ECE 472F Problem Set #2 Solutions Fall, 2015

Question 2 Solution

(a) In the table below, all figures are in millions \$.

Company	Total Assets	Total Liabilities	Total Equity	Revenue	Net Income	Net margin	Asset turnover	Leverage	ROE
GS	938500	860400	78100	10450	1930	18.5%	1.1%	12.02	9.9%
L	17717	11026	6691	7520	178	2.4%	42.4%	2.65	10.6%
AAPL	199856	76502	123354	35323	6900	19.5%	17.7%	1.62	22.4%

Loblaw's is a grocery chain, which is a low-margin high-volume business. Accordingly, the asset turnover is very high while the margins are very thin. A small degree of leverage is used to boost returns.

Goldman Sachs is a financial company. Most financial companies rely on a very high degree of leverage to get an acceptable ROE (indeed 12x would be astronomically high in any other industry).

Lastly, Apple is a good example of a high-margin business. Since its products are considered "high-end" they command a premium so the profit driver is margin rather than turnover. The degree of leverage used is quite low, particularly if one looks only at long-term debt.

(b) Measuring leverage as $A/E = (L+E)/E = 1+L/E \sim 1+D/E$ if we assume L=D. So a company with no liabilities at all (wouldn't that be nice to own...) has A/E=1.