

Chapter 5: Business Valuation (Market Approach)

This methodology values larger companies based upon the value of similar publicly traded companies. For smaller companies, otherwise known as micro businesses (e.g., less than \$10,000,000 in sales), a multiple of adjusted owner's discretionary cash flow is more often used, along with rules of thumb.

Overview

The market approach is a technique which is used to value a company based upon the market value of similar publicly traded companies. Valuation ratios of publicly held companies are used as a basis for a privately held company. Obviously, if a company is very small, then the use of publicly traded company information *may* be a misapplication of this approach (e.g., a pet store, etc.).

Comparing Your Business to Other Public Companies

One of the first steps in analyzing a business is to decide whether the business is a commodity business where margins are thin, or whether the business has a large amount of goodwill. Usually a commodity business has lower multiples, so a harder look at the business' assets must be made. By multiples, it is meant a multiple of economic income variables, such as price/earnings multiples, price/sales multiples, for example). If the business has a large amount of goodwill, then multiples will be generally higher since there is more optimism from the market toward the industry.

There are generally six steps to using public company information to value a business:

- (1) Review the economy and its relationship to the company
- (2) Review the industry in which the company operates
- (3) Look at the company's financial and competitive position
- (4) Select comparable companies

- (5) Compare the financial information of the subject company to the comparable public companies, and
- (6) Analyze the multiples

How the Economy/Industry Impacts a Business

As mentioned in Chapter 1, there may be a direct relation between changes in the economy and the industry in which the company operates. While the subject company may not have the same attributes as a large business, the company may operate in an identical or similar business as its publicly traded counterparts. As a result, insight can be gained from the market as to what the prospects of the publicly traded companies are in the future, and likewise for the subject company.

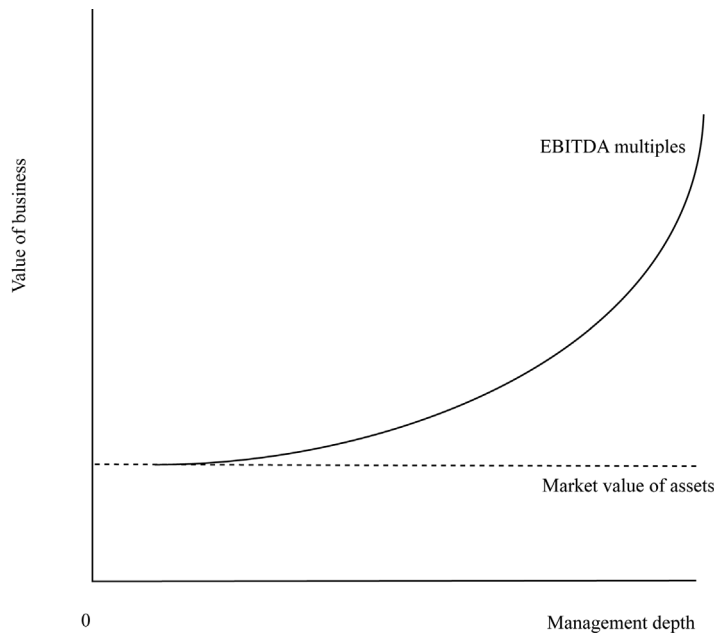
For large companies, usually a multiple of EBIT (Earnings Before Interest and Taxes) and/or EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) is used. The larger the company, the more closely it relates to publicly traded companies, because larger companies generally have superior management and are larger in size than for smaller companies. In general, the greater the depth (higher quality) of management, the larger the multiple. On the other hand, the more shallow (lower quality) the management, the lower the multiple. Figure 5-1 on page 75 shows the relationship between management and the value of a company, all else being equal.

Selection of Comparable Companies

Once comparable companies have been found, and their financial statements have been studied and adjusted, their stock market's values can be used as a proxy for the company which is being appraised.

Usually a good starting point for finding comparable companies is to find publicly traded companies with the same or similar SIC (Standard Industrial Classification) codes, put out by the U.S. Government. These Standard Industrial Classification books can be found in most libraries, or on the internet. Some internet sites where these can be found are at <http://www.osha.gov/osh-stats/sicser.html> or at <http://www.freedgar.com/Search/BeginSearch.asp>. When reviewing the different classifications, one often finds companies which have different SIC codes, which equates to different lines of business (diverse or integrated), multiple lines of business, a different geographic presence such as an area of the country or domestic and international locations. All of these differences force the valuation expert to make subjective choices when picking comparable companies.

Some of the selected companies that appear to be good comparables at first glance may have to be rejected on a closer look, due to recent acquisitions or divestitures, negative earnings, low number of shares outstanding, recapitalizations, low volume of shares trading (no liquidity), etc. Overall, it is important to state why a comparable company is either accepted or rejected.

Figure 5-1: Relationship Between Management and Company Value

As a last effort, it may be important to use secondary SIC codes for related businesses or industries which have related problems or competitive issues but similar margins. Sometimes companies may have similar manufacturing processes, customers, or distribution channels, among other things.

Finally, when analyzing comparable companies which are publicly traded it is important to know the liquidity of the stock. Look at the bid-ask spread (difference between the purchase price and selling price) and see what this is and when the last trade was, as well as whether these are arms length trades. If the stock does not have a good volume for trading, and/or it has a small number of shareholders, then it may not be a good representative company to use as a comparison.

Adjustments must often be made for differences in inventory accounting (Last In First Out vs. First In First Out), intangible assets or off balance sheet financing, depreciation or capital structure. All of these adjustments assume a controlling value.

How Similar are the Comparables to the Subject Company?

Ratio analysis is an important quantitative and qualitative tool to review when selecting the multiples which are to be used for the valuation. Obviously if profit margins, asset turnover, and so on are different for the comparables versus the subject company, then this would affect the multiples which are chosen, all other things being equal.

The *DuPont analysis* (described in the heading “DuPont Model” on page 45) is a helpful tool when comparing the ratios of comparable companies to the subject company. The DuPont formula breaks down the return on equity into different components which relate to the balance sheet and income statement (tax burden, financing costs, operating margin, asset turnover, and financial leverage). One can review the different components which make up ROE (return on equity), since growth expectations play a major role in multiples used in the market.

Once the most comparable firms have been chosen, their income statements are then compared to the subject company, in percentage terms. A close look is taken at the differences in ratios for inventory methods, gross profit, operating margin, tax rate, EBITDA, etc., as a percentage of sales.

Valuation Multiples (Equity Value versus Debt-Free)

Multiples can be put into two categories: *equity value* and *debt-free* multiples. A summary of typical multiples can be seen in Table 5-1 and Table 5-2. This list is by no means comprehensive, since each industry has unique multiples.

Equity value multiples are used in order to find the value of the equity based upon the market. The multiples are calculated by dividing the purchase price for the common stock by measures of earnings and cash flow, which are representative to the common stockholders. Equity value multiples are easier to understand and calculate, however they are not as reliable when there are significant differences in capital structures (debt + equity combinations). A summary of the various equity value multiples can be found in Table 5-1.

Debt-Free multiples adjust for differences in capital structures. Multiples are calculated assuming that each company does not have any interest-bearing debt in its capital structure. The multiples are calculated by dividing the purchase price for the common stock plus the value of the interest bearing debt by various measures of earnings, such as cash flow, pre-tax income, etc. Therefore, these multiples indicate that total value of the firm. In order to obtain the equity value, the interest bearing debt must be subtracted. A summary of the various debt free multiples can be found in Table 5-2.

Ratios are only meaningful when viewed in connection with time comparability. Although one may try not to mismatch time periods (comparables have balance sheets and income statements one year old or older), it is important to ensure that data is as current as possible, especially for cyclical firms. In order to avoid distortions of balance sheets and income statements that are 12-18 months old, it is often necessary to adjust interim statements for the comparable public companies. This always requires more effort, but will strengthen the final conclusion.

Table 5-1: Summary of Typical Equity Value Multiples

Ratio	Indicator	Advantages	Disadvantages
Price/Sales	Indicates the value that the market places upon the company's equity, relative to its sales volume, which to some degree equates to earnings. Most ratios fall between 0.2 to 0.8. Ratios significantly above this signal over valuation by the market (not including emerging growth companies).	Good if there is a high correlation between return on sales and price/revenue; run a regression to find out; good for firms with negative earnings; also screens out non comparable accounting methods such as depreciation, inventory, extraordinary charges, etc.; good for companies with volatile earnings or for service companies or asset-light companies.	Not a good indicator if the capital structures of comparable companies are different from the subject; stability of revenue can be a disadvantage if there are problems in cost control.
Price/Book	Indicates the value that the market places upon the company's equity, relative to its booked net worth. Optimism equates to a ratio over 1.0. Pessimism equates to a value under 1.0.	Good if price/book and return on equity are highly correlated; or industry is asset intensive; run a regression to find out; good for firms with negative earnings. Good for finance and investment companies.	Not a good indicator if the subject and guideline companies have different accounting methods, asset mix, or capital structures. Does not account for intangible assets. Less applicable for service and technology companies.
Price/Net Asset Value (NAV)	Indicates the value that the market places upon the company's equity, relative to its adjusted net worth. A ratio over 1.0 equates to good management, while less than 1.0 equates to mismanagement.	Good for companies with investments in securities, real estate or other assets whose assets can be marked to market (e.g. holding company); good for firms with negative earnings.	Questionable indicator of value if market value of assets cannot be found; does not consider intangible assets.
Price/Net Income (earnings)	Value that the market places upon the company's equity, relative to its net income; reciprocal of capitalization rate for net income.	Equates a direct relationship of price to earnings; simple, and is widely available; a good proxy for risk.	Bad for firms with negative or volatile earnings, or for cyclical firms; forces one to decide on growth rates; difficult to use for comparable firms with different accounting methods.
Price/Cash Flow	Value that the market places upon the company's equity, relative to its net income, depreciation and amortization.	Equates a direct relationship of price to earnings after adjusting for differences in depreciation; good for companies with low or negative earnings as compared to its depreciation and amortization such as with manufacturing or asset intensive companies; good when depreciation represents low functional or economic obsolescence.	Bad for firms with significant obsolescence and a need for significant capital expenditures; bad for firms with significant differences in capital structure.
Price/Pretax Income	Value that the market places upon the company's equity, relative to its pretax income.	Good when company has abnormal tax rate. S corporations can be valued using pre-tax income or based upon a hypothetical C corporation rate.	Difficult to use for comparable firms with different accounting methods; bad for firms with significant differences in capital structure.
Price/Pretax Cash Flow	Value that the market places upon the company's equity, relative to its pretax income and depreciation.	Good when company has abnormal tax rate and low or negative earnings or when depreciation represents low functional economic obsolescence.	Bad for firms with significant differences in capital structure.