A

Big Rock Candy Mountain Mining Co.				
Ratio Analysis for 2019 and 2020				
Ratio	**2019**	**2020**	**Industry 2020**	**Analysis**
Liquidity Ratios				
Current Ratio	2.86x	2.89x	2.50x	Good
Quick Ratio	1.49x	1.61x	2.00x	Ok
Efficiency Ratios				
Inventory Turnover	5.77x	6.08x	5.00x	Good
A/R Turnover	8.41x	8.99x	7.00x	Good
Average Collection Period	42.81 days	40.05 days	40.00 days	Ok
Fixed Asset Turnover	1.17x	1.18x	1.30x	Ok
Total Asset Turnover	0.88x	0.88x	1.00x	Ok
Leverage Ratios				
Total Debt Ratio	48.17%	45.24%	50.00%	Good
Long-term Debt Ratio	39.37%	36.48%	35.00%	Ok
LTD to Total Capitalization	43.17%	39.98%	40.00%	Good
Debt to Equity	0.93x	0.83x	1.00x	Good
LTD to Equity	75.96%	66.62%	75.00%	Good
Coverage Ratios				
Times Interest Earned	3.29x	4.25x	2.50x	Good
Cash Coverage Ratio	6.80x	7.72x	5.00x	Good
Profitability Ratios				
Gross Profit Margin	20.90%	22.72%	20.00%	Good
Operating Profit Margin	6.99%	8.84%	6.00%	Good
Net Profit Margin	3.65%	5.07%	3.00%	Good
Return on Assets	3.21%	4.47%	4.00%	Good
Return on Equity	6.19%	8.17%	7.00%	Good
Return on Common Equity	24.80%	35.63%	7.00%	Good

B

C

DuPont Analysis (3-29)	Net Profit Margin	TAT	TD Ratio	ROE	Check From Ratio Analysis
2019	3.65%	0.88x	48.17%	6.19%	6.19%
2020	5.07%	0.88x	45.24%	8.17%	8.17%
% Change	38.86%	0.41%	-6.08%		31.97%

Extended DuPont Analysis (3-33)	Op. Margin	EBT / EBIT	NI / EBT	TAT	TD Ratio	ROE
2019	6.99%	69.64%	75.00%	0.88x	48.17%	6.19%
2020	8.84%	76.46%	75.00%	0.88x	45.24%	8.17%
% Change	26.47%	9.80%	0.00%	0.41%	-6.08%	

Examing the DuPont Analysis using equation 3-29 shows an increase in Net Profit Margin by 39%, a negligible increase in Total Asset Turnover <1%, and a decrease in the Total Debt ratio by 6%. The increase to the Net Profit Margin is the sole driver to the improvement in ROE. This means the company is able to generate a better bottom line for investors. The Decrease in the TD Ratio means that Equity is less concentrated, however since this is a small enough decrease, it does not impact the ROE as significantly as the increase in Net Profit Margin.

Examining the DuPont analysis using equation 3-33 helps better understand the company's ROE through additional factors such as operating profitability, interest burden, and tax burden. Since Tax burden does not change it does not matter in this analysis; instead, Interest burden and Operating margin are the key players. The increase in Op. Margin is a definite booster to the ROE as it increases the return for investors by controlling operating expenses. The interest burden increase indicates that debt has an increasing role in the company. Increasing this Debt relative to Equity improves the ROE.