2017 to 2018 from 1.17 to 1.58 followed by a quick dip in 2019 to 1.05. From then onwards, the graph is stable and increasing. The ratio does not undergo a lot of fluctuations, and maintains a value between 1 and 1.5. We can deduce that the liquidity position of the company has been improving since 2019.

c. Genians Inc.



In the case of Genians.Inc, an abnormality can be noticed in the chart. The current ratio was 6.64 in 2017, and it increased to an even higher value, 8.01 in 2018. Consequent decrease can be observed from then onwards but the current ratio's lowest value is also 3.16. Its liquidity position shows an overall decrease but this is also a clear indication of extremely high liquidity and that the company has problems managing capital allocation and is holding too much cash in its accounts.

Comparative Analysis: Genians.Inc has the highest liquidity among all three companies. Its current ratio is abnormally high, reaching 8.01. Comparing Tech Mahindra with SAP SE, it is clearly seen that Tech Mahindra's Current ratio is maintained between 1.7 and 2.1 consistently, and SAP SE's current ratio is between 1 and ~1.5. This tells us that Tech Mahindra's fund position to pay its current liability in time without facing difficulties is higher than SAP SE, and Tech Mahindra's liquidity position is also consistently better than SAP SE's.



❖ Quick Ratio

The Quick ratio measures the ability of a company to use its quick assets (near cash) to pay off its liabilities. A company with a quick ratio of less than one cannot currently pay back its current liabilities.

$$QR = \frac{CE + MS + AR}{CL}$$

Or

$$QR = \frac{CA - I - PE}{CL}$$

where:

$QR =$ Quick ratio

$CE =$ Cash & equivalents

$MS =$ Marketable securities

$AR =$ Accounts receivable

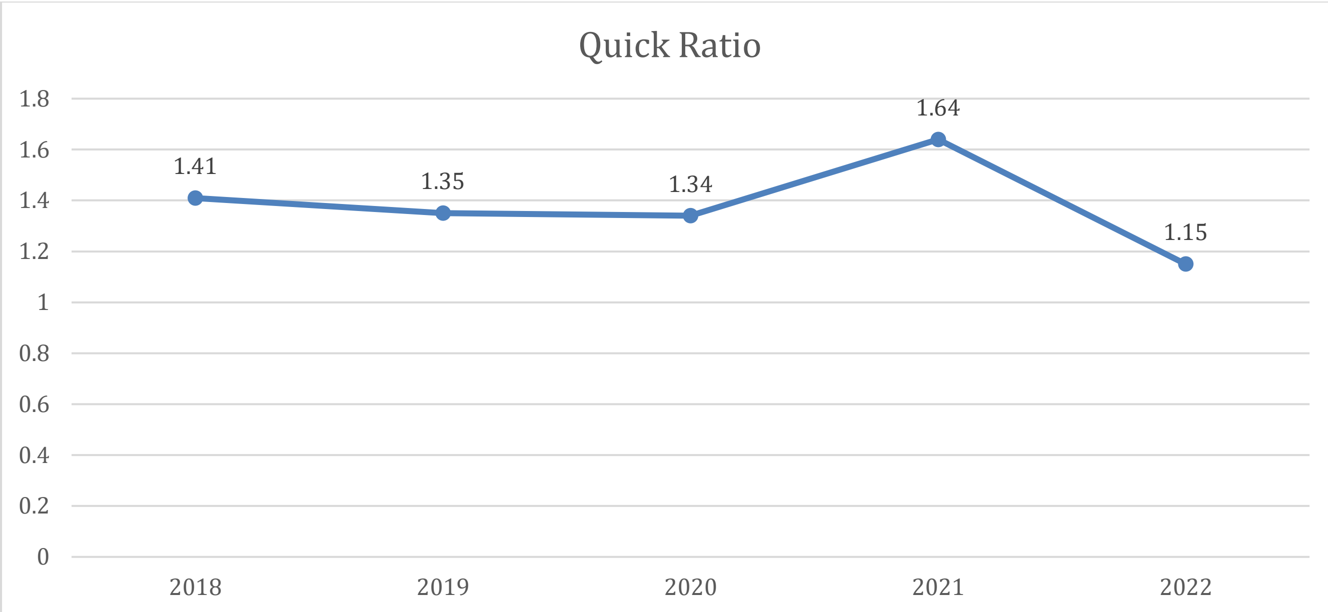
$CL =$ Current Liabilities

$CA =$ Current Assets

$I =$ Inventory

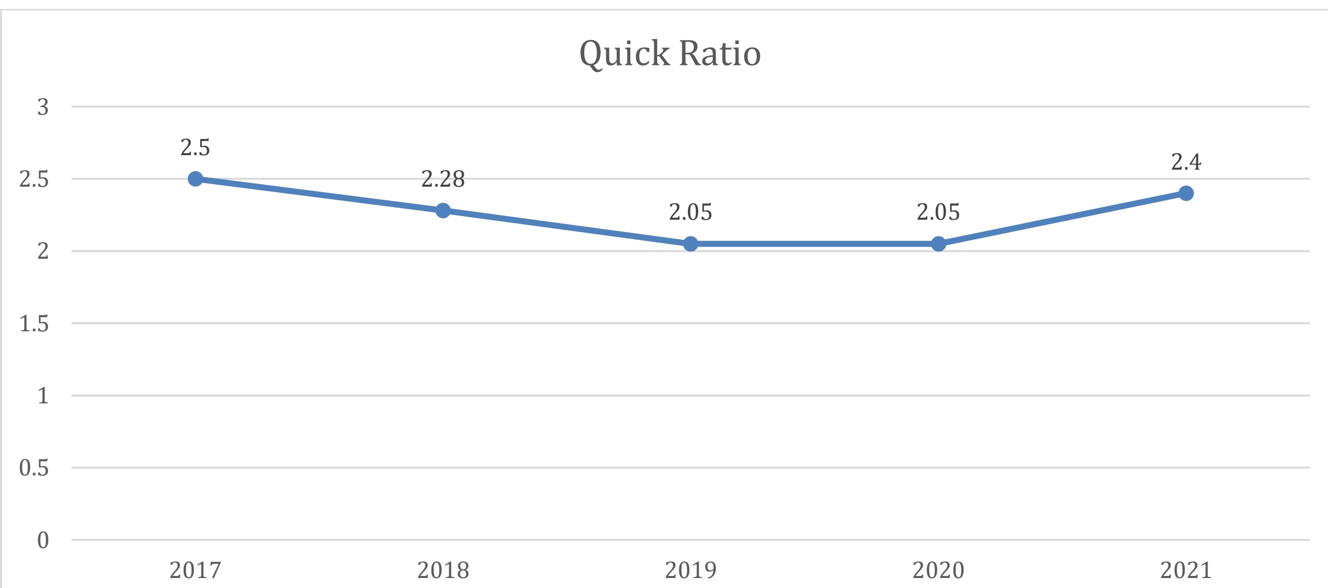
$PE =$ Prepaid expenses

a. Tech Mahindra



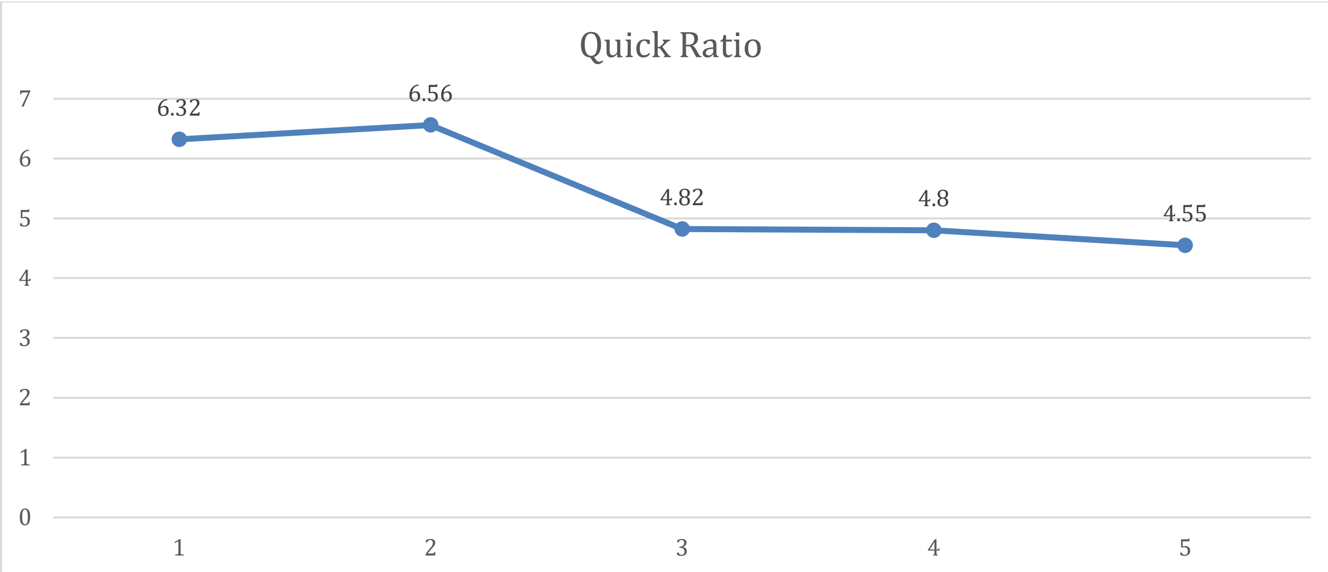
For Tech Mahindra, the quick ratio follows a similar trend compared to current ratio, i.e, continuously decreasing from 2017 to 2020, The graph has almost no fluctuations and the value of the quick ratio lies between 2.4 and 2.8, with a significant rise to 2021 to 2.75 and a drop again in 2022.

b. SAP SE



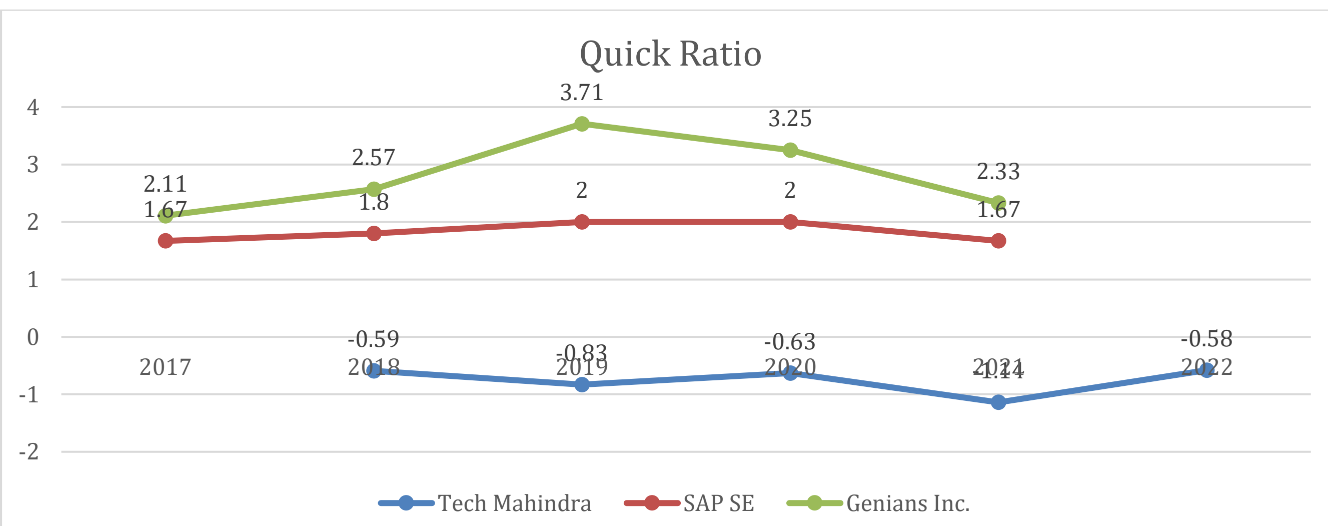
In SAP SE, the graph for quick ratio doesn't exactly follow the exact same trend as the current ratio. Although the current ratio increases in 2018 and falls again, the quick ratio graph shows a steady decline. It becomes constant in the years 2019 and 2020 and increases more steeply from 2020 to 2021 (2.05 to 2.4) than the current ratio did in the same time period (1.17 to 1.24).

c. Genians Inc.



For Genians, even though the quick ratio has abnormally high values, it mostly follows the same trend as the current ratio except a slight change in the year 2019, the quick ratio decreases till 2021 while the current ratio spikes and then falls again. Even in this case, the quick ratio is above 3, this indicates that the company might not be using its assets efficiently.

Comparative Analysis: We can see that in all three cases, the trends of the quick ratios remain similar to current ratios. The ability of all three companies to pay off their current liabilities is high, with Genians being the highest, followed by Tech Mahindra and the last being SAP SE.
Therefore, we land at the same conclusion that we made in the initial analysis.



❖ Asset Turnover Ratio

The asset turnover ratio indicates the effectiveness of the firm’s use of its total asset base. It measures a company’s ability to generate sales from assets.

$$\text{Asset Turnover} = \frac{\text{Total Sales}}{\frac{\text{Beginning Assets} + \text{Ending Assets}}{2}}$$

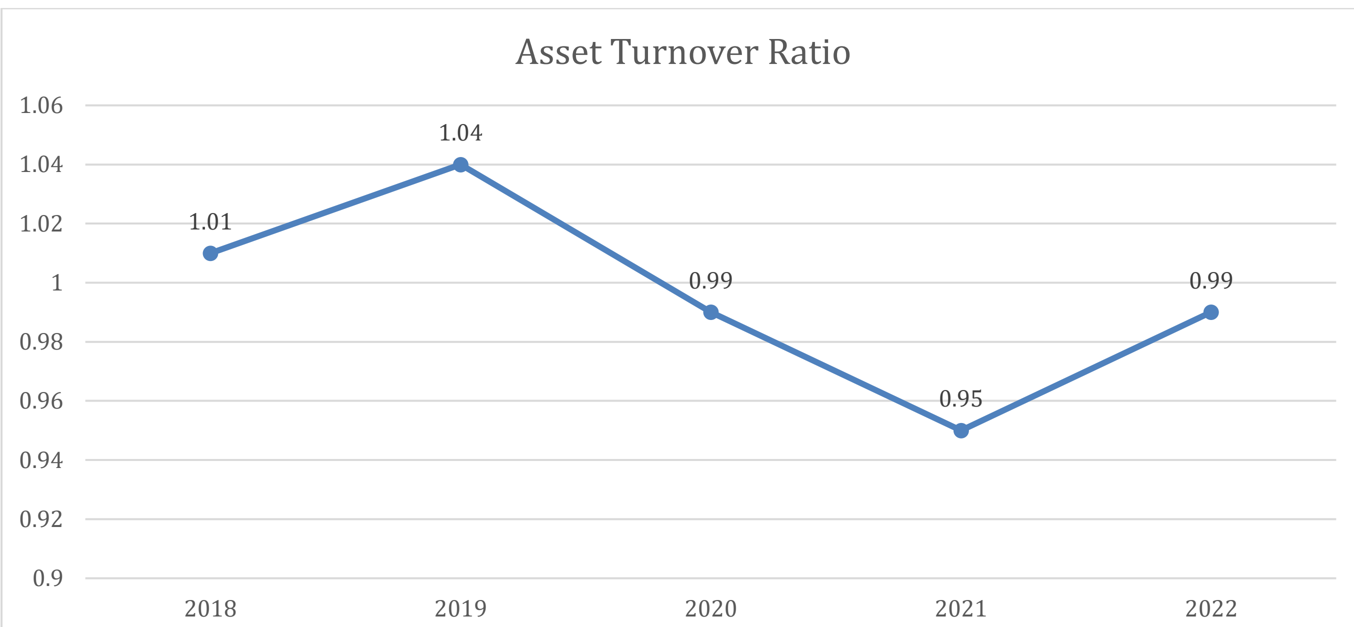
where:

$\text{Total Sales} = \text{Annual sales total}$

$\text{Beginning Assets} = \text{Assets at start of year}$

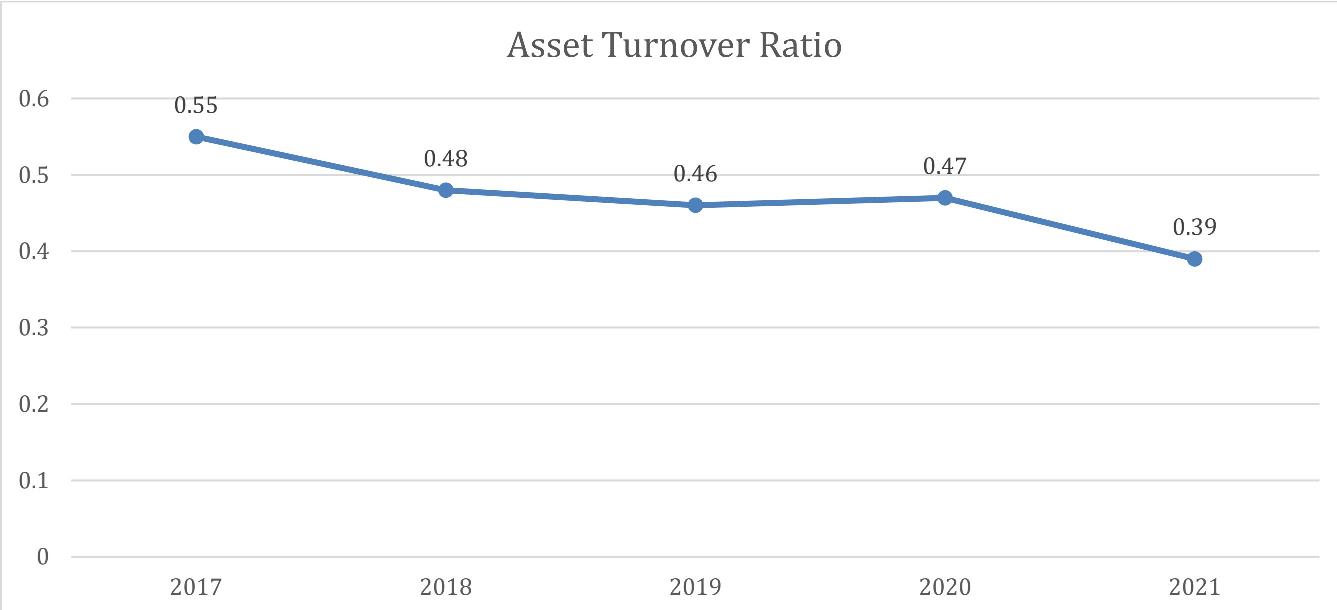
$\text{Ending Assets} = \text{Assets at end of year}$

a. Tech Mahindra



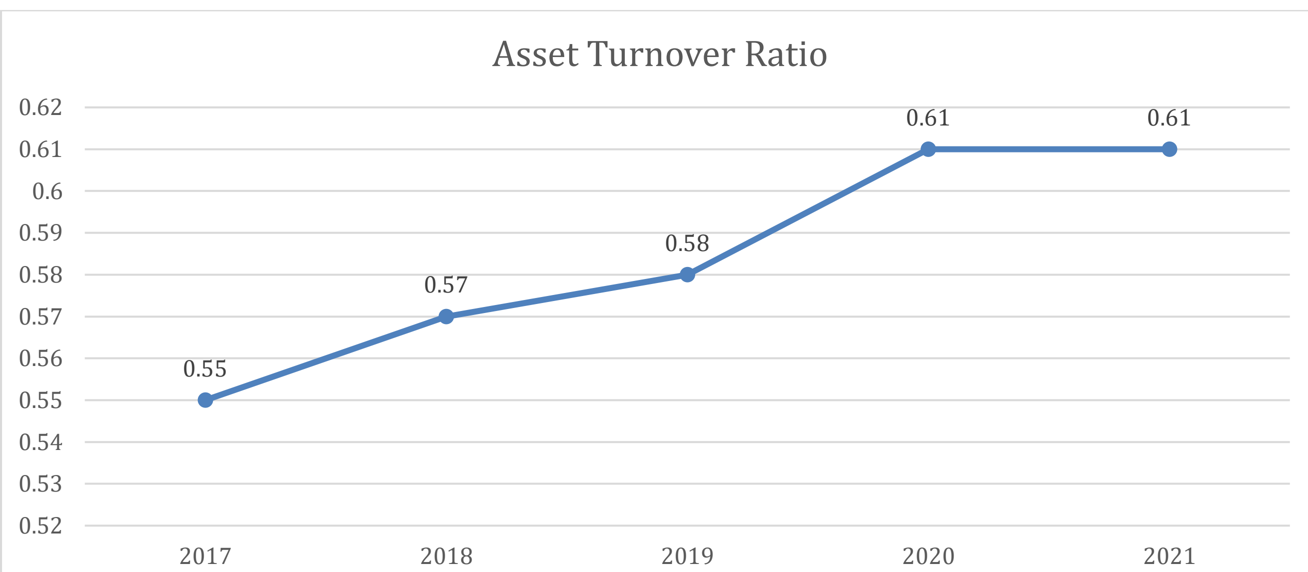
The Asset turnover ratio shows a consequent decrease from 2017 to 2022 except a minute rise in 2019 to 1.04, and a rise in 2022 from 0.95 to 0.99 thus indicating the decreasing efficiency of the company to generate sales from assets.

b. SAP SE



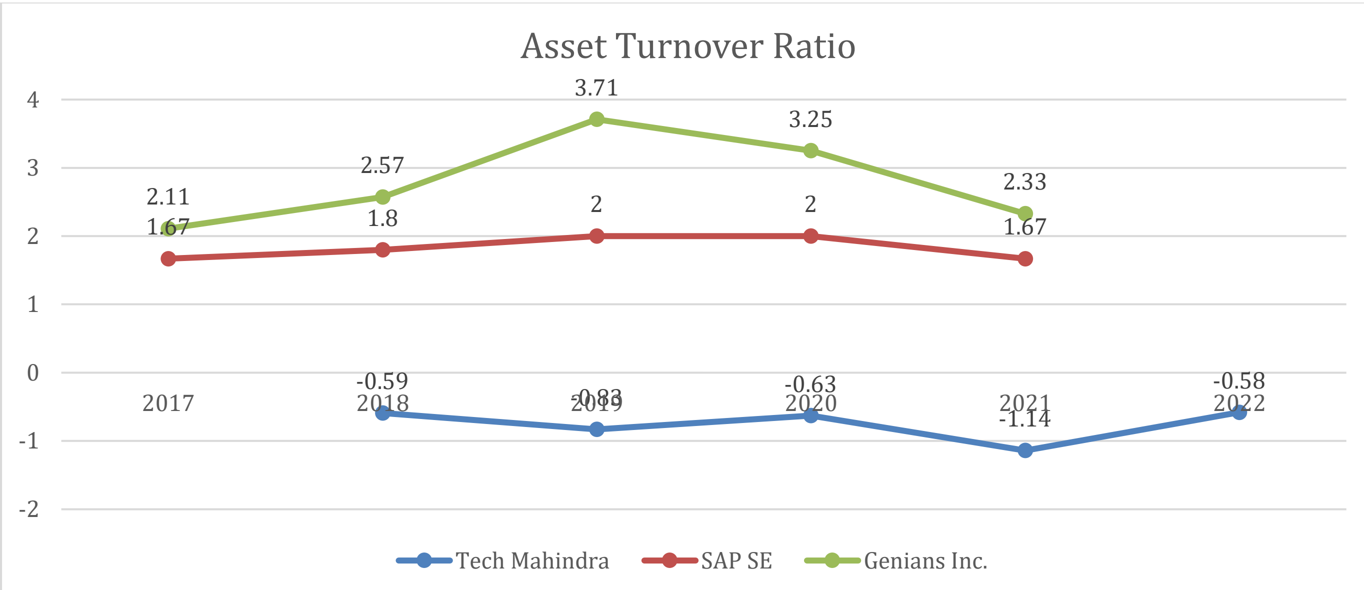
In SAP SE's case, the asset turnover ratio eventually declines from 2017 to 2022 except for a rise in 2018 from 0.5 to 0.55. This implies that the company's efficiency to generate sales increased slightly in the year 2018 but it could not maintain that efficiency and it gradually decreased till 2021 by which the ratio drops to 0.39 undergoing a drop of 22% since 2017.

c. Genians Inc.



For Genians, the graph for the asset turnover ratio shows a steady increase from 2017 and almost becomes constant by 2021 compared to 2020. This shows that the company's efficiency to generate sales from its total assets is increasing year by year. It saw an increase of 10.9% from 2017 to 2022. That being said, the ratio is mostly constant from 2020 to 2021 which tells us that the company's new methods to increase its sales might not have worked in the year 2020, leading to no net increase in efficiency in 2021.

Comparative Analysis: Comparing the assets Turnover ratio for all three companies, it can clearly be seen that the company with the highest efficiency in converting its total assets into sales is Tech Mahindra; its ratio mostly fluctuates between 0.95 and 1.1. Now, analyzing the graphs for the other two companies, Genians Inc has better efficiency in converting its assets into sales than SAP SE (The highest point that the asset turnover ratio reached for SAP SE is 0.55, which is also the lowest in the case of Genians).



Profitability Ratios

Profitability ratios measure a company's ability to generate income relative to revenue, balance sheet assets, operating costs, and equity.

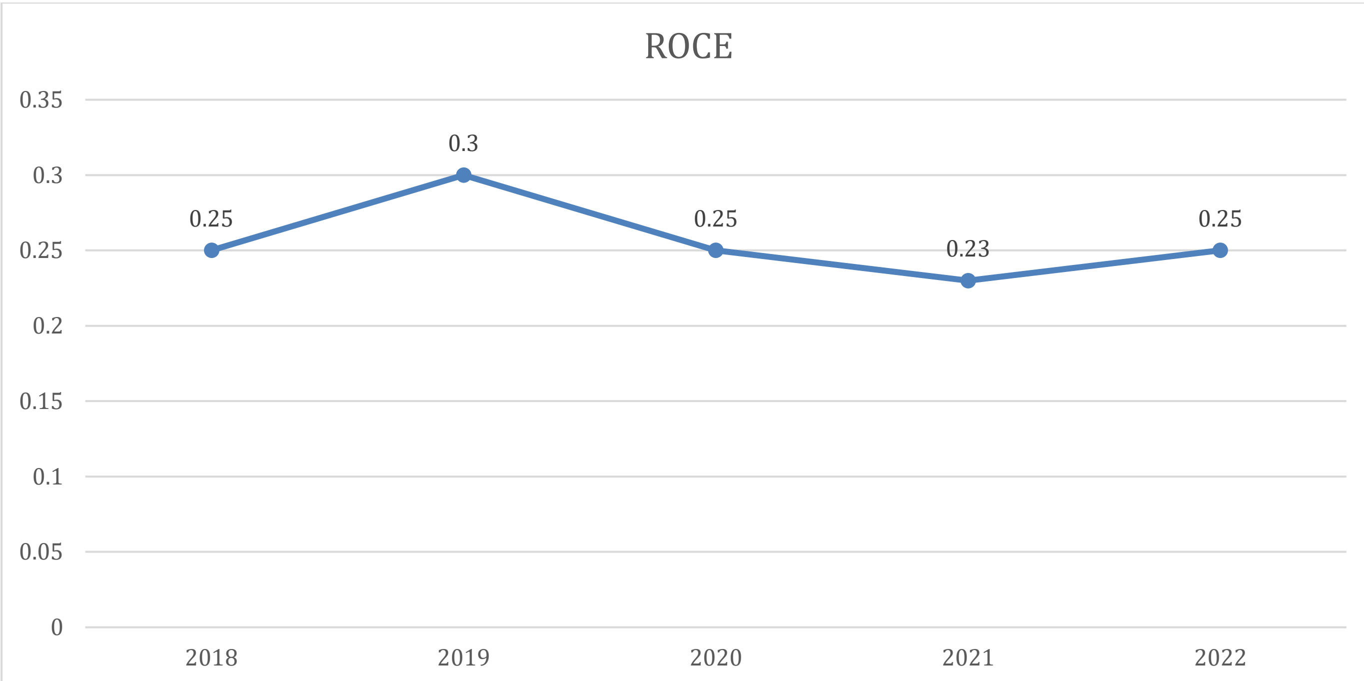
Common profitability financial ratios include the following:

❖ Return on Capital Employed Ratio (ROCE):

The term return on capital employed (ROCE) refers to a financial ratio that can be used to assess a company's profitability and capital efficiency. In other words, this ratio can help to understand how well a company is generating profits from its capital as it is put to use.

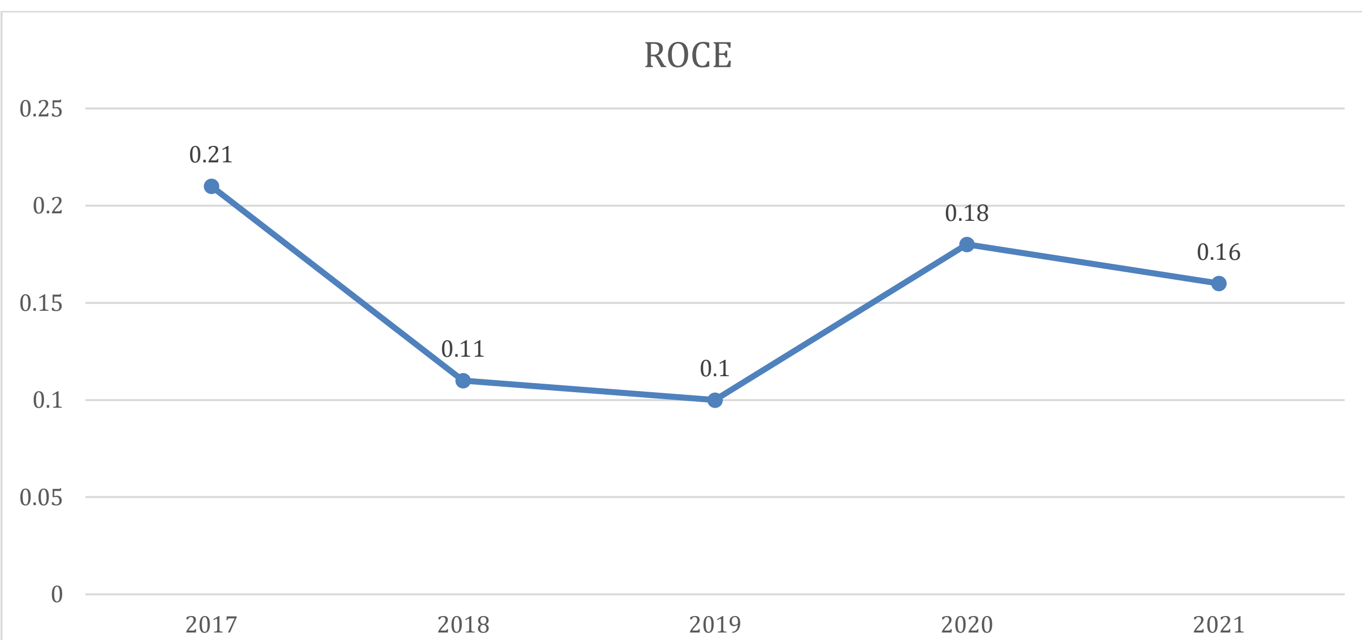
$$ROCE = \frac{EBIT\ (Earnings\ Before\ Interest\ and\ Tax)}{Capital\ Employed}$$

a. Tech Mahindra



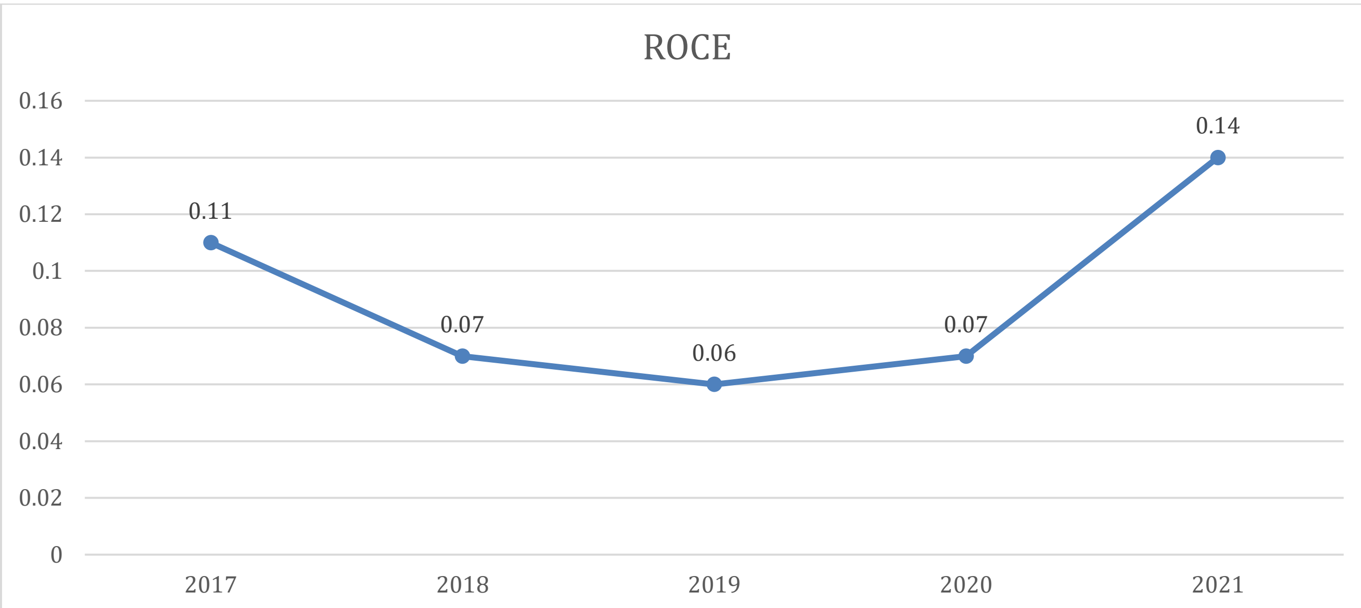
For Tech Mahindra, Return on Capital Employed Ratio(ROCE) is quite steady with a rise in 2019, overall maintaining a steady profitability efficiency of 0.25 in last 5 years with a slight fall of 0.02 during the covid phase of 2021.

b. SAP SE



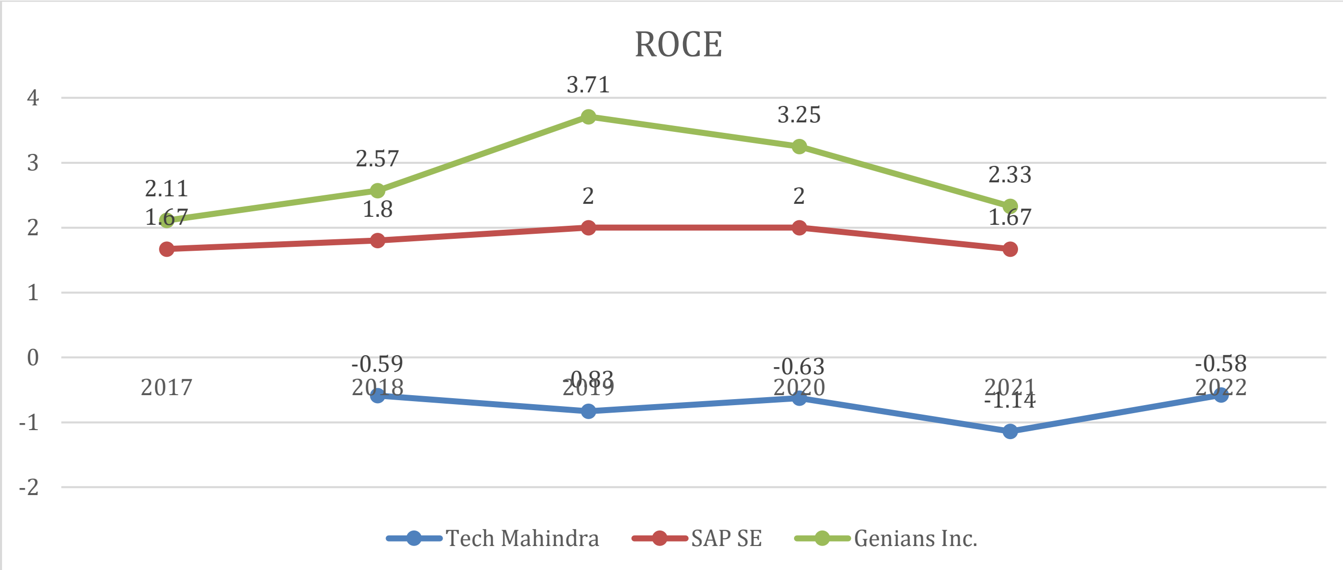
For SAP SE, Return on Capital Employed Ratio(ROCE) is unsteady during the last 5 years with a swift fall from 2017 to 2019 and a sudden increase in 2020, profitability efficiency during 2018 and 2019 went really low but increased during the COVID phase drastically with a slight decrease in 2021.

c. Genians Inc.



For Genians Inc. ,Return on Capital Employed Ratio(ROCE) is unsteady during the last 5 years with a gradual decrease from 2017 to 2019 and a sudden increase from 2020 to 2021 suggesting an increase in the profitability efficiency during the COVID times i.e. 2020-2021

Comparative Analysis: Comparing these three companies on the basis of Return on Capital Employed Ratio,Tech Mahindra has lowest variability with a high ROCE compared to SAP SE and Genians Inc. Both SAP SE and Genians Inc. have had high variability over the last 5 years with SAP SE being more profitably efficient than Genians Inc. During COVID Tech Mahindra Faced a slight downfall but in comparison Genians Inc performed well with a steady and slightly increasing ratio and SAP SE is unsteady with variability but still were not near as profitable as Tech Mahindra.

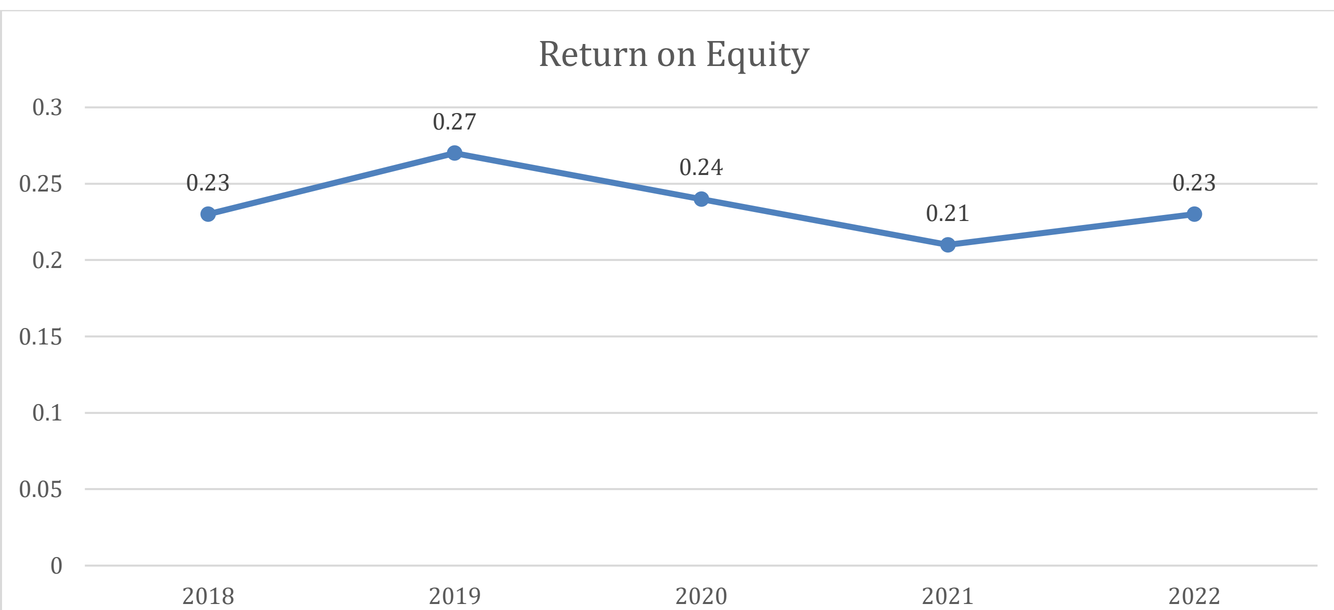


❖ Return on Equity Ratio:

Return on Equity Ratio indicates the rate of return the management has earned on the capital provided by the stockholders after accounting for payments to all other capital suppliers. It measures how efficiently a company is using its equity to generate profit.

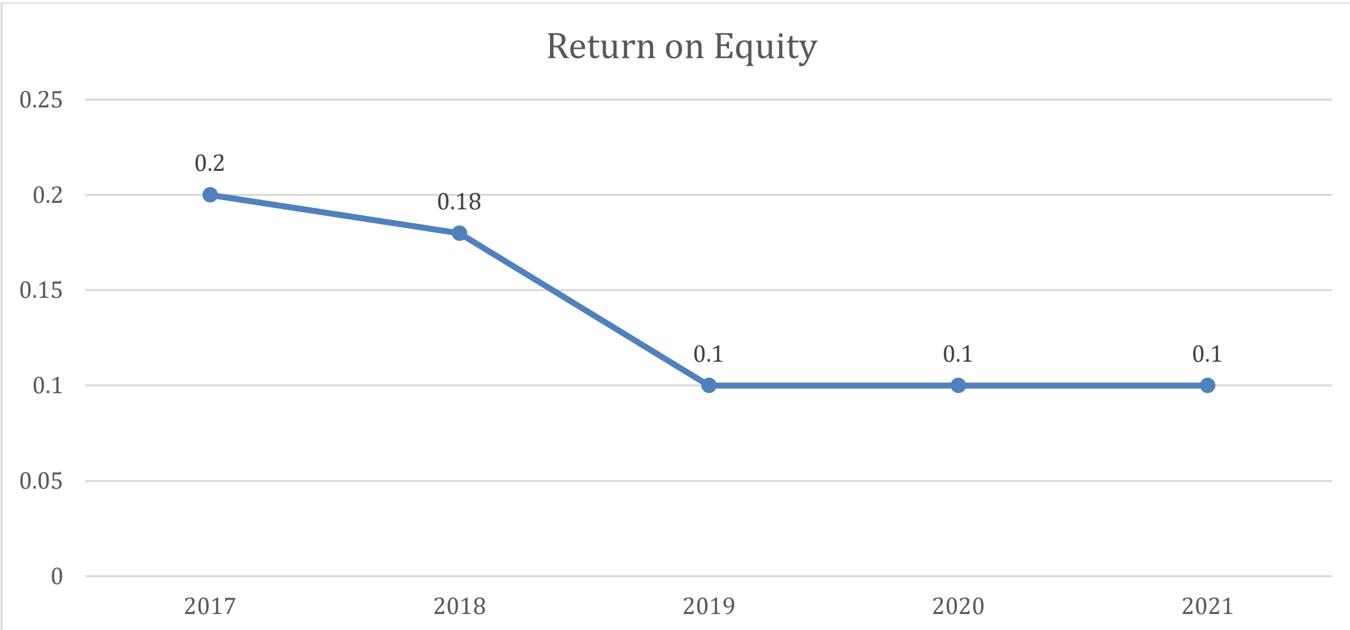
$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Average Shareholders' Equity}}$$

a. Tech Mahindra



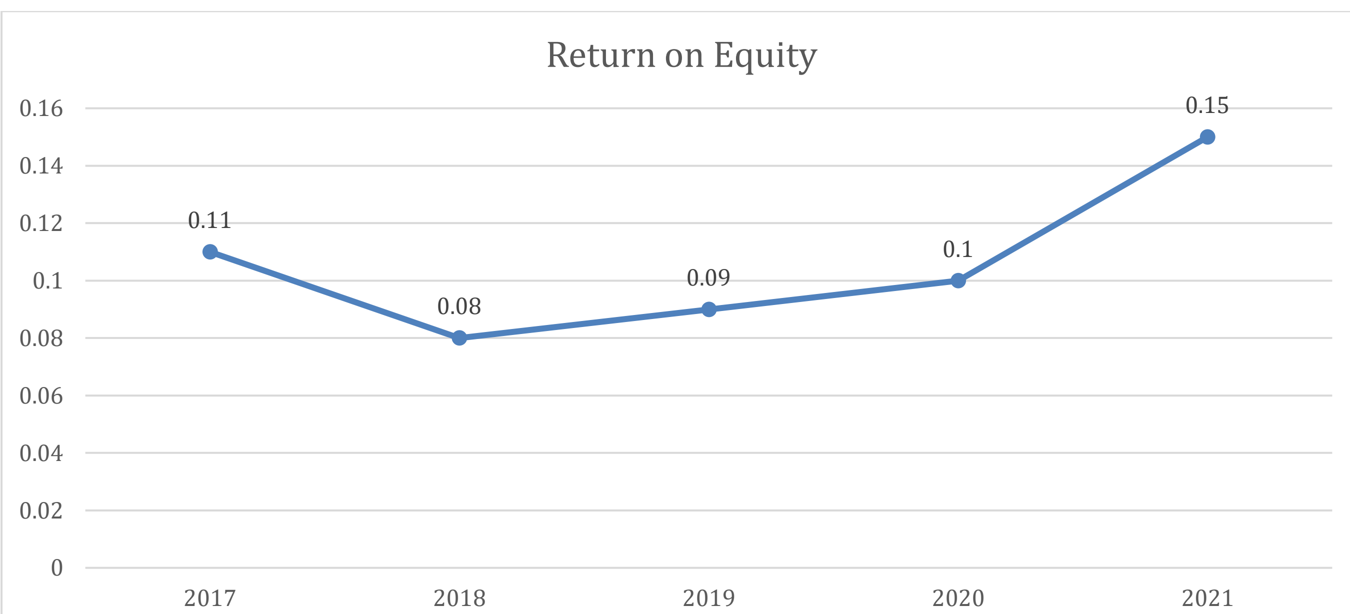
For Tech Mahindra, Return on Equity Ratio is very steady with a slight increase in 2019 with a gradual decrease during COVID from 2019 to 2021 with a slight increase in 2022 efficiently generating profit using its equity during the last 5 years.

b. SAP SE



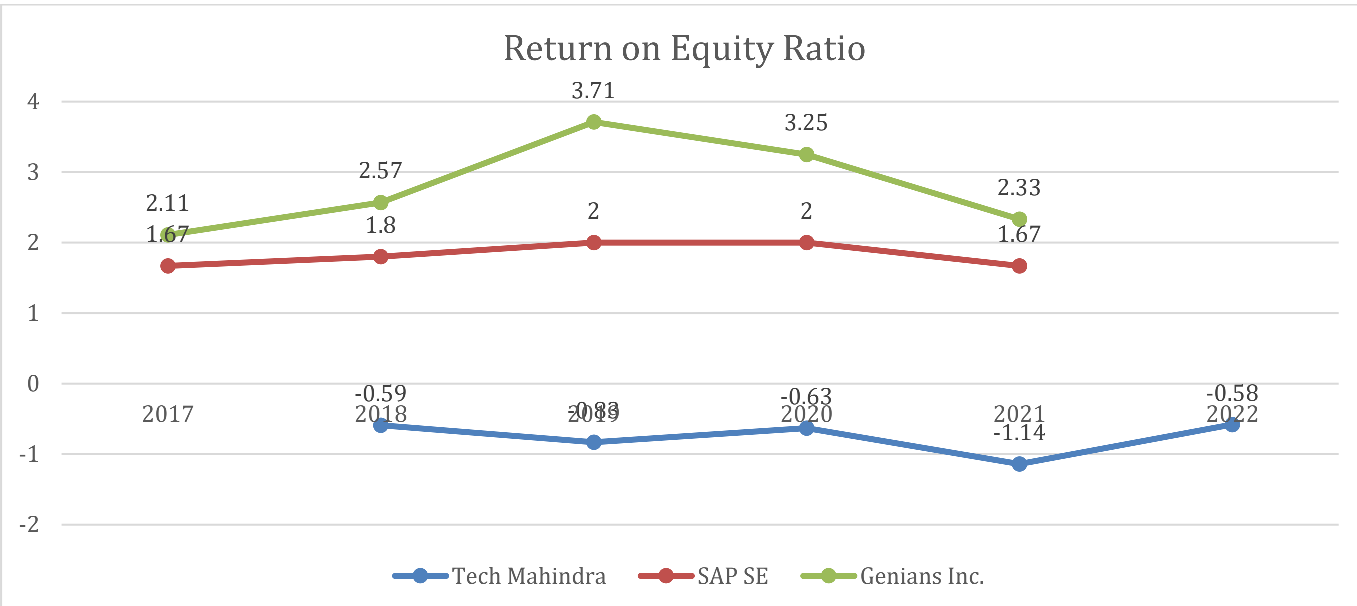
For SAP SE, Return on Equity Ratio is unsteady with a swift downfall from 2017 to 2019 then a constant efficiency from 2019 to 2021 i.e. 0.1. The company faced a downfall in generating profit in the last 5 years. The company went through a bad phase and has to work more efficiently to regain its pre-COVID state.

c. Genians Inc.



For Genians Inc., Return on Equity Ratio is slightly unsteady with a slight decrease from 2017 to 2018 and a gradual increase from 2018 to 2021.The company has really grown in the last 5 years with a steady increase in the utility of equity to generate profit efficiently.

Comparative Analysis: Comparing these three companies based on Return on Equity Ratio, Tech Mahindra outperforms SAP SE and Genians Inc. with a steady profit generation using the equity on the other hand Genians also performed really well with a steady increase in profit generation, but SAP SE faced rough five years with downfall but tried to maintain a 0.1 ratio from 2019 to 2021. During COVID, Tech Mahindra faced a slight downfall while Genians Inc. slightly increased and SAP SE was constant.

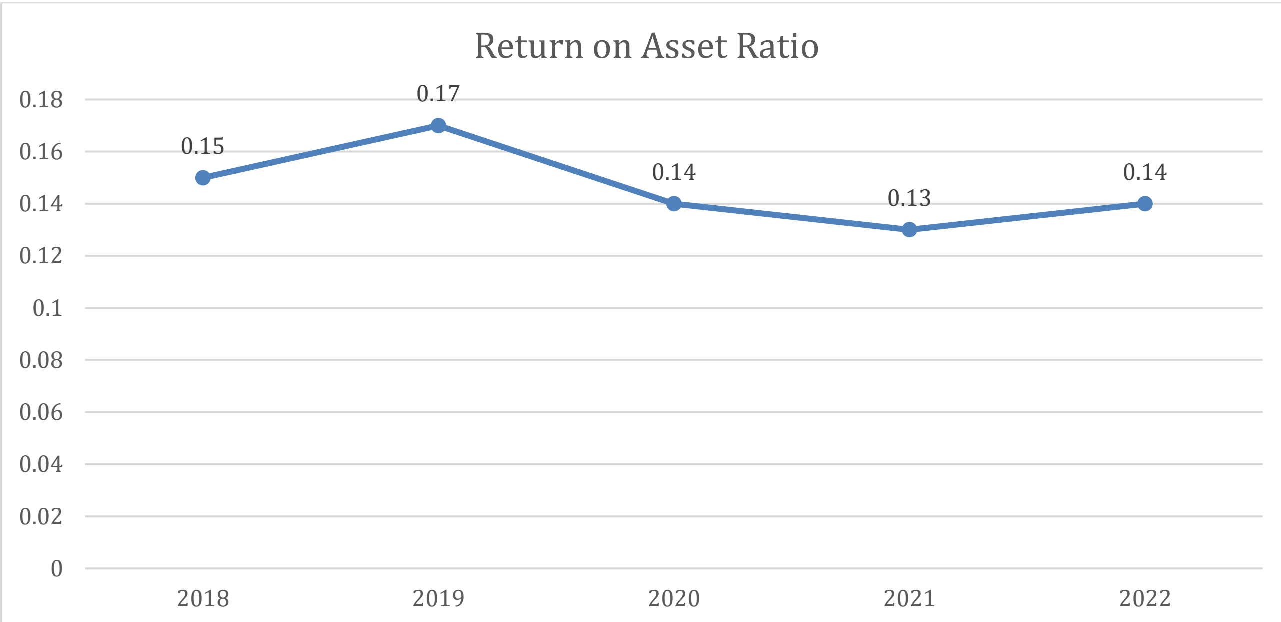


❖ Return on Assets Ratio:

The term return on assets (ROA) refers to a financial ratio that indicates how profitable a company is in relation to its total assets. Corporate management, analysts, and investors can use ROA to determine how efficiently a company uses its assets to generate a profit.
You can calculate a company's ROA by dividing its net income by its total assets.

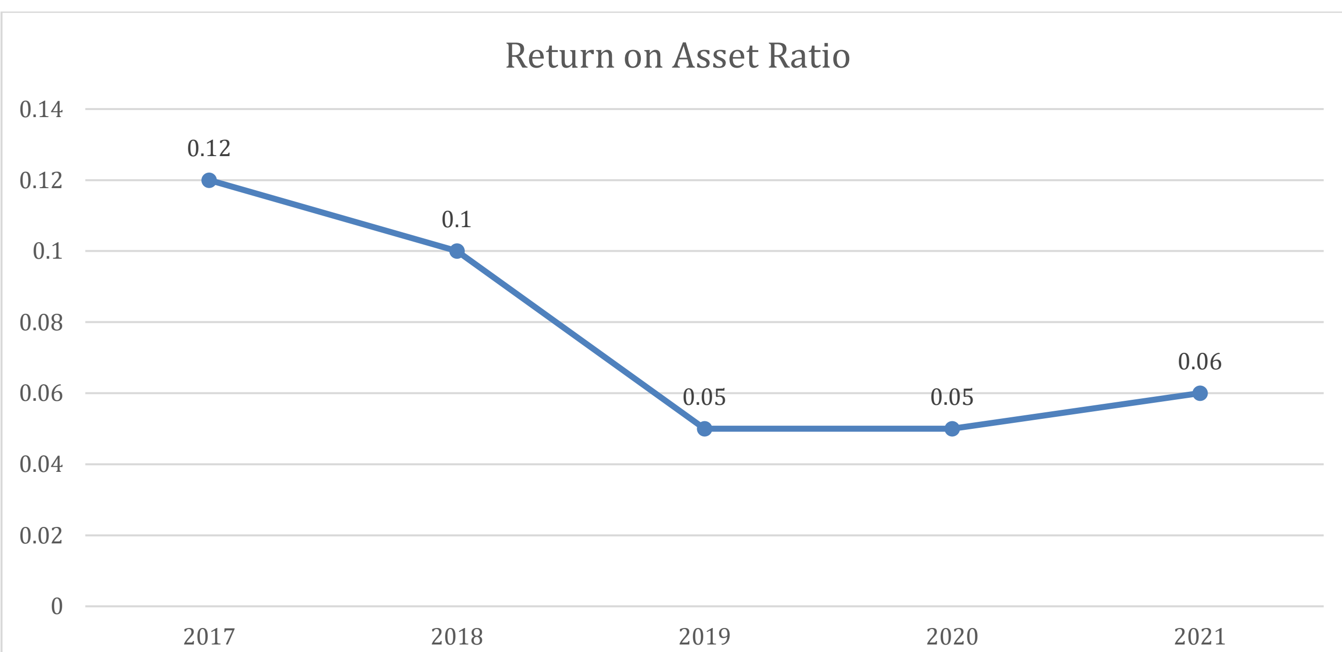
$$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets}$$

a. Tech Mahindra



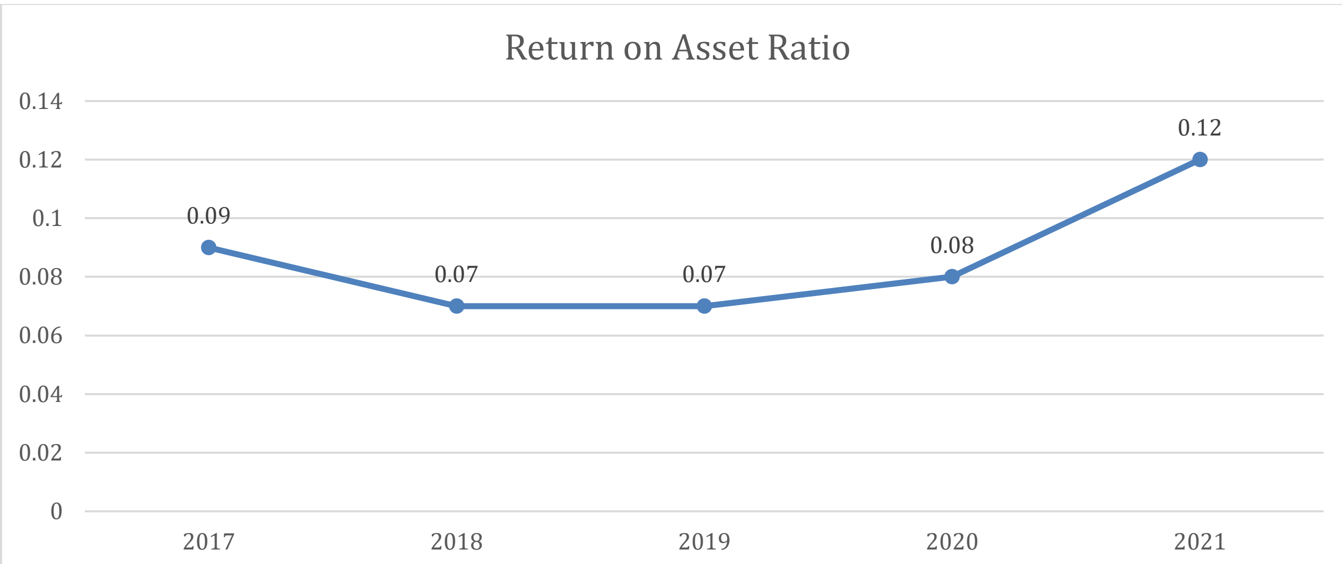
There has been an increase in Return on Asset ratio from 2019 (from 0.15 to 0.17) but a comparatively further decline from 0.17 to 0.13 in the next two years. It has increased to 0.14 in 2022. The decrease in this ratio shows that the company has been using its assets more inefficiently compared to the previous years. The most recent data shows the ratio at 0.14 which is 0.03 lesser than 0.17 in 2019. This means Company has yet to reach its full potential in order to achieve 0.17 and beyond in coming years.

b. SAP SE



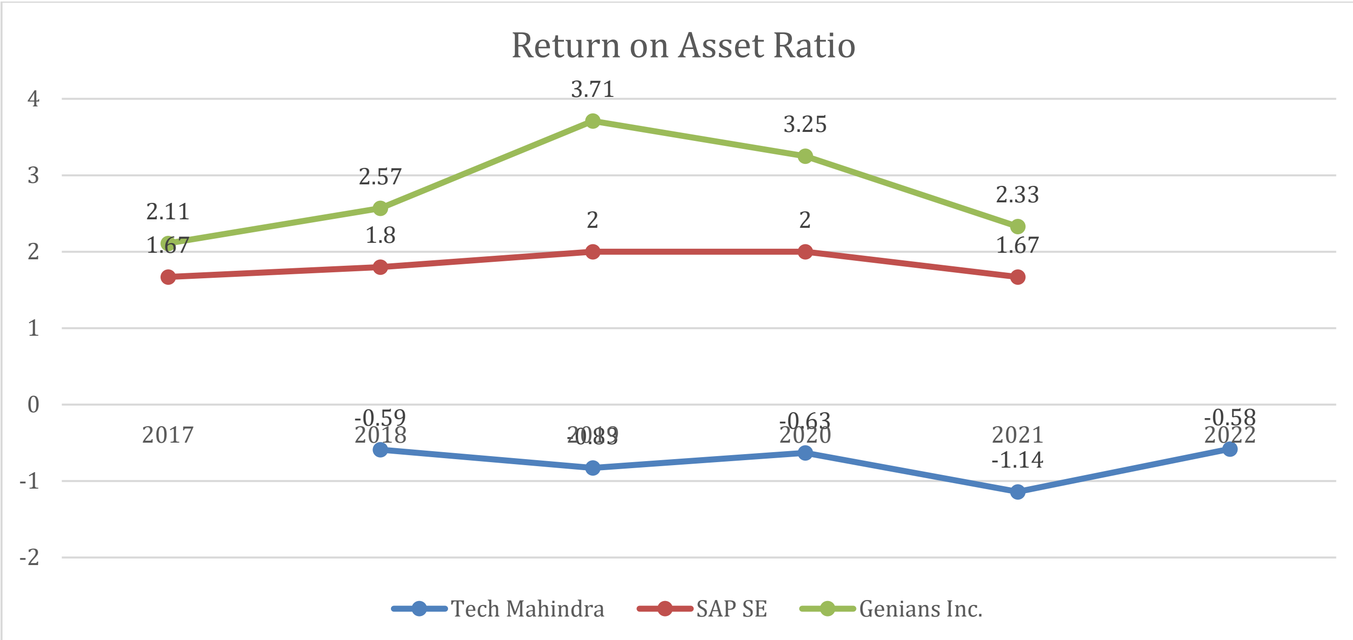
Observing the downward trend in the last 5 years, we can say that the company SAP SE has gotten worse at handling their assets efficiently. This can cause Investors to go for alternative companies in the industry to invest in and this would cause long-term loss to the company. The positive thing here is that the ratio has been somewhat constant around 0.05-0.06. In this situation, Investors might want to wait a little longer and see if there is any possibility of improvement in Return on Assets.

c. Genians Inc.



Observing the graph, we can see that the ratio has shown a decrease from 0.09 to 0.07 but then jumped to 0.12 in its most recent data. The increase in the Return on assets has been constant for 3 years in 2021, this shows that the company has been adopting newer methods of asset utilization which causes them to utilize fewer assets to generate same profit. This would attract new investors and cause the long-term growth of the company.

Comparative Analysis: From the above data, we can see that Tech Mahindra has been utilizing its resources more efficiently than Genians and SAP SE. But Genians has been constantly showing a greater positive slope for the past two years when both Tech Mahindra and SAP SE have shown a somewhat constant slope, this shows that Genians might have more potential to manage and utilize its asset and use them to generate profits. SAP SE has shown the worst performance with respect to Return on Asset ratio due to a comparatively sudden dip from 0.1 to 0.05 (5% drop) in 2019, and then it has not shown enough increase(1% increase) in coming years.



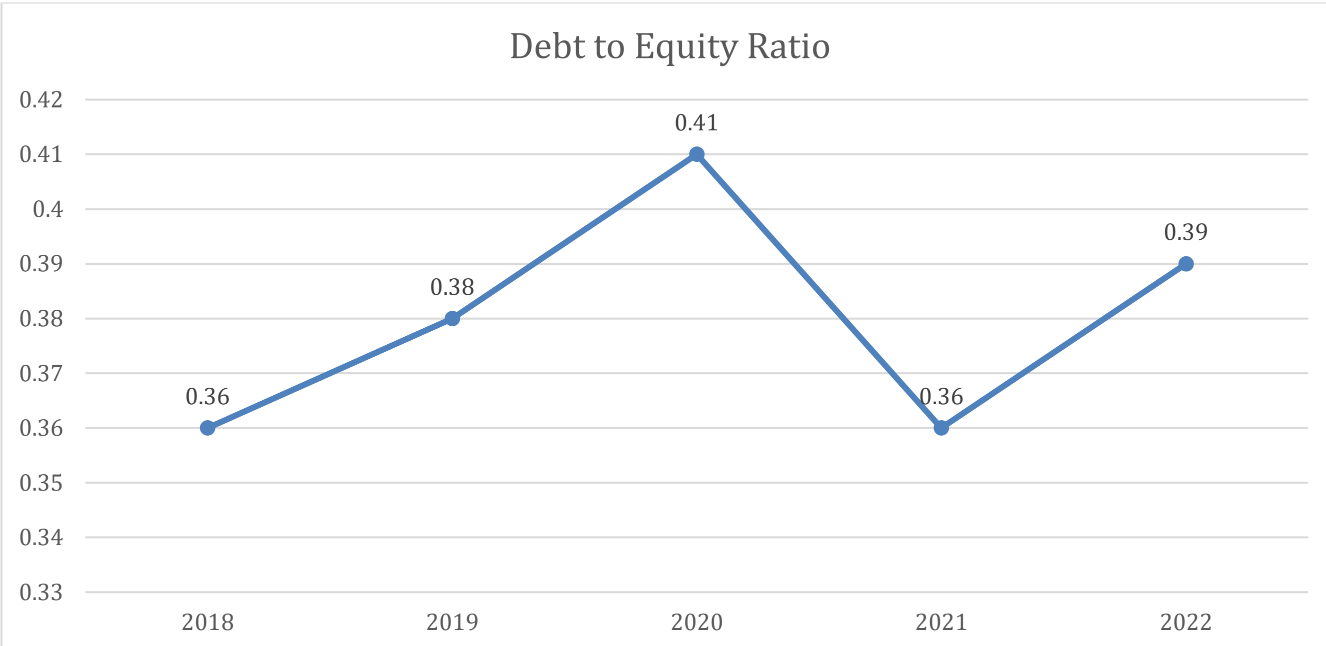
❖ Debt-to-Equity Ratio:

Debt-to-equity (D/E) ratio compares a company's total liabilities with its shareholder equity and can be used to assess the extent of its reliance on debt.

The ratio is used to evaluate a company's financial leverage. The D/E ratio is an important metric used in corporate finance. It measures the degree to which a company finances its operations through debt versus wholly-owned funds.

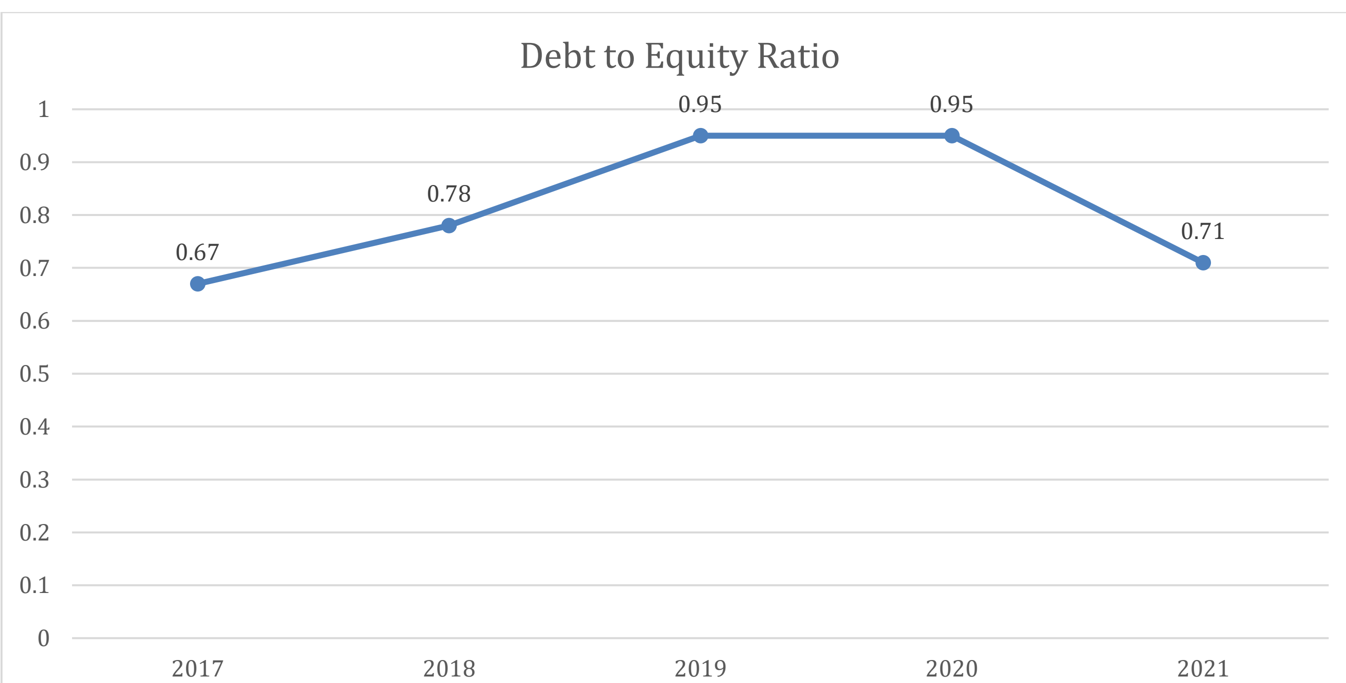
$$\text{Debt/Equity} = \frac{\text{Total Liabilities}}{\text{Total Shareholders' Equity}}$$

a. Tech Mahindra



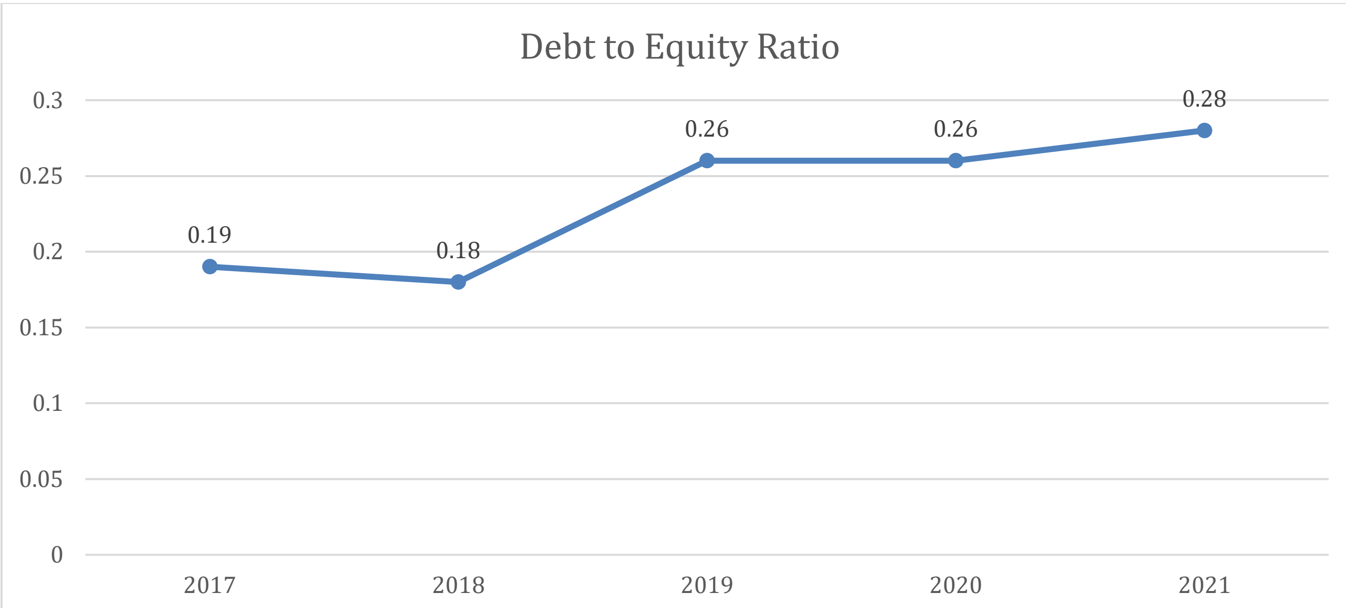
For Tech Mahindra, the D/E ratio had seen a gradual rise between the 2018-2020 period, peaking at 2020, indicating that the company's debt position was the worst during this time for the given data, although the company did manage to better its position for a while around 2021, but eventually could not manage that position.

b. SAP SE



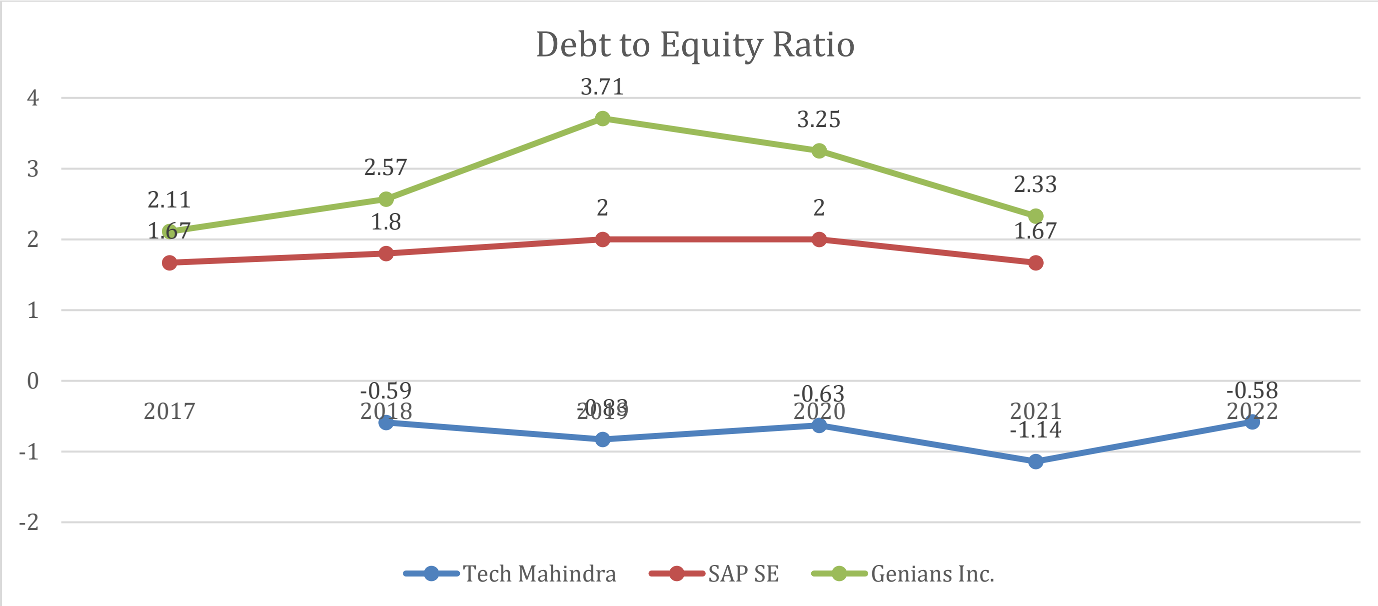
For SAP SE, the Debt to Equity ratios have been quite high for the whole sample period of our acquired data, which indicates that the company has been in a bad debt position for a long period of time, with its worst time during the years COVID years i.e. 2019 to 2020 with a D/E ratio of 0.95.

c. Genians Inc.



For Genians Inc., the low Debt to Equity Ratios across the chart/sample period signify that the company has managed to maintain its Debt position over this period, although it has seen a notably large rise in its D/E ratio during the 2018-2019 period but has managed to maintain that ratio during the whole COVID period, i.e. 2019-2021

<u>Comparative Analysis:</u> Among the three sample companies that we have chosen Genians Inc., even though being the newest in the industry, has managed to maintain the best D/E ratios, with its all-time (in the collected data) high being significantly low than the other companies collected data low. While SAP SE is the worst performer amongst the three companies in terms of Debt position.



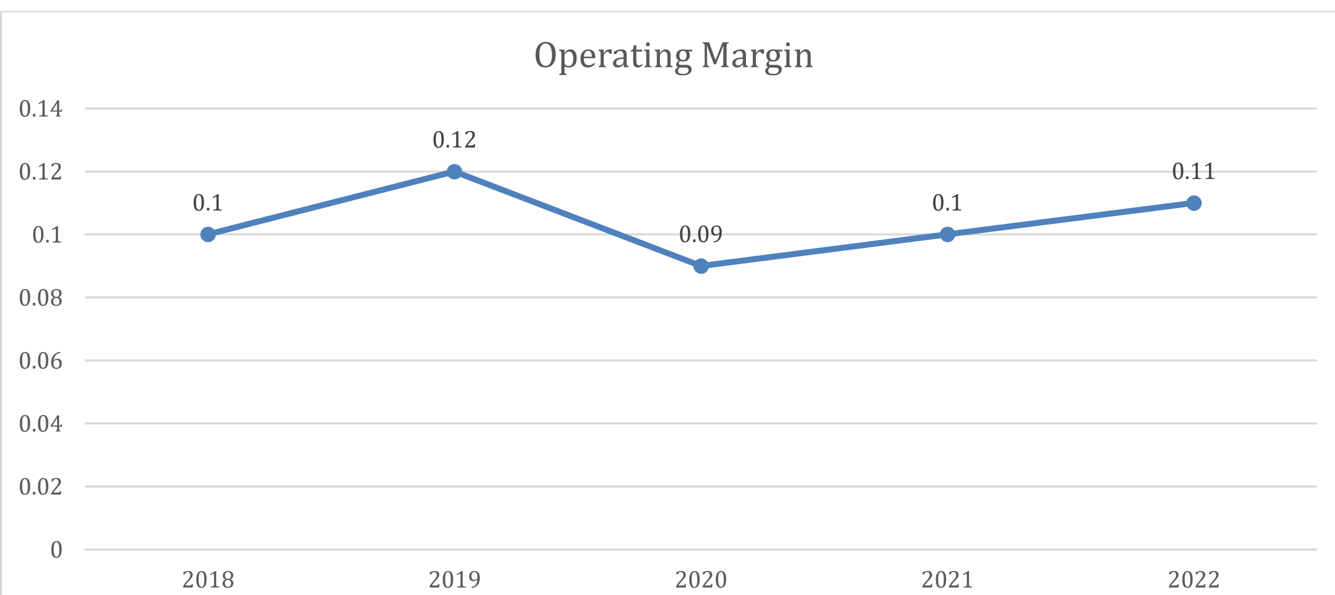
❖ Operating Margin Ratio:

The operating margin measures how much profit a company makes on a dollar of sales after paying for variable costs of production, such as wages and raw materials, but before paying interest or tax

$$\text{Operating Margin} = \frac{\text{Operating Earnings}}{\text{Revenue}}$$

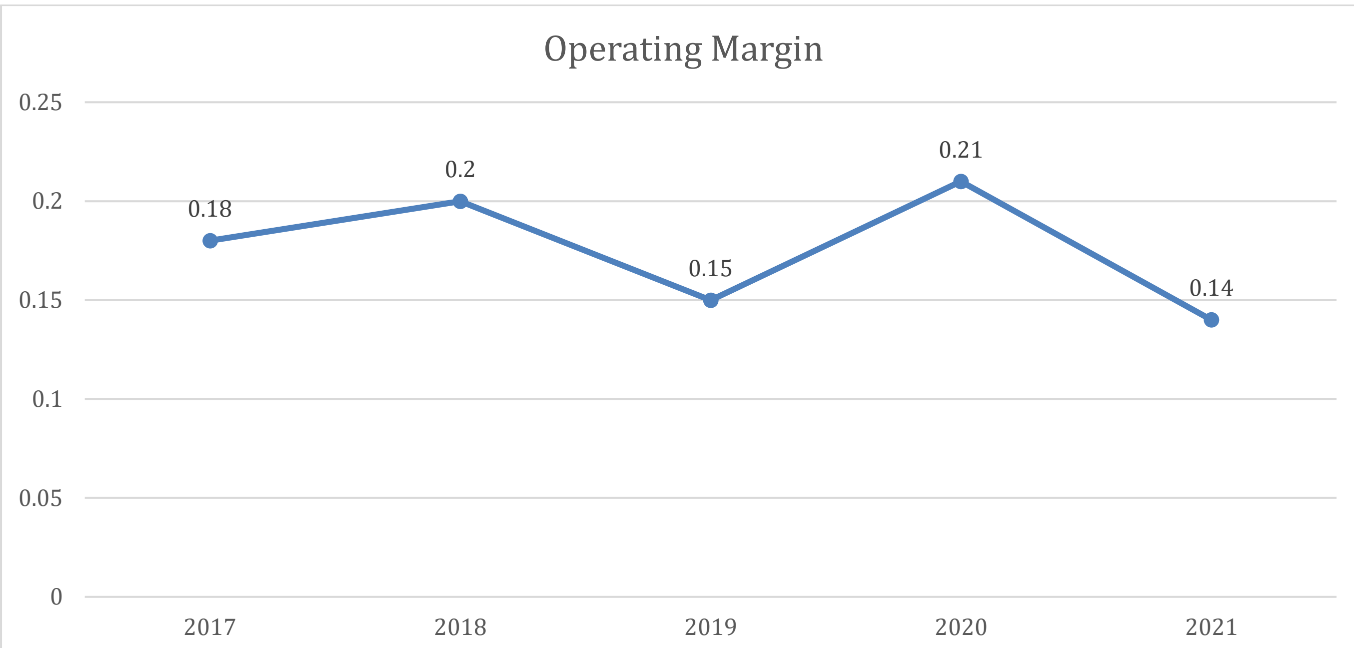
A key sign of business risk is the fluctuation of the Operating Profit Margin and Net Profit Margin over time. Operating Income Return on Investment measures a company's return on all of its capital investments and if the business is profitable.

a. Tech Mahindra



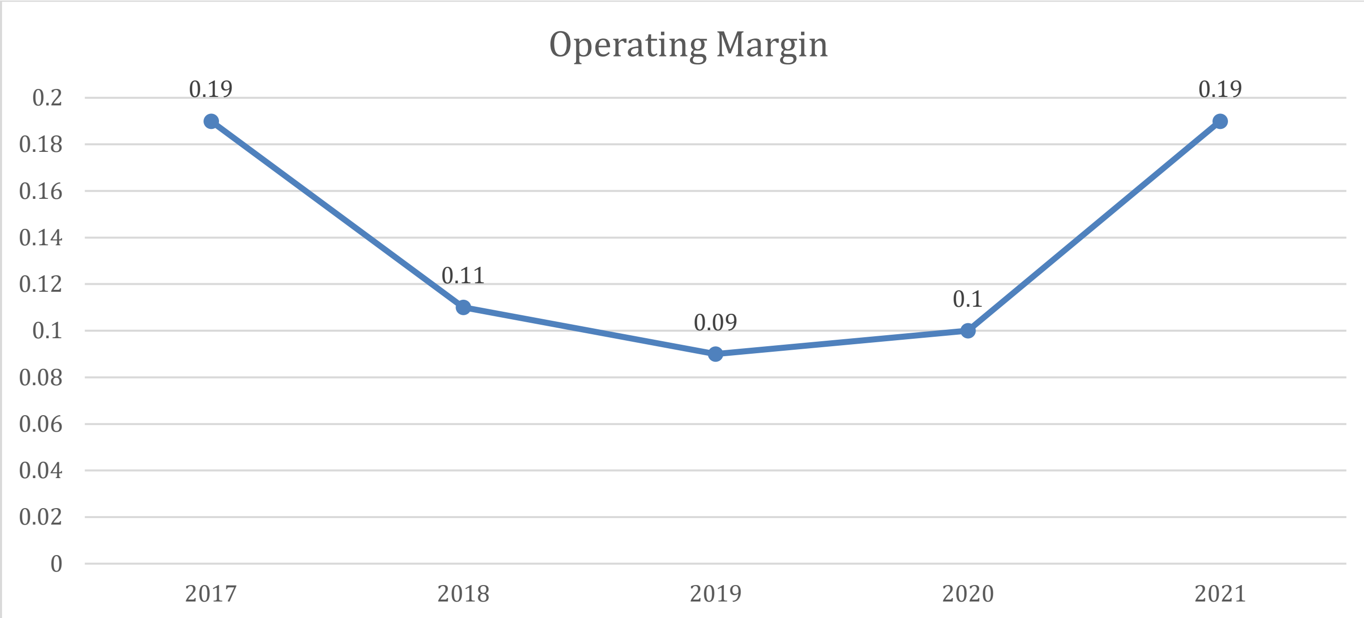
Tech Mahindra has had a very stable operating margin ranging from 0.1 to 0.12 (10-12%) per year within the last 5 years. Highly variable operating margins are a prime indicator of business risk. This shows that Tech Mahindra more or less has been showing constant performance in managing and efficiently using resources, pricing, and marketing. The ratio took a dip in 2020 but otherwise it has been growing ever since.

b. SAP SE

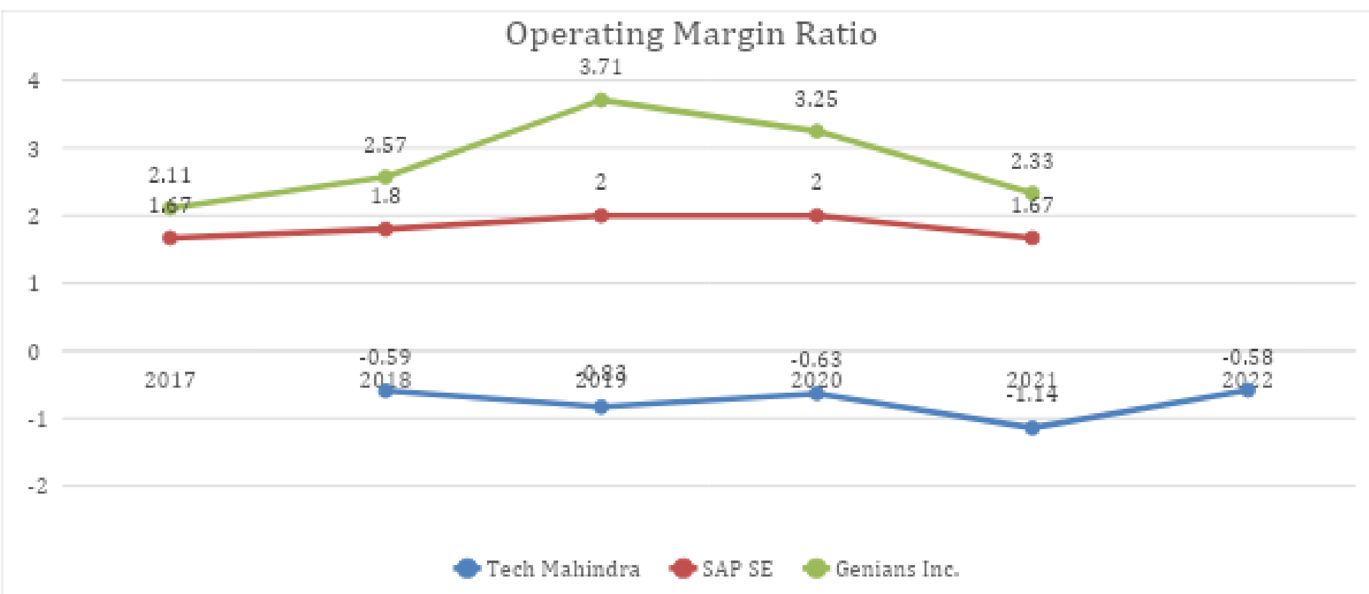


SAP SE has had an Operating margin in the range of 0.14-0.21 (14-21%) per year in the last 5 years. The graph shows a somewhat variable nature of the Operating margin in the case of SAP SE. Due to the company's recent (2021) lowest operating margin in 5 years and variability (21-14=6%), this poses a minor risk to the investors to invest in this business/company. SAP SE must have been using and managing its resources inefficiently, or its pricing and marketing strategy must not have been good enough to keep up with the competition in the market.

c. Genians Inc.



Genians Inc. has a downward slope for its Operating margin up till 2019 that potentially might have been caused by inefficient use and management of resources. 2019 afterward, the company has shown a positive upward trend and is at its highest 0.19(19%) in 2021 which is equivalent to 2017 Operating margin data. Due to its recent expansion in India and North Africa in 2022, we can say that the company has a positive outlook toward the future and provides better perspectives to potential and current investors.



<u>Comparative Analysis:</u> Comparing these three companies based on Operating margin, we can observe that Tech Mahindra has the **lowest variability** that, which makes it a stable alternative for investors to invest in, and Genians has the **highest variability** here but considering Genians most recent Operating margin which is 0.19 (19%) and the highest among all three, we can say that Genians might not be stable in nature but potentially show even better margins in future. SAP SE has a comparatively

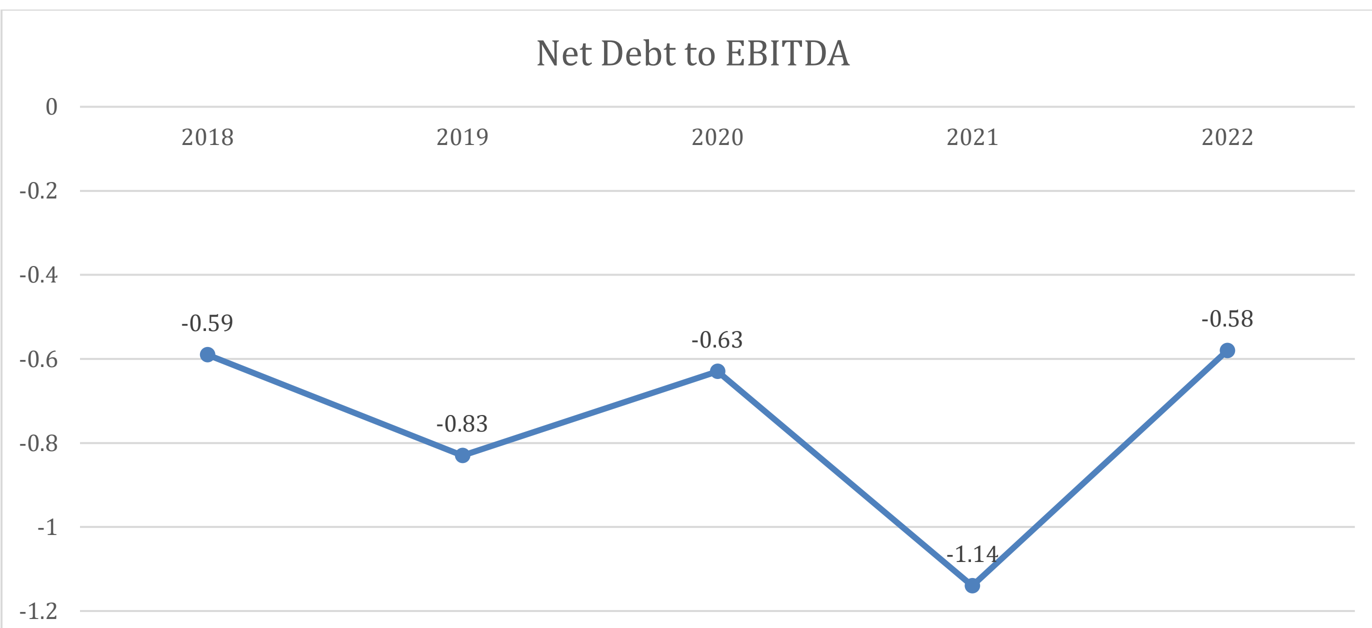
moderate operating margin range, so we can not deduce anything regarding its increase or decrease, compared to the other two companies, in the future.

❖ Net Debt to EBITDA (Debt Ratio):

The net debt-to-EBITDA ratio is a debt ratio that shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant.
The net debt-to-EBITDA (earnings before interest depreciation and amortization) ratio is a measurement of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA.

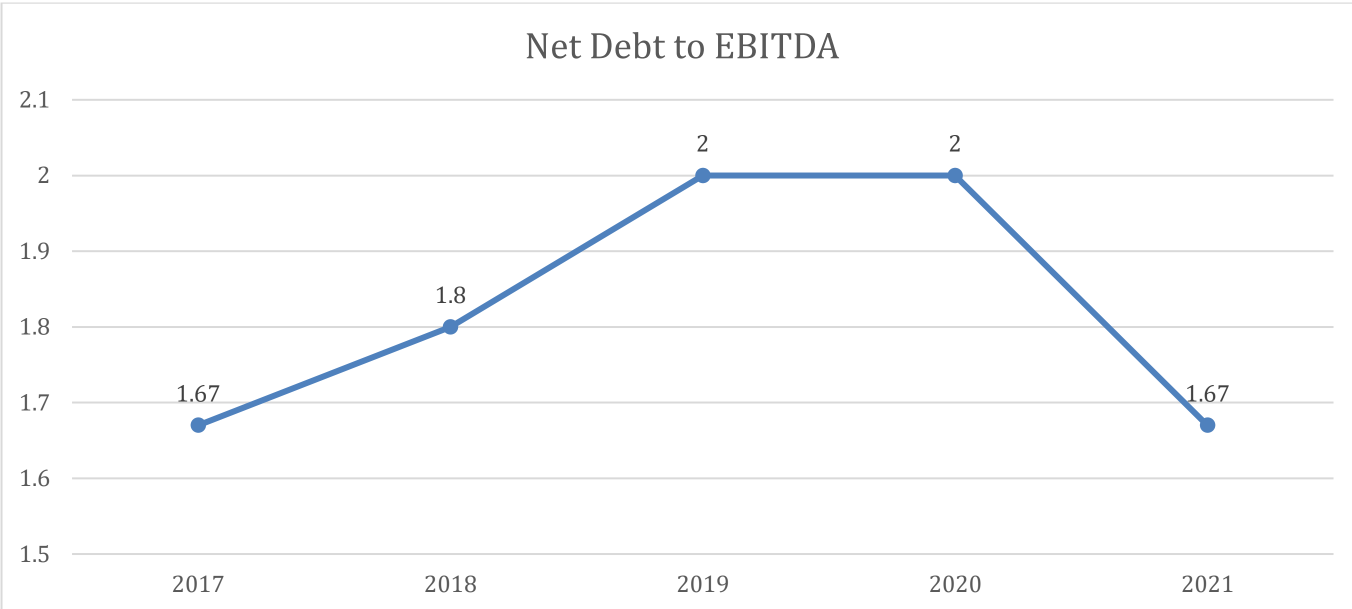
$$Net\ Debt\ to\ EBITDA = \frac{Total\ Debt - Cash\&Equivalents}{EBITDA}$$

d. Tech Mahindra



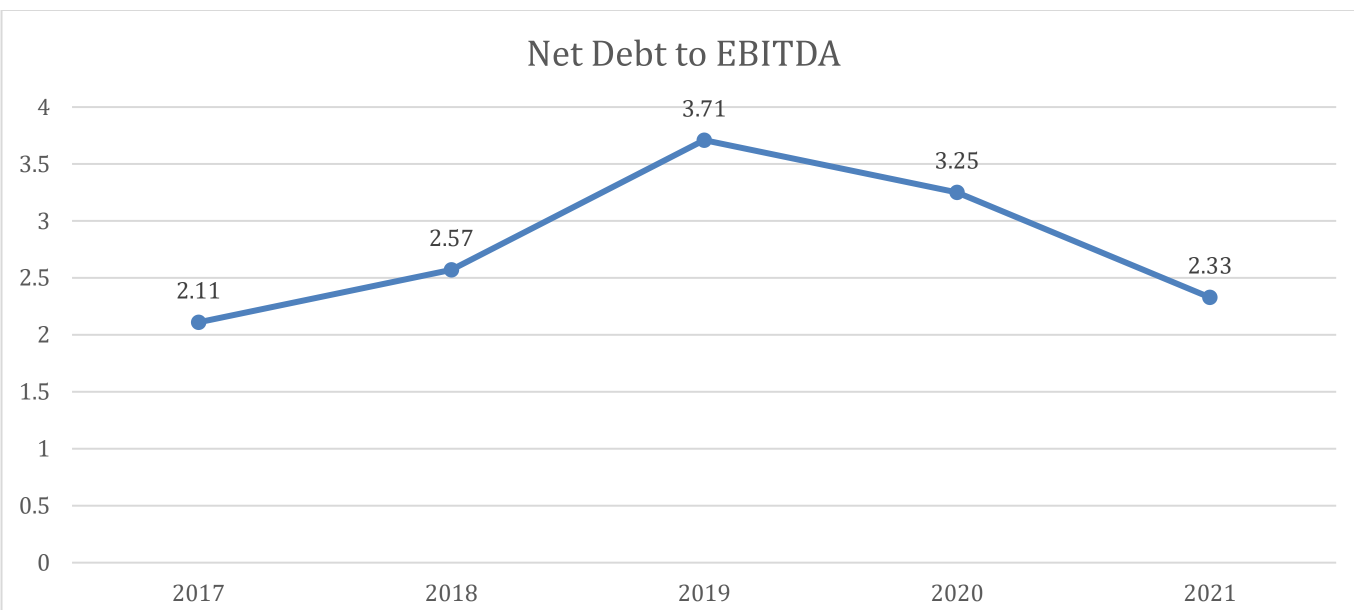
If a company has more cash than debt, the ratio can be negative. This means that the company has been gaining more cash from from 2018-2019 and from 2020-2021. And there is steep decrease in the cash level in 2022. Overall in the last 5 years, company has approximately same Net Debt to EBITDA ratio and so we can say its ability to pay back its debt remains constant. The values of the graph also show that the company is well able to take more debt to further grow its business.

e. SAP SE



SAP SE has more debt than cash since the above graph is showing positive value. We can see that the debt has increased from 2017 to 2019 and remained constant for 1 year and then went down in 2021. In the last 5 years, the graph is showing overall constant value (beginning = ending). This company is moderately able to pay back it debt and is able to take more debt to further grow its business.

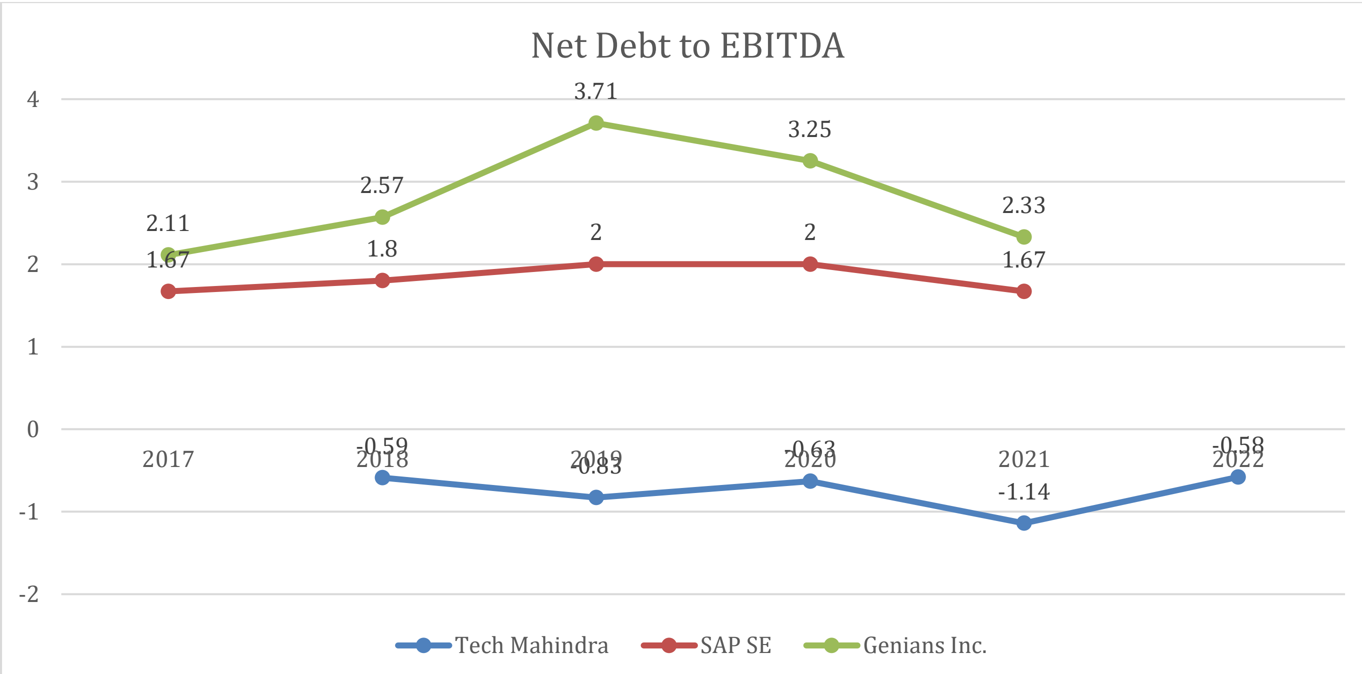
f. Genians Inc.



Graph shows positive levels of debt in last five years. Especially in the years ranging from 2019-2020, the situation is alarming, the ratio is ranging from 3.71 to 3.25 and company is less likely to be able to handle its debt burden, and thus is less likely to be able to take on the additional debt required to grow the business. In other years, company is performing moderately in paying back its debt keeping net debt and EBITDA constant.

Comparative Analysis:

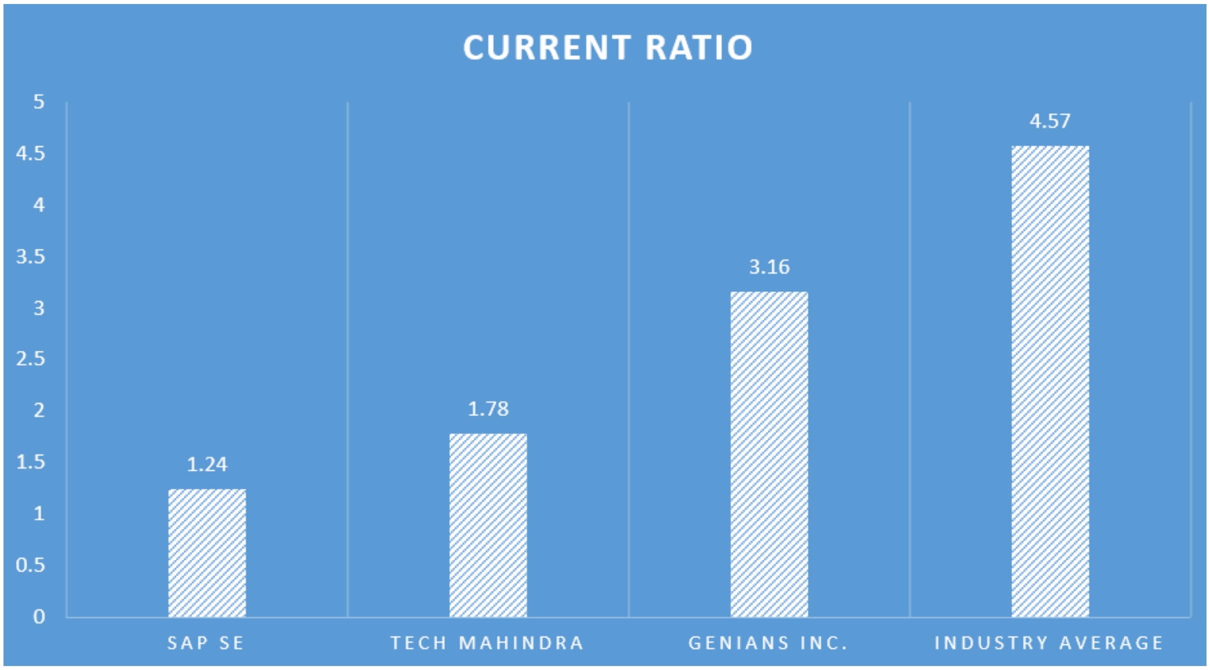
Among all the three companies, Tech Mahindra, SAP SE, Genians Inc, Tech Mahindra has the best ability to pay back its debt followed by SAP SE and Genians Inc. respectively.



INDUSTRY ANALYSIS:

❖ Current Ratio

The current ratio measures a company's ability to pay off short-term liabilities with current assets. A high current ratio indicates liquidity or short-term solvency. However, it may also indicate that the company is not efficiently using cash(or its assets) and other short-term assets, missing out on profitable investment opportunities.



For Current Ratio, all three companies are way below industry average in a decreasing order : Genians Inc., Tech Mahindra, SAP SE.So all three companies have lower ability to pay-off short term liabilities with current assets.

❖ Quick Ratio

The Quick ratio measures the ability of a company to use its quick assets (near cash) to pay off its liabilities. A company with a quick ratio of less than one cannot currently pay back its current liabilities.

$$QR = \frac{CE + MS + AR}{CL}$$

Or

$$QR = \frac{CA - I - PE}{CL}$$

where:

QR = Quick ratio

CE = Cash & equivalents

MS = Marketable securities

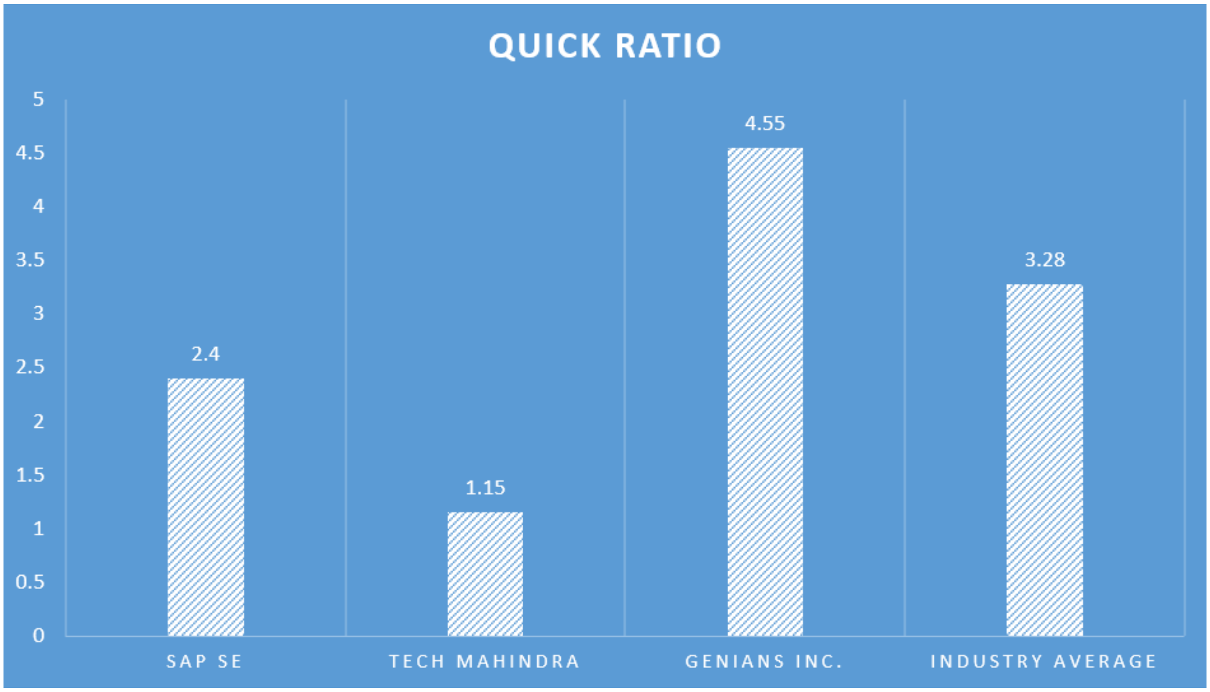
AR = Accounts receivable

CL = Current Liabilities

CA = Current Assets

I = Inventory

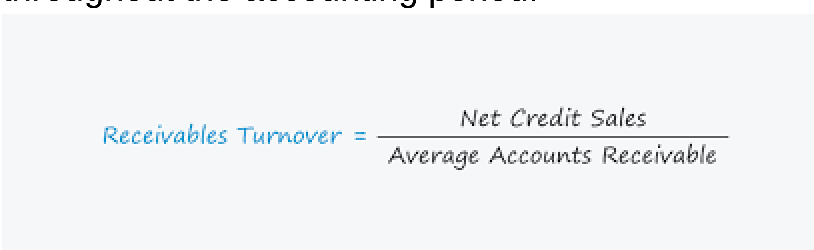
PE = Prepaid expenses



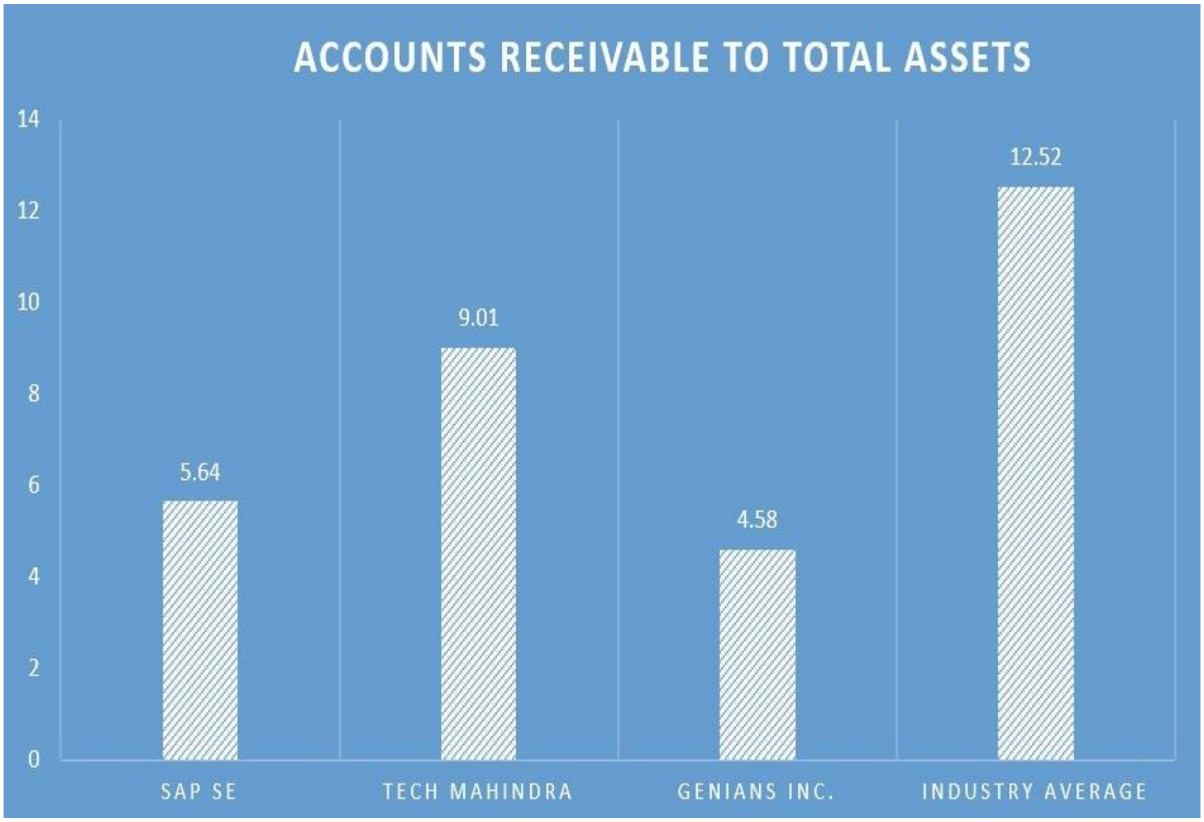
For Quick Ratio, Genians Inc. is above the industry average while other two companies are below average so Genians Inc. has more ability to use its quick assets to pay its liabilities while Tech Mahindra has the lowest Quick Ratio

❖ **Accounts Receivable to Total Assets**

The accounts receivable turnover ratio, or receivables turnover, is used in business accounting to quantify how well companies are managing the credit that they extend to their customers by evaluating how long it takes to collect the outstanding debt throughout the accounting period.



$$\text{Receivables Turnover} = \frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

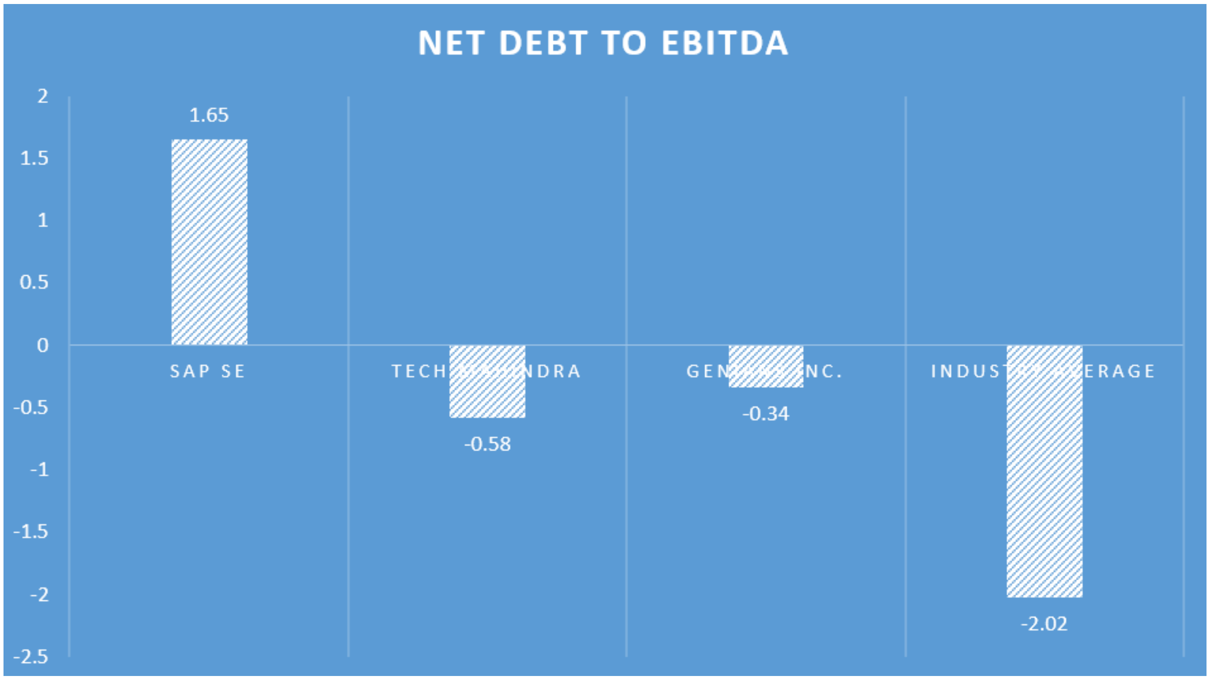


For Accounts Receivable to Total Assets, All three companies are below industry average in decreasing order of Tech Mahindra, SAP SE, Genians Inc. So Tech Mahindra are managing their credit well but not at par with the industry average and the other two companies are not able to manage their credit well as per industry.

❖ Net Debt to EBITDA (Debt Ratio):

The net debt-to-EBITDA ratio is a debt ratio that shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant.
The net debt-to-EBITDA (earnings before interest depreciation and amortization) ratio is a measurement of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA.

$$Net\ Debt\ to\ EBITDA = \frac{Total\ Debt - Cash \& Equivalents}{EBITDA}$$



For Net Debt to EBITDA, more negative the ratio is more cash a company has than its debt so here Tech Mahindra has the highest ratio but still it is below industry average on the other hand Genians Inc. also has a negative ratio but SAP SE has a positive ratio hence has more debt than cash so Tech Mahindra will take the least amount of years to pay debt in comparison to other companies but will still take more years as per the industry.

❖ **Asset Turnover Ratio**

The asset turnover ratio indicates the effectiveness of the firm's use of its total asset base. It measures a company's ability to generate sales from assets.

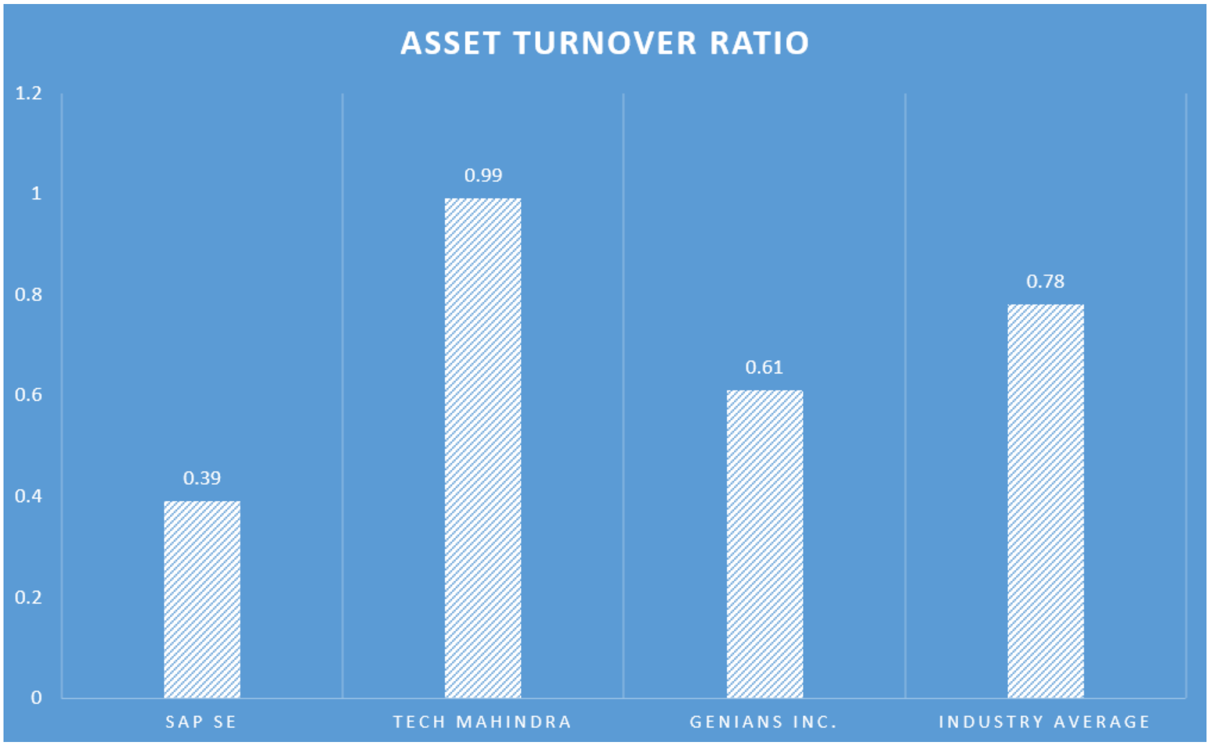
$$\text{Asset Turnover} = \frac{\text{Total Sales}}{\frac{\text{Beginning Assets} + \text{Ending Assets}}{2}}$$

where:

$$\text{Total Sales} = \text{Annual sales total}$$

$$\text{Beginning Assets} = \text{Assets at start of year}$$

$$\text{Ending Assets} = \text{Assets at end of year}$$



For Asset Turnover Ratio, Tech Mahindra has a ratio above industry average while Genians Inc. and SAP SE has ratio below Industry average. So, Tech Mahindra is able to generate sales from assets well and good as per industry standards while Genians Inc. is growing but SAP SE has really low asset turnover.

SUMMARY

In a whole we can summarize from the industrial analysis is Tech Mahindra is the most stable and growing company in all three companies while the Genians Inc. is a growing company which has recently expanded in India has has shown real growth during and after the COVID phase, SAP SE has experienced a downfall in the last 5 years but on the comparison with the industry Genians Inc. and SAP SE are generally below the industry average while Genians Inc. showing signs of growth and expansion over the last 5 years. On the other hand SAP SE has Net Debt to EBITDA positive showing the ability of SAP SE not able to pay back their debts while all other ratios are also below the industry average. Tech Mahindra has been around the industry average with a steady growth and maintains its position in the industry. Genians Inc. is a steadily growing company with ratios below the industry average but still growing and expanding. All three companies are very different in Liquidity, profitability, and solvency with

Tech Mahindra with highest liquidity and profitability then Genians Inc and at last SAP SE.

SOURCES

- Bloomberg
- Yahoo Finance
- Wall Street Journal