EXERCISES-7 (SOLUTIONS)

The financial ratios for IBM and HP are reported in the file Chapter_8_IBM_HP.xlsx. These results lead to the following conclusions:

The analysis of IBM across time: IBM has created value for its stockholders both for 2014 and 2013. The EVA is positive and the ROC exceeds the cost of capital. However, this performance has deteriorated during the last year. IBM loses close to 5 billion in EVA from 2013 to 2014, while the ROA dropped from 14% to 10%. This is due to a decrease in the asset turnover ratio. So, IBM has performed worst in 2014 than in 2013 due to a less efficient use of its assets. IBM has a very high long-term debt compared to the equity or the overall capital. This debt ratio has further increased during the last year. On the other hand, IBM can easily service this debt as the times-interest earned ratio indicates. Finally, IBM stands in good stead in terms of liquidity. Current assets exceed current liabilities, even when the former consists only of cash, marketable securities and accounts receivable. This is true for both years examined.

The analysis of HP across time: HP has not created value for its stockholders for the last two years. EVA is negative and the ROC is far below the required cost of capital. The performance of HP has deteriorated during 2014, especially for stockholders, as the ROE has dropped from 23% to 18%. This sluggish performance is due to a very low profit margin. The net income represents only the 4-5% of firm sales. HP has a low long-term debt compared to equity capital. The debt-to-equity ratio has remained constant during these two years. Finally, HP performs well in terms of liquidity. For example, cash and marketable securities are close to 30% of its current liabilities.

IBM vs HP: IBM has performed better compared to HP these last two years. This is confirmed by all measures of performance. This success is due to the higher profit margin indicating a higher operating efficiency for IBM. It worth, however, noticing here that HP uses its assets more efficiently, compared to IBM, as the asset turnover ratio indicates. IBM is a highly levered firm compared to HP. Long-term debt ratio far exceeds the equity capital. However, current interest expenses are low and can be easily covered by the firm earnings. In contrast, HP is mainly financed by equity capital. Both companies perform well in terms of liquidity across time. IBM has a better quick ratio than HP which fully covers its current liabilities. On the other hand, HP outperforms IBM in terms of the cash ratio.