

Merger analysis research paper example

[Finance](#), [Investment](#)



Introduction

Mayo's Clinic is a health organization that is based in Rochester in Minnesota. It was founded in 1899 and has grown tremendously over the years. Today, it employs approximately four thousand physicians and scientists and 60 thousand allied health staff. Similarly, Erie County Medical Centre is a health organization located in New York City. It has a hospital facility with 550-bed capacity and more than thirty outpatient service centres. This paper seeks to analyse the financial viability of the two entities. In addition, it seeks to analyse the financial viability of merging these two entities. To this end, this paper will use the latest available audited financial statements of the two organizations.

Financial Statement and Operating Indicator Analysis

Liquidity Position of Mayo Clinic and Erie Medical Centre

Liquidity is the ability of a given entity to meet its short term obligations as and when they fall due. There are two main ratios that will be used to assess the liquidity of the two health organizations; current ratio and quick ratio.

Current Ratio

The current ratio of Mayo Clinic was 1.072 which is above 1.0. This indicates that Mayo Clinic is able to settle its short-term maturing obligations using its current assets. The net working capital was also positive. This indicates that current assets exceed current liabilities. Therefore, Mayo Clinic can settle all its current liabilities without exhausting its current assets. However, the ratio is way below the recommended ratio of 2.0. This creates high liquidity risks since there are high chances that the ratio may fall below

the 1.0 mark. The current ratio of Erie Medical Centre was 1.94 which is above 1.0. This indicates that Erie Medical Centre is able to settle its short-term maturing obligations using its current assets. The net working capital was also positive. This indicates that current assets exceed current liabilities. Therefore, Erie Medical Centre can settle all its current liabilities without exhausting its current assets. The current ratio is slightly below the recommended ratio of 2.0. Therefore, Erie Medical Centre has a low liquidity risk since the chances of the current ratio falling below the 1.0 mark are minimal.

Acid Test Ratio

The acid test ratio of Mayo Clinic was below 1 in 2011. This indicates that Mayo Clinic is not able to settle its short-term maturing obligations using the organization's most liquid assets. Therefore, Mayo clinic has a high liquidity risk. On the contrary, Erie County Medical Centre has an acid test ratio that is above 1. This indicates that Erie Medical County Centre is able to settle its short-term maturing obligations using the organization's most liquid assets. Therefore, Erie County Medical Centre has a low liquidity risk.

Profitability of Mayo Clinic and Erie County Medical Centre

Profitability is an entity's ability to manage its costs, maximise its revenues and consequently derive returns from its investments. The two health organizations are not-for-profit entities. Therefore, analysing their profitability will be of little significance. However, it would be important to determine if the two organizations can generate enough revenue to sustain

their operations. For the purposes of profitability analysis two ratios will be used; operating profit margin and return on total assets.

Operating Profit Margin

The operating profit margin of Mayo's Clinic is 8 per cent. This implies that 92 per cent of the total revenues are consumed by operating expenses while only 8 per cent is retained as operating profits. This indicates that Mayo Clinic is not operating efficiently. The operating profit margin of Erie County Medical Centre is 2 per cent. This implies that 98 per cent of the total revenues are consumed by operating expenses while only 2 per cent is retained as operating profits. This indicates that Erie Medical Centre is not operating efficiently. Comparing the two health organizations, Mayo's Clinic is more efficient and profitable than Erie County Medical Centre.

Return on Total Assets

The return on assets for Mayo's Clinic is 6.42 per cent. The low return on assets could be attributed to high operating expenses of the firm. The return on assets for Erie County Medical Centre is -0.29 per cent. The negative returns could be attributed to the high operating costs. In addition, Erie County Medical Centre incurred high financing costs.

Operational Efficiency of Mayo Clinic and Erie County Medical Centre

Operational efficiency is the ability of an entity to properly use all resources/assets at its disposal to generate revenue. For the purposes of analysing operational efficiency two ratios will be used; fixed assets turnover and total assets turnover.

Fixed Asset Turnover

The fixed asset turnover was 1.096 in Mayo Clinic. This implies that every 1 dollar invested in fixed assets contributed to revenue generation by 1.1 dollars. This implies that fixed assets were utilised efficiently. The fixed asset turnover was 1.534 in Erie County Medical Centre. This implies that every 1 dollar invested in fixed assets contributed to revenue generation by 1.53 dollars. This implies that fixed assets were utilised efficiently. Erie County Medical Centre has a higher efficiency as regards fixed asset utilization in revenue generation compared to Mayo's Clinic.

Total Assets Turnover

The total asset turnover was 0.84 in Mayo Clinic. This implies that every 1 dollar invested in assets contributed to revenue generation by 0.84 dollars. On the other hand, Erie County Medical Centre had a total asset turnover of 0.76. This implies that every 1 dollar invested in fixed assets contributed to revenue generation by 0.76 dollars. Mayo Clinic has a higher efficiency as regards fixed asset utilization in revenue generation compared to Erie County Medical Centre.

Capital Structure of the Mayo Clinic and Erie County Medical Centre

Mayo's Clinic and Erie Medical County Centre are not-for-profit organizations. Therefore, the main objective of the two health organizations is provision of health services and not profit generation. Consequently, both Mayo's Clinic and Erie Medical County Centre do not have equity financing. Equity investors invest in for profit organisations so that they can maximize their returns. However, the two organizations have long term and short term debt

in their portfolio. This section will analyse the debt structure of Mayo's Clinic and Erie Medical County Centre using various debt ratios.

Total Debt Ratio

The debt ratio of Mayo's Clinic in 2011 was 0.53. This implies that 53.3 per cent of its total assets were financed by debt. Mayo's Clinic has a high bankruptcy risk since it is financing more than half of its assets with debt. This threatens the going concern assumption of Mayo's Clinic. On the other hand, the debt ratio of Erie Medical Centre in 2011 was 0.828. This implies that 82.8 per cent of its total assets were financed by debt. Erie County Medical Centre has a high bankruptcy risk since it is financing more than half of its assets with debt. This threatens the going concern assumption of Erie Medical Centre. Erie County Medical Centre has a higher debt ratio than Mayo's Clinic. Therefore, Erie County Medical Centre has a higher bankruptcy risk and a bigger threat to its going concern assumption compared to Mayo's Clinic.

Fixed Charged Capital Ratio

The fixed charge capital ratio of Mayo's Clinic is 0.389. This implies that 38.9 per cent of capital employed is fixed charge capital. Mayo's clinic has prudently managed its fixed charge capital by maintaining it at less than 50 per cent of capital employed. Prudent management of fixed charge capital enables an entity to manage its financing costs relative to its operating income. In addition Mayo's Clinic was able to achieve a modest net income. On the contrary, the fixed charge capital ratio of Erie County Medical Centre is 0.567. This implies that 56.7 per cent of capital employed is fixed charge

capital. Erie County Medical Centre will incur high financing costs since it finances more than half of its assets with fixed charge capital. This is likely to adversely affect its profitability unless the situation is reversed.

Times Earned Interest Ratio

The times earned interest ratio for Mayo's Clinic was 12.7 in 2011. This implies that the interest expense of Mayo's Clinic can be paid 12.7 times from the operating income of the organization. Mayo's Clinic is generating more than enough income from its operations to cover its financing costs. On the contrary, the times earned interest ratio for Erie County Medical Centre was 1.2 in 2011. This implies that the interest expense of Erie County Medical Centre can be paid 1.2 times from the operating income of the organization. Erie Medical Centre is generating just enough income from its operations to cover its financing costs. Therefore, Erie County Medical Centre has high bankruptcy risks. This is because a slight increase in interest expense or a slight decrease in operating income would render Erie County Medical Centre unable to pay interest expense on its fixed charge debt. In addition, the low times earned interest ratio explains why Erie County Medical Centre incurred a loss in that financial year. The high times earned interest ratio is attributable to the high fixed charge capital the capital structure of Erie County Medical Centre. Interest expense is directly proportional to the fixed charged capital

Risk Analysis regarding the Merger

Liquidity Risk

Mayo Clinic has a high liquidity risk. This is evident from the current ratio and

the acid test ratio. The current ratio is slightly above 1.0 while the acid test ratio is below 1. Therefore, Mayo Clinic is not able to settle its short-term maturing obligations using the organization's most liquid assets. On the other hand, Erie Medical Centre has a fairly low liquidity risk since both the current ratio and acid test ratio is above 1.0. If the two entities are combined, the acid test ratio is below 1.0 as shown in the table below

An acid test ratio below 1.0 implies that the resulting organization would not be able to settle its short-term maturing obligations using the organization's most liquid assets. Therefore, merging the two organizations poses a high liquidity risk.

Bankruptcy Risks

The debt ratio of Mayo's Clinic in 2011 was 0.53. This implies that 53.3 per cent of its total assets were financed by debt. Mayo's Clinic has a high bankruptcy risk since it is financing more than half of its assets with debt.

This threatens the going concern assumption of Mayo's Clinic. The debt ratio of Erie Medical Centre in 2011 was 0.828. This implies that 82.8 per cent of its total assets were financed by debt. Erie County Medical Centre has a high bankruptcy risk since it is financing more than half of its assets with debt.

This threatens the going concern assumption of Erie Medical Centre. In addition, the times earned interest ratio for Erie County Medical Centre was 1.2 in 2011. This implies that the interest expense of Erie County Medical Centre can be paid 1.2 times from the operating income of the organization. Erie Medical Centre is generating just enough income from its operations to cover its financing costs. This increases bankruptcy risks since a slight increase in interest expense or a slight decrease in operating income would

render Erie County Medical Centre unable to pay interest expense on its fixed charge debt.

Both Mayo's clinic and Erie County Medical Centres have a high bankruptcy risk. Merging the two health organizations will consequently result in an organization with a high bankruptcy risks.

Operational Risks

The operating profits margins of both Mayo Clinic and Erie County Medical Centre have thin operating profit margins. The operating profit margin of Mayo's Clinic is 8 per cent. This implies that 92 per cent of the total revenues are consumed by operating expenses while only 8 per cent is retained as operating profits. Similarly, the operating profit margin of Erie County Medical Centre is 2 per cent. This implies that 98 per cent of the total revenues are consumed by operating expenses while only 2 per cent is retained as operating profits. The thin operating profit margins in both Mayo's Clinic and Erie County Medical Centre pose operational risks to both organizations. Merging the two organizations will only compound the situation and increase operational risks.

Management of Current Receivable

Receivable Turnover and Receivable Collection Period

The receivable turnover for Mayo's Clinic is 5.4 and the receivable collection period is 68 days. This implies that Mayo's Clinic converts current receivables into revenue 5.4 times in a year. It takes 68 days to collect current receivables. The receivable turnover for Erie County Medical Centre is 1.17 and the receivable collection period is 312 days. This implies that Erie

Medical Centre converts current receivables into revenue 1.17 times in a year. It takes 312 days to collect current receivables. Mayo's Clinic is managing its accounts receivable better than Erie County Medical Centre. It only takes Mayo's Clinic 68 days to collect account receivable compared to 312 days taken by Erie County Medical Centre.

In the post-merger, the organization should reduce the average number of days taken for current receivables to be settled to less than 2 months. This can be achieved by; providing discounts for early payments, limiting credit amount per client, insisting on cash before services is rendered for out-patient services. In addition, the organization can factor its receivables to a factoring agent.

Ratios Used in the Analysis

Current Ratio

Current ratio is the number of times current assets exceed current liabilities. It is used to determine whether current assets can adequately settle current liabilities. Current ratio indicates the liquidity of an entity. Current ratio is calculated by the formula below;

Current Ratio = Current Assets/Current Liabilities

Acid test Ratio

Acid test ratio is the number of times the most liquid assets exceed current liabilities. It is used to determine if the most liquid assets can adequately settle current liabilities. Acid test ratio also indicates the liquidity of an entity. The most liquid assets are all current assets excluding inventory. Acid test ratio is calculated by the formula below;

Acid test ratio = (Current Assets - Inventory)/Current Liabilities

Operating Profit Margin

Operating profit margin is the percentage of total revenue that operating incomes represents. It is used to determine the operational efficiency of firm by determining the proportion of total revenue that is consumed by operating expenses. It is calculated by the formula below;

Operating Profit Margin = (Operating Income/Total Revenue)*100%

Return on Total Assets

Return on total assets is the percentage of the total assets that the net profit of an entity represents. It is used to determine the percentage return on all funds invested in the entity. The total value of assets is equal to the value of funds invested in the entity. It is calculated by the formula below;

Return on Total Assets = (Net Profit/ Total Assets)*100%

Fixed Asset Turnover

Fixed asset turnover is the amount of dollars generated by every dollar that is invested in fixed assets. It is calculated by the formula below;

Fixed asset turnover = Total Revenue/Fixed assets

Total Asset Turnover

Total asset turnover is the amount of dollars generated by every dollar that is invested in total assets. It is calculated by the formula below;

Total asset turnover = Total Revenue/Total assets

Debt Ratio

Debt ratio is the portion of assets that is financed by debt. It is used to indicate the extent to which an entity's assets have been financed by debt. It

shows the gearing level of a firm. It is calculated by the formula below;

Debt ratio = Total debt/ Total assets

Fixed Charge Capital Ratio

Fixed charge capital ratio indicates the portion of capital employed that is fixed charge capital. It is used to assess the bankruptcy risk of an entity. It is calculated by the formula below;

Fixed charge capital ratio = Fixed charge capital/Capital employed

Times Earned Interest Ratio

Times earned interest ratio is the number of times operating profit exceeds interest expense. It is used to determine whether operating income is adequate enough to settle interest expense. It is calculated by the formula below;

Times earned interest ratio = Operating Income/Interest Expense

Current Receivable Turnover

Current receivable turnover is the number of times that current receivables are converted in revenue. It indicates the frequency with which debtors settle their accounts. It is calculated by the formula below;

Current Receivable Turnover = Credit sales/ Accounts receivable

Account Receivable Collection Period

Accounts receivable collection period is the number of days taken by debtors to settle their account. It is used to determine how soon debtors settle their accounts. It is calculated by using the formula below;

Accounts receivable collection period = 365 days/ Current receivable period

References

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