

The Market Approach to Valuing Businesses **(Second Edition)**

Shannon P. Pratt

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Summary

By *guideline public companies*, we mean companies similar to the subject company with stocks that trade freely in the public markets on a daily basis. The primary strengths of using these daily stock transaction prices in the market approach to valuing businesses are because of

- Securities and Exchange Commission (SEC) filing requirements: There is a great deal of information available for each company, and that information is verifiable and generally very reliable.
- Active trading: The market price represents informed investors' consensus of value on an arm's-length basis.
- Daily trading: Market prices can be observed as of the actual effective valuation date.
- Investment interest: There is a great deal of analytical information published on most public companies, including projected earnings.

This chapter presents the basic methodology; subsequent chapters provide details of implementation.

SCOPE OF MARKET

Companies filing with the SEC include over 12,550 companies. In addition, there are another 15,000 or so companies that are public, but do not have to file with the SEC because they are below either the number of stockholders or the asset value thresholds that require filing.

While the guideline public company method has always been good for valuing larger businesses, in the last 20 years the number of medium-size and small businesses in the public market has increased. There are several reasons for this:

1. To allow smaller companies better access to the capital markets, Congress has encouraged regulations allowing less onerous initial SEC filing requirements for smaller companies. For example, there are forms SB-1 for offerings under \$10 million and SB-2 for offerings under \$25 million, each requiring less information than the full S-1 registration form.
2. Public investors have become increasingly willing to invest in such smaller initial public offerings (IPOs), although these offerings suffered a drought in 2001 and 2002.
3. A substantial number of underwriting firms that specialize in smaller IPOs have sprung up around the country, thus facilitating smaller company offerings.

When a company first goes public, it is not necessary to list on an exchange or other listed trading market. The company can simply trade in the over-the-counter (OTC) market. However, listing requirements for major exchanges and the National Association of Security Dealers Automated Quotations (NASDAQ) market are far lower than many people realize. Initial market capitalization (share price times number of shares publicly traded) requirements are

New York Stock Exchange (NYSE)	\$60,000,000
American Stock Exchange (ASE)	\$ 3,000,000
NASDAQ	\$ 8,000,000
NASDAQ "Small Cap Market"	\$ 5,000,000

Once these initial market capitalization requirements have been met, a company's market capitalization subsequently can fall considerably lower, but it can still maintain its listing.

AVAILABILITY OF PUBLIC COMPANY DATA

Many print and online sources summarize public company data. They are generally convenient to use. They are not inexpensive (some are very expensive), but most major city public libraries carry one or more of such sources. A listing of the

most widely used of such sources is contained in the Guideline Public Company Data Sources in Chapter 5 on gathering guideline public company data and in Appendix B, “Data Resources.”

The print and online sources almost universally derive their data from SEC filings. The various line items or variables may be summarized or defined differently from one source to another. Although they are generally accurate, they cannot guarantee accuracy and occasionally contain mistakes. If one wants to verify the definitions of line items or variables, to read and interpret the explanatory footnotes firsthand, or have access to the complete information as supplied by the company and ensure complete accuracy, then it is best to go to the actual SEC filings.

As shown in Exhibit 2.1, the number of public companies listed on the New York Stock Exchange, American Stock Exchange, and NASDAQ has been declining in recent years, from a peak of 9,305 in 1997 to 6,614 at the end of 2004 (a decline of almost 30%). This decline is attributable to three primary reasons:

1. Consolidation in many industries resulted in many public companies being acquired.
2. The dot-com boom and bust and other economic factors caused many public companies to drop below listing maintenance requirements.
3. Lack of market receptiveness to IPOs, especially in 2001 and 2002, although a pickup in IPOs started in 2003 and accelerated in 2004 and 2005.

This decline in the number of public guideline companies has reduced usefulness of the guideline public company method, although it is still a viable method for some industries. In the meantime, the data available for the transaction method have burgeoned (see Chapters 3 and 6).

SEC Filings and EDGAR

Although there are a wide variety of forms filed with the SEC, the most important are

- 10-K annual report
- 10-Q quarterly report
- 8-K special events filing (e.g., a significant acquisition)

Since mid-1996, all companies required to file with the SEC must do so electronically. The data are gathered and stored by the Electronic Data Gathering and Retrieval (EDGAR) system. All such data are available on the Internet, and access to the data is *free*.

Exhibit 2.1 Number of Listed Companies Yearly
Comparison of NASDAQ, NYSE, and AMEX

Year	NASDAQ	NYSE	Amex	Total
1975	2,467	1,557	1,215	5,239
1976	2,456	1,576	1,161	5,193
1977	2,456	1,575	1,098	5,129
1978	2,475	1,581	1,004	5,060
1979	2,543	1,565	931	5,039
1980	2,894	1,570	892	5,356
1981	3,353	1,565	867	5,785
1982	3,264	1,526	834	5,624
1983	3,901	1,550	822	6,273
1984	4,097	1,543	792	6,432
1985	4,136	1,541	783	6,460
1986	4,417	1,575	796	6,788
1987	4,706	1,647	869	7,222
1988	4,451	1,681	896	7,028
1989	4,293	1,720	859	6,872
1990	4,132	1,774	859	6,765
1991	4,094	1,885	860	6,839
1992	4,113	2,089	814	7,016
1993	4,611	2,361	869	7,841
1994	4,902	2,570	824	8,296
1995	5,122	2,675	791	8,588
1996	5,556	2,907	751	9,214
1997	5,487	3,047	771	9,305
1998	5,068	3,114	770	8,952
1999	4,829	3,025	769	8,623
2000	4,734	2,862	765	8,361
2001	4,109	2,798	691	7,598
2002	3,765	2,783	678	7,226
2003	3,335	2,750	700	6,785
2004	3,271	2,768	575	6,614
2004 vs. peak	58.9%	88.9%	47.3%	71.1%

Source: all of 1999 data was missing in original document but was provided by Tim McCormick (Academic Liaison) of NASDAQ.

2003 and 2004 data provided by Tim McCormick (Academic Liaison) of NASDAQ.

Source document was corrected with NYSE data from:

Nasdaq: <http://www.nasdaq.com/investorrelations/10k.pdf>

NYSE: http://www.nyse.com/factbook/viewer_edition.asp?mode=table&key=76&category=4

AMEX: Sean Jenkins (Director-Equity Research)

Analysts can access the data free of charge from both the SEC and the New York University (NYU) Stern School of Business Internet home pages. The formatting is virtually impossible to work with, but this problem is easily solved with readily available freeware.

Several commercial services provide EDGAR data for a low fee, with some value-added features. For example, Global Securities Information's (GSI) online *LIVEDGAR* costs \$10 to access and \$2 per minute to retrieve documents. Disclosure's *Global Access* indexes EDGAR to allow a variety of searches and downloading of selected portions of documents as desired. The various services are listed in Appendix B. Of course, the more refinements, the greater the cost of the service. 10kWizard (10kwizard.com) costs a nominal fixed fee for unlimited access and retrieval and is easy to search.

Secondary Sources for Public Company Data

As noted earlier, there is a wide variety of print and electronic sources for public company data. These are described in some detail in Appendix B.

One of the advantages of the guideline public company method is that balance sheet and income statement data are available for most companies for five years or more, whether collected from original or secondary sources. Therefore, trends over time in growth and various financial ratios can be compared between the subject company and each of the guideline public companies. An example of the comparative analysis between the subject (Colossal Software) and guideline companies is shown as Exhibit 2.2. Comparative financial analysis is the subject of Chapter 8.

ANALYTICAL DATA FOR PUBLIC COMPANIES

One of the advantages of the guideline public company method is the plethora of analytical data available for most of the companies. Because of public investor interest on the parts of both individual and institutional investors, there are hundreds of sources providing investment outlook information for thousands of companies and hundreds of industries. Although the classifications are arbitrary and not totally discrete nor exhaustive, these sources can be identified by three categories:

1. Investor publications
2. Brokerage house reports
3. Consensus earnings forecasts

Investor publications range from popular individual investor sources such as Value Line to greatly detailed institutional services published by companies such

Exhibit 2.2 Guideline Public Company Common Size Comparison

Fiscal Year Ended	Best Software 12/31/98 (%)	IDX Systems 12/31/98 (%)	Symix Systems 6/30/98 (%)	Median (%)	Colossal Software 12/31/98 (%)
Size					
Assets (\$MM)	75	284	66	75	57
Revenues (\$MM)	69	322	98	98	69
Balance Sheets					
ASSETS					
Cash & Equivalents	39.6	3.9	9.2	9.2	16.1
Short-term Investments	22.4	39.9		31.2	12.5
Accounts Receivable, Net	11.0	34.9	49.6	34.9	30.3
Other Current Assets	4.2	3.4	4.3	4.2	9.4
Total Current Assets	77.3	82.2	63.1	77.3	68.4
Fixed Assets, Net	5.8	11.2	9.8	9.8	12.4
Capitalized Software Costs, Net		0.2	16.6	8.4	3.7
Intangible Assets, Net	9.6		7.7	8.6	12.3
Other Assets	7.3	6.4	2.9	6.4	3.2
TOTAL ASSETS	100.0	100.0	100.0	100.0	100.0
LIABILITIES & EQUITY					
Accounts Payable	8.4	5.1	20.0	8.4	7.0
Other Accrued Liabilities	10.7	5.8	2.4	5.8	6.9
Deferred Revenue	25.9	6.4	19.8	19.8	16.4
Current Portion of LTD	0.2	0.0	0.4	0.2	1.5
Total Current Liabilities	45.3	19.3	42.6	42.6	31.7
Deferred Income Taxes		0.0	3.7	1.9	1.8
Long-term Debt	0.2	0.0	3.5	0.2	12.2
Total Liabilities	46.2	22.4	52.8	46.2	45.7
Shareholders' Equity	53.9	77.6	47.2	53.9	54.3
TOTAL LIABILITIES & EQUITY	100.1	100.0	100.0	100.0	100.0
Income Statements					
Net Sales	100.0	100.0	100.0	100.0	100.0
Cost of Sales	19.4	50.7	36.6	36.6	42.6
Gross Profit	80.6	49.3	63.4	63.4	57.4
Depreciation Expense	4.3	3.5	6.4	4.3	3.0
Operating Expenses	70.8	34.7	61.4	61.4	52.2
Operating Profit	9.8	14.7	2.1	9.8	5.3
Interest Expense		0.0		0.0	0.9
Other Income (Expenses), Net	3.4	1.6	(0.2)	1.6	1.2
Pretax Income	13.2	16.3	1.9	13.2	5.5
Income Taxes	(5.0)	6.9	3.3	3.3	2.2
NET INCOME	8.1	9.4	(1.4)	8.1	3.3

as Standard & Poor's. The analyst can compare the outlooks for each of the guideline companies with the outlook for the subject company for guidance as to where the market multiples to be applied to the subject company should fall.

Brokerage house reports similarly give outlook information for thousands of companies, which can be compared to the outlook for the subject company. Brokerage house reports are heavily oriented to the "buy side" and therefore have been known to contain some degree of positive bias. Besides individual reports, there are services that index and abstract brokerage house reports.

Three services present consensus earnings estimates for thousands of public companies (see Appendix B). This makes it possible to have a multiple of next year's expected earnings as one of the market value multiples.

THE GUIDELINE PUBLIC COMPANY BASIC PROCEDURE

As discussed in Chapter 1, valuation multiples can be computed on either an equity basis or an invested capital basis. An example of computing market value of invested capital for guideline public companies is shown in Exhibit 2.3.

The object of the guideline public company method is to derive multiples to apply to the fundamental financial variables of the subject company. These fundamental financial variables may be either balance sheet amounts or, in most cases, operating variables derived from the income statements. Thus, one starts with a description of the subject company, in terms of lines of business, markets served, size, and other criteria, and then uses the information to develop criteria for selection of guideline companies. Based on these criteria, the analyst defines a population of companies (e.g., NYSE, ASE, or NASDAQ) and gets data on the companies meeting the criteria. www.hoovers.com is an excellent starting point to determine which companies are engaged in similar lines of business. Then, one can move the search to an Edgar website or go to Yahoo Profiles and click on SEC Filings. Those filings are formatted and free.

The analyst then analyzes both the subject and guideline companies' financial statements to "normalize" them, eliminating nonrecurring items and putting them on a comparable accounting basis. If a company seems to have unexplained abnormalities, the analyst might decide to exclude it. Using these adjusted statements, the analyst does comparative financial analysis, identifying similarities and relative strengths and weaknesses between the guideline and subject companies.

The analyst also conducts site visits and management interviews with the subject company to better understand the company and its similarities and strengths and weaknesses relative to the guideline companies. In the course of the site visits and interviews, the analyst may glean some ideas as to additional guideline companies or may find reason to reject one or more of the guideline companies originally selected.

At some point in the process, the analyst will also gather relevant industry and economic data. This will help the analyst to understand the nature of and outlook

Exhibit 2.3 Guideline Public Company Market Value of Invested Capital

Company	Mkt./Sym.	FYE ^a	Lat. Qtr. BV IBD (\$000)	Lat. Qtr. MV IBD ^b (\$000)	As of or for Period Ending	Bid/Close Price per Common Share 3/26/99 (\$)	Common Shares Outstanding (000)	MV Common Equity (\$000)	MVIC (\$000)
Best Software	NASD/BEST	12/31/98	125	125	3/26/99	13.750	11,640	160,050	160,175
IDX Systems	NASD/IDXC	12/31/98	0	0	3/26/99	15.437	26,493	408,972	408,972
Symix Systems	NASD/SYMX	6/30/98	2,305	2,305	3/26/99	16.125	6,711	108,215	110,520
Colossal Software	N/A	12/31/98	6,594	6,594	3/26/99				

^a FYE = Fiscal year-end.^b IBD = Interest-bearing debt.

for the industry, and how the subject company is positioned relative to the industry. The analyst should also consider how economic and industry factors will impact the subject company and, in particular, the extent to which these impacts will be greater or less for the subject company relative to the guideline companies, and the extent to which this analysis should affect the multiples chosen for the subject company relative to the multiples observed for the guideline companies.

Based on the comparative analysis between the guideline and subject companies, as well as site visits and management interviews and the nature of the industry, the analyst chooses what valuation multiple(s) to rely on and the appropriate value for each multiple relative to those observed for the guideline companies. The analyst then weights the indications of value from each multiple, either subjectively or by assigning a mathematical weight to each to get an indication of value. In some cases, it may be appropriate to add values for cash and/or excess assets or subtract for asset deficiencies. This indication of value is often called *value as if publicly traded* or *publicly traded equivalent value*.

PREMIUMS AND DISCOUNTS

The publicly traded equivalent value is a value based on publicly traded minority stocks. Premiums and/or discounts may be applied to this value, depending on the type of value being sought in the assignment (e.g., control value, non-marketable minority value).

Valuing Controlling Interests

Since the indication of value is based on minority interest transactions, if one is valuing a controlling interest, it may sometimes be necessary to consider applying a premium for control; this is often appropriate. There are two schools of thought on this. (See Chapter 11.)

Quantification of a control premium, however, requires a challenging combination of empirical analysis and analytical judgment. Acquisition premiums observed in the market reflect both elements of control and also synergistic value. This is addressed in more detail in Chapter 11 on premiums and discounts. A discount for lack of marketability may or may not be appropriate, as discussed in Chapter 12.

Valuing Minority Interests

If valuing a minority interest in a privately held company, it is usually appropriate to apply a discount for lack of marketability to the value as if publicly traded. This discount often is substantial, and should be based on the facts and circumstances of each individual case, as discussed in Chapter 12.

SUMMARY

The basic steps in the guideline public company method are as follows (not necessarily in the following order)

- Set criteria for selection of guideline companies.
- Identify the population and source from which the guideline companies will be selected (see Chapter 5).
- List the companies that meet the criteria.
- Obtain financial data on the companies selected.
- Analyze and make adjustments to the subject company financial statements and the guideline company financial statements, if appropriate (see Chapter 7).
- Prepare comparative financial analysis between the guideline companies and the subject company (see Chapter 8).
- Prepare guideline company market value tables, on an equity basis and/or an invested capital basis (see Chapter 9).
- Gather and analyze relevant industry and economic data, and summarize it in terms of its impact on value.
- Visit the subject company facilities and conduct management interviews.
- Choose which multiples to apply to the subject company.
- For each multiple selected, decide on the value of that multiple to be applied to the subject company relative to the range of that multiple observed for the guideline companies.
- Decide on the relative weight to be accorded to the indication of value from each valuation multiple used (total weight must equal 1.00) (see Chapter 10).
- Prepare a publicly traded company method valuation summary table.
- Add any cash or excess assets or subtract asset deficiencies, if appropriate, to reach a publicly traded equivalent value or value as if publicly traded.
- Apply premiums or discounts, if appropriate, to reach the level of value called for in the assignment.

Throughout the process, the analyst may modify guideline selection criteria as necessary to try to obtain the best possible set of guideline companies. Companies often are eliminated for various reasons, such as lack of adequate comparability or lack of adequate data. The analyst should document such changes and additions, so that it is clear that objective selection criteria have been followed and that the analyst has not chosen a biased sample of guideline companies.