WHAT IS YOUR EPS? ISSUES IN COMPUTING AND INTERPRETING EARNINGS PER SHARE

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ABSTRACT

This paper examines several problematic issues in the presentation of information related to earnings per share (EPS) that are common to college textbooks and popular investment websites. U.S. generally accepted accounting principles (GAAP) require disclosure of EPS for all publicly listed firms. In fact, EPS is the only financial ratio required by GAAP and it is the only financial ratio with a formula specified by GAAP. Despite these facts, many college textbooks and investment websites present incorrect formulas for the computation of EPS. Furthermore, many textbooks and investment websites either explicitly or implicitly encourage students and investors to interpret EPS incorrectly. This paper discusses these issues and contrasts proper EPS computation and interpretation with the most common errors in computation and interpretation.

INTRODUCTION

In a recent study, we used business textbooks to evaluate the state of financial ratio education in business schools (Mankin and Jewell, 2014). The study included current textbooks from accounting, finance, management, marketing, and financial statement analysis. The textbooks generally had copyright dates from 2007-2011 and included books from all major publishers. Table 1 gives information about the sample of textbooks in the preceding paper.

Table 1
SAMPLE OF BUSINESS TEXBOOKS
(Mankin and Jewell, 2014)

ACCOUNTING	FINANCE	MGT/MKT	FSA	TOTAL
31	27	13	6	77

The study made several interesting discoveries. Two of the most interesting points are as follows. First, many financial ratios with the same formula have different names. We call this phenomenon "naming confusion." This naming confusion can hinder understanding of the ratios and cause miscommunication. An example of this naming confusion is when the ratio Days Sales Outstanding (DSO) can also be called Days Sales in Receivables, Average Collection Period (ACP), or Days Sales Uncollected. An experienced analyst may know these terms all refer to the same formula, but this is difficult for students and novice analysts.

Second, financial ratios may have the same name but several different formulas. We call this phenomenon "formula confusion." Textbook authors agree unanimously on very few ratio formulas. The Current Ratio, Gross Profit Margin, and Dividend Yield are the most notable of these ratios. (See Table A1 in the Appendix). Most ratios, even the most commonly used ones, have several alternate formula versions. Common ratios with substantial disagreement in the formulas are Return on Assets (ROA), Quick Ratio and Inventory Turnover. For example, we found eleven different formulas for Return on Assets in current business textbooks (Mankin and Jewell, 2014). We also demonstrated, in a separate study, that there are at least fourteen different formulas for ROA (Jewell and Mankin, 2011).

This paper focuses on basic, not diluted, Earnings Per Share (EPS) since it is widely used and should enjoy complete consensus on its formula since it is required by U.S. GAAP. However, we find that it does not enjoy formula consensus in business textbooks. This paper expands on our previous work by exploring how EPS is defined on popular finance and investing websites. It will also explore how different "versions" of the EPS formula can lead to erroneous computations and some major problems in interpreting EPS numbers.

LITERATURE REVIEW

In the United States, financial reporting in the 1800's focused only on the balance sheet accounts and the changes to the balance sheet accounts. Company revenues and expenses increased and decreased these accounts and net income was shown only as a component of the equity or capital account. The modern income statement first appeared in the 1830's in the annual reports of railroad companies. Railroads were the high tech companies of that era and adopted the income statement first, while non-railroad companies were slow to adopt the new income statement. United States Steel Corporation produced its first income statement in 1901 and Westinghouse Corporation began in 1911. Some large U.S. corporations did not prepare income statements until 1930 (Vangermeersch, 1996).

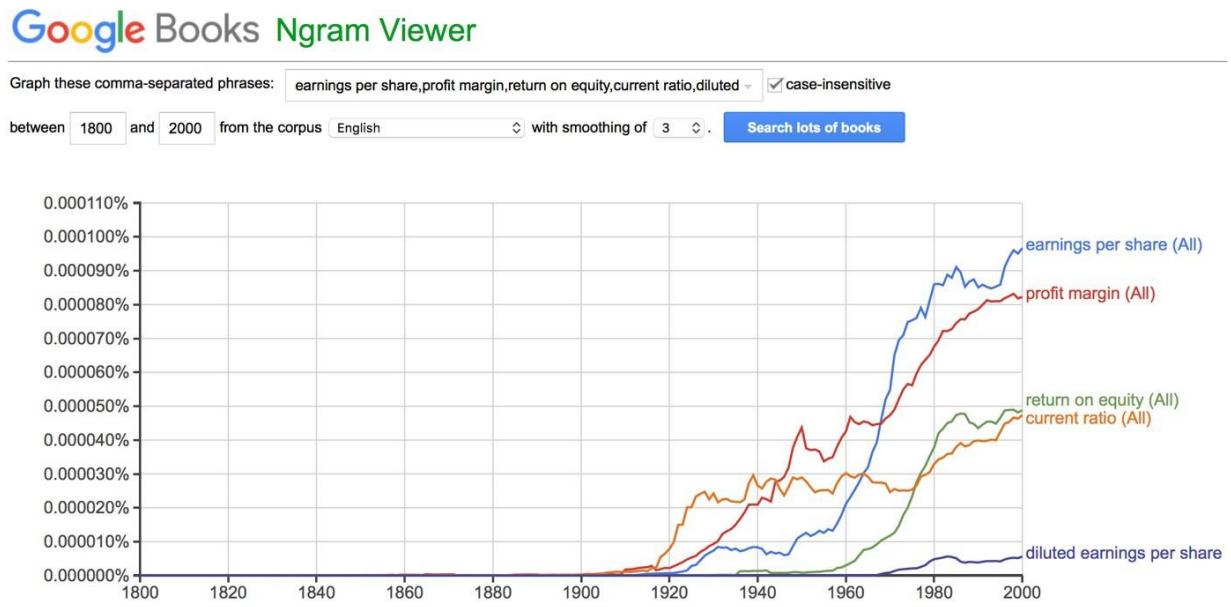
The idea of earnings per share followed the development of the income statement and the rise of the modern corporation. Financial analysts first popularized the use of EPS. According to Google Book Ngram Viewer, the first use of the term "earnings per share" in that database was in 1850 by the Eastern Railroad in New Hampshire (Twelfth Annual Report). Another early mention of earnings per share was for the Vanderbilt railroads in 1887 as reported in *The Railway News* (The Vanderbilt Roads, p. 105). Vangermeersch reports that the first mention of EPS in the *Wall Street Journal* was in an article about Bethlehem Steel in 1915. An accounting textbook included earnings per share as early as 1919, but only as an advanced topic (Rittenhouse, p. 307). Famed investor Benjamin Graham included an EPS calculation in a 1922 stock analysis article (Graham, 1922).

The Google Ngram Viewer is based on the Google Books corpus of over 4.5 million books in the English language that have been digitized by Google. The corpus includes over 468 billion English words. Words and phrases in the corpus are called n-grams. Any single word is a 1-gram, a two-word phrase is a 2-gram, and so on (Lin et al., 2012). The Google Ngram Viewer shows the frequency of the n-grams based on publication dates.

Figure 1 shows the rise of the use of the Earnings Per Share term versus other popular financial ratios in the Google Books corpus. We searched the most common twenty ratios in textbooks from our previous study and found the most common in the Google database. (The list is shown on the Table A2 in the Appendix). The top four financial ratios in the Google corpus are EPS, Profit Margin, Return on Equity, and Current Ratio. Both Current Ratio and Profit Margin were used more frequently than Earnings Per Share during the 1920-1960 period. EPS became the

most popular financial ratio beginning with its explosive growth in the 1960's. We also added Diluted Earnings Per Share to show the relative use of diluted versus basic EPS.

Figure 1
FREQUENCY OF THE TERM EARNINGS PER SHARE VERSUS OTHER FINANCIAL RATIO TERMS
(https://books.google.com/ngrams)



Academic authors also followed the financial analysts by joining the EPS trend beginning in the 1920's. Sloan (1928) included Earnings Per Share numbers in his analysis of U.S. business prospects. Sloan, an editor of the Standard Statistics Company (a predecessor of the Standard & Poor's Company), showed that his company computed earnings per share amounts as early as 1914 (1928, p. 188). Haney, writing on the eve of the 1929 stock market crash, lamented the prevalence of the idea that "stocks are better than bonds" and included EPS in his argument (1929, p. 159). Roberts recommended the use of the Price-Earnings Ratio as an index of stock prices. His analysis of 170 companies used market prices divided by earnings per share as the price-earnings ratio (Roberts, 1929). The first master's thesis including the term earnings per share that appears in the ProQuest Dissertation database is a 1929 MBA thesis (Jones). The first doctoral dissertation that used earnings per share in its analysis was by Phillip Taylor in 1934 (Taylor, 1934).

Paralleling the rise of EPS in financial analysis and academic papers, some companies began including earnings per share calculations in their annual reports in the early 20th century. American Telephone & Telegraph included a table in its 1919 annual report that showed EPS for every year from 1901-1919 (p. 46). This was a new calculation for the 1919 report that was not included in previous years. Apparently, the firm's EPS calculation was net income divided by ending number of shares of common stock, though the formula was not specified. Companies and financial writers continued to expand their use of EPS for the next several decades.

Prior to the 1950s, regulation of the earnings per share number did not exist; and there was great debate on the value of EPS throughout the 1950s and 60s. Some professionals argued that financial statements should include earnings per share and dividends per share (Stanley, 1951). Robertson, a partner at the New York office of Haskins & Sells (a predecessor firm of Deloitte), stated the position of the accounting and regulatory community that "earnings per share figures are not a fair summary of operating results (1951, p. 569)." His argument was that using a single number such as EPS was an over simplification of complex financial results (Robertson, 1951).

One author (Belda, 1955) showed three different ways to calculate earnings per share and recommended a uniform approach by investors. He noted that analysts frequently used different methods that could lead to misunderstanding. The article was published in the *Journal of Accountancy*, an official publication of the organization now known as the American Institute of Certified Public Accountants (AICPA). The article was preceded by an editorial comment that showed the AICPA's perspective on EPS:

We do not join in Mr. Belda's enthusiasm for the earnings per share figures as a measure of a company's performance, since it is usually necessary to know the elements going into the make-up of the net income figure if the per share figure is to be meaningful. However, we agree that it is one of a number of useful financial statistics, and that a great deal of importance is attached to it by financial reporters, securities dealers, and investors (Belda, 1955 p. 62).

The accounting regulators were the last to join the earnings per share trend. The U.S. Securities and Exchange Commission (SEC) was created by the Securities Exchange Act of 1934. The SEC has the legal authority to set accounting and financial reporting practices for all publicly traded corporations in the U.S. capital markets. Since 1938, the SEC has allowed private standard setters in the accounting and financial profession to set financial reporting standards (Wahlen, Jones, & Pagach, 2016). Table 2 shows the history of the private bodies charged with setting accounting standards.

Table 2
UNITED STATES FINANCIAL REPORTING STANDARD-SETTING BODIES
(Wahlen, Jones, & Pagach, 2016)

ABBREVIATION	ORGANIZATION	STANDARDS	YEARS
CAP	Committee on Accounting Procedure	Accounting Research Bulletins (ARB)	1938-1959
APB	Accounting Principles Board	APB Opinions	1959-1973
FASB	Financial Accounting Standards Board	Statements of Financial Accounting Standards (SFAS)	1973-2009
		FASB Accounting Standards Codification	2009-Present

The timeline of EPS and the standard setting process is shown in Table 3. First, the earnings per share trend was ignored until the 1950's. Then, the standard setting bodies began to give guidance on EPS. The first authoritative discussion of EPS occurred in 1953. Finally, the standard-setters began to require EPS in 1969. The 1969 pronouncement required a specific formula for EPS for the first time. The 1997 standard required a dual presentation of 1) Basic EPS and 2) Diluted EPS. The current EPS standard is included in the FASB Accounting Standard Codification as ASC 260 *Earnings Per Share.*

THE IMPORTANCE OF EARNINGS PER SHARE

There is ample evidence that EPS is an important ratio. The fact that it is the only ratio with required disclosure and a mandated formula (see ASC 260-10-45-10 Computation of Basic Earnings Per Share (FASB, 2009)) from the Accounting Standards Codification is fairly compelling on its own, yet there is far more evidence than that. First, analysts and investors used EPS for many years before it was first required and some companies voluntarily provided it in their annual reports. Second, Gibson (1987) found EPS to be the third most important ratio for financial analysts, trailing only Return on Equity (ROE) and the Price/Earnings (P/E) ratio in importance. Obviously, the P/E ratio cannot be computed without EPS; therefore, EPS affects two of the three most important ratios for analysts.

Table 3
HISTORY OF EARNINGS PER SHARE IN U.S. FINANCIAL REPORTING STANDARDS

YEAR	STANDARD	RESULT
1953	ARB No. 43 Restatement and Revision of Accounting Research Bulletins	"earnings per share is often given undue prominence and its significance exaggerated" (p. 18)
1958	ARB No. 49 Earnings Per Share	"It is, in many cases, undesirable to give major prominence to a single figure of earnings per share" (para. 1) Any computation of EPS should include net income as the numerator Should be applicable to common stock No guidance on how to calculate the number of shares of common stock
1966	APB Opinion No. 9 Reporting the Results of Operations	Strongly encouraged disclosure of EPS using income before extraordinary items and using net income Provided limited guidance on how to compute EPS
1969	APB Opinion 15 Earnings Per Share	First official accounting standard to require presentation of EPS in the income statement Required Primary EPS and Fully Diluted EPS, if more than 3% dilution Controversial and complex, by 1971 the FASB had published 102 additional accounting interpretations
1997	FASB Statement No. 128 Earnings Per Share	Intended to simplify the rules to make them comparable to international EPS standards Required Basic EPS and Diluted EPS
2009	FASB Accounting Standards Codification ASC 260 Earnings Per Share	Combined all previous standards into a single authoritative source

In addition, EPS is the second most important ratio to general users of financial information. This can be shown simply by measuring the "web presence" of various ratios on the Internet. Table 4 shows that P/E and EPS are the top two ratios in terms of web presence by a large margin. Web presence was measured by a simple Google search of each ratio name.

Table 4
TOP 20 RATIOS BY WEB SEARCH BY GOOGLE.COM
As of 2/14/2015

RANK	RATIO NAME	GOOGLE HITS
1	P/E Ratio	23,400,000
2	Earnings per Share (EPS)	10,100,000
3	Return on Equity (ROE)	6,490,000
4	Dividend Yield	5,380,000
5	Return on Assets (ROA)	4,450,000
6	Current Ratio	3,700,000
7	Net Profit Margin (Return on Sales)	1,720,000
8	Gross Profit Margin	1,110,000
9	Dividend Payout	581,000
10	Quick Ratio	521,000
11	Debt Ratio	507,000
12	Inventory Turnover	500,000
13	Debt to Equity Ratio	482,000
14	Market to Book	364,000
15	Receivables Turnover	335,000
16	Days Sales Outstanding	289,000
17	Fixed Asset Turnover	223,000
18	Total Asset Turnover	163,000
19	Times Interest Earned	135,000
20	Days Sales in Inventory	32,100

EARNINGS PER SHARE DEFINED

The prescribed formula for basic EPS is found in ASC 260-10-45-10:

Basic EPS shall be computed by dividing income available to common stockholders (the numerator) by the weighted-average number of common shares outstanding (the denominator) during the period (FASB, 2009).

Income available to common stockholders is net income minus preferred stock dividends. The basic EPS formula can be shown as:

$$\textit{Basic EPS} = \frac{\textit{Income Available to Common Stockholders}}{\textit{Weighted} - \textit{Average Number of Common Shares Outstanding}}$$

Or, alternatively the formula can be shown as:

$$Basic\ EPS = \frac{Net\ Income - Preferred\ Stock\ Dividends}{Weighted - Average\ Number\ of\ Common\ Shares\ Outstanding}$$

Admittedly, the EPS formula is slightly more complex than the formulas for some other common ratios. However, the fact that the formula is mandated would seem to imply that it is important to use and teach the correct version. But the evidence suggests that many are not very concerned with using the correct version. Remember, this is only the Basic EPS calculation, not the more complicated Diluted EPS, which is a topic for intermediate accounting classes and beyond.

PROBLEMS WITH EARNINGS PER SHARE EDUCATION

Despite the obvious importance of Basic EPS, we found (Mankin and Jewell, 2014) four serious problems with the presentation of the ratio in college textbooks:

1. Less than 55% of textbooks containing ratios discuss EPS at all.
2. EPS is the 14th most discussed ratio in college textbooks – not the second or third most discussed as the evidence above would seem to support.
3. Despite the fact that EPS has a mandated formula, less than 65% of textbooks included the correct formula.
4. EPS ranked 11th in terms of "formula consensus" out of all ratios.

Similar problems are found when exploring how EPS is presented on educational websites. A simple Google search using terms like "EPS defined" and "EPS explained" identified the top twenty finance education websites that discuss EPS. Of these twenty websites, only three used the precise mandated formula for EPS. Another three of the sites were assessed to use versions that were "basically correct" – even if they contained a technical error. The other fourteen sites were found to have serious problems with their EPS definitions. A summary of the findings is shown in Table 5 below.

When combining the results from college textbooks and educational websites, four competing versions of EPS can be identified:

1. The correct version as stated above.
2. A version that ignores Preferred Dividends in the numerator.
3. A version that fails to weight common shares in the denominator.
4. A version that both ignores Preferred Dividends and fails to weight common shares.

Table 6 shows the frequency of each version for textbooks and websites. Notice that the textbooks and the websites went for the simplest, or least accurate, version of EPS with roughly equal frequency. Textbook authors were much more likely to use the correct formula, while websites frequently used one of the two "intermediate" versions that were not found in any college textbooks.

Table 5
ISSUES WITH EPS ON TWENTY EDUCATIONAL WEBSITES AS OF 2/15/2015

SITE	ASSESSMENT	PROBLEM
Investopedia.com	Basically Correct	Omits "common" in denominator
Wikihow.com	Incorrect	Ignores weighting of shares in the denominator
MyAccountingCourse.com	Perfect	None
Dummies.com	Incorrect	Ignores Preferred Dividends and weighting of shares
Stocks.About.Com	Incorrect	Ignores Preferred Dividends and weighting of shares
FinanceFormulas.Net	Incorrect	Ignores Preferred Dividends
AccountingExplained.com	Perfect	None
Wikipedia.com	Basically Correct	Use of "Profit" in numerator is ambiguous
Zacks.com	Perfect	None
InvestingAnswers.com	Incorrect	Ignores weighting of shares – but notes that weighting is "typically used"
Financial-Dictionary.com	Incorrect	Ignores Preferred Dividends and weighting of shares
BeginnersInvest.com	Incorrect	Ignores Preferred Dividends
BizFinance.com	Incorrect	Ignores weighting of shares
ReadyRatios.com	Incorrect	Ignores weighting of shares and omits the word "common" in denominator
finance-glossary.com	Incorrect	Ignores Preferred Dividends and weighting of shares
istockanalyst.com	Basically Correct	Omits the word "common" in denominator
education.stocktrak.com	Incorrect	Ignores weighting of shares
nasdaq.com	Incorrect	Ignores Preferred Dividends and weighting of shares
InvestorWords.com	Incorrect	Ignores Preferred Dividends and weighting of shares
Finance.Yahoo.com	Incorrect	Ignores Preferred Dividends and weighting of shares

Table 6
FREQUENCY OF EPS VERSIONS IN TEXTBOOKS AND EDUCATIONAL WEBSITES

VERSION	TEXTBOOKS	WEBSITES
EPS 1 (correct and most complex)	64.29%	30.00%
EPS 2	0.00%	10.00%
EPS 3	0.00%	25.00%
EPS 4 (simplest)	35.71%	35.00%
TOTAL	100.00%	100.00%

PROBLEMS WITH "COMPETING" EPS FORMULAS

The table above shows there is significant "formula confusion" with EPS, despite the mandated formula for the ratio. Novice users of financial statements attempting to educate themselves on EPS through research on the web have a 70% chance of finding an incorrect formula, while college students have about a 36% chance of being taught an incorrect formula in a formal classroom setting.

The differences in the four versions of the formula may seem trivial at first glance, but they can result in significant mathematical errors when computing EPS. This will be demonstrated with a simple example.

Table 7
EPS COMPUTATIONS

	Company A	Company B	Company C	Company D
Net Income	$10,000	$10,000	$10,000	$10,000
Preferred Dividends	-	$1,000	-	$1,000
Beginning Shares	5,000	5,000	5,000	5,000
Share Activity	-	-	issues 1,000 shares	repurchases 1,000 shares
Ending Shares	5,000	5,000	6,000	4,000
Income Available to Common Stockholders	$10,000	$9,000	$10,000	$9,000
Weighted Common Shares Outstanding	5,000	5,000	5,500	4,500
EPS 1 (correct)	$2.00	$ 1.80	$1.82	$2.00
EPS 2 (ignores preferred dividends)	$ 2.00	$ 2.00	$1.82	$2.22
EPS 3 (does not weight shares)	$ 2.00	$ 1.80	$1.67	$2.25
EPS 4 (ignores preferred dividends and weighted shares)	$ 2.00	$ 2.00	$1.67	$2.50

Table 7 shows data and EPS computations for four very similar firms. Each firm has $10,000 of Net Income and begins the year with 5,000 common shares outstanding. However, two of the firms have preferred stock, on which they pay $1,000 of preferred dividends, while the other two do not. In addition, one of the firms issues new shares during the year, while another has a share repurchase. For the sake of simplicity, we will assume these share transactions occur exactly halfway through each firm's fiscal year.

Since Company A has neither preferred stock nor any change in shares outstanding, all four EPS formulas yield the same results for it. But the results are quite different for the other three firms. Note that version 2 of the EPS formula always yields an answer that is less than or equal to the correct answer provided by version 1. However, version 3 and 4 of the formula give results that may be either larger or smaller than the correct answer depending on the nature of the change in shares outstanding.

Finally, note that the differences in magnitude between the answers provided by the four versions are not trivial, even though the differences between the four firms are not huge. The errors in the answers provided by versions two through four range from fifteen to fifty cents per share.

Changes in EPS of a single penny can have dramatic effects on the stock prices of publicly traded firms. The classic example of this was given by then SEC Chairman Arthur Levitt when he said, "I recently read of one major U.S. company, that failed to meet its so-called "numbers" by one penny, and lost more than six percent of its stock value in one day (Levitt, 1998)." Therefore, it is baffling that the level of potential imprecision in EPS implied by the example above would be tolerated by textbook authors or educational websites.

PROBLEMS WITH EDUCATION ON EPS INTERPRETATION

Unfortunately, formula confusion is not the only educational problem plaguing EPS. There is also widespread misinformation about what the ratio actually means and how it may be used.

When EPS is discussed in textbooks, the discussion is usually framed imperfectly. Information on EPS is typically presented in the same chapter and in the same manner as many other financial ratios. However, EPS cannot be used in the same manner as most other ratios, which are designed to be useful in cross-sectional comparisons. EPS cannot be directly compared between firms, yet this is almost never mentioned.

Most textbooks and educational websites completely ignore the fact that shares outstanding is a choice variable for public companies. Since firms can directly control their number of shares, they can indirectly control their EPS. The same logic explains why stock prices cannot be directly compared. Most people seem to understand the point for stock prices, yet fail to grasp it for EPS.

Consider two firms that are identical in every way except for shares outstanding. Neither has any preferred stock and neither has issued or repurchased shares in the recent past. Both have Net Income of $10,000, but the first firm has 1,000 shares outstanding while the second has ten thousand shares outstanding. The first firm's EPS will be ten times that of the second, even though there are literally no other differences between the firms.

The only way to draw meaningful comparisons between earnings of different firms is to take the shares outstanding out of the picture in some way. This can easily be accomplished by comparing earnings growth rates or earnings yields or many other transformations of earnings.

It is incredibly easy to find examples that prove this misunderstanding. For the sake of brevity, we will only provide one. Stocks.About.Com correctly points out that comparing stock prices is meaningless and that comparing total earnings of firms is also meaningless. However, it then instructs readers that the solution to both of these problems is to compare the EPS of firms. This is obviously incorrect.

CONCLUSION

There are two major issues with both formal and informal education about Earnings per Share. First, there are four "competing" versions of the EPS formula in wide use, even though one specific formula has been mandated by ASC 260 and is therefore clearly "correct."

Second, there is the widespread belief that EPS can be used for cross-sectional comparisons of firms' earnings. Due to the fact that EPS depends on Shares Outstanding, which is a choice variable for the firm, this is incorrect. In order to compare earnings, the inherent bias of the firm's choice of shares must be removed from the equation. This can be accomplished through the use of earnings growth rates or various transformations of earnings such as the earnings yield.

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APPENDIX

Table A1
TOP 20 RATIOS BY DEGREE OF CONSENSUS
(Mankin & Jewell, 2014)

RANK	RATIO NAME	RATIO FORMULA	PERCENT	TOTAL VERSIONS
1	Current Ratio	rrent Assets / Current Liabilities	100.00%	1
	Gross Profit Margin	Gross Profit / Sales	100.00%	1
	Dividend Yield	ends Per Share / Market Price	100.00%	1
	Market to Book	Market Price / Book Value	100.00%	1
5	Debt Ratio	Debt / Assets	96.00%	3
6	PE Ratio	Market Price / EPS	95.08%	4
7	Net Profit Margin (Return on Sales)	NI / Sales	90.91%	3
8	Debt to Equity	Debt / Equity	87.76%	3
9	Times Interest Earned	EBIT / Interest Expense	82.35%	4
10	Fixed Asset Turnover	Sales / Fixed Assets	73.33%	2
11	Earnings Per Share (EPS)	NI – Preferred Dividends) / WAvg Common Shares	64.29%	2
12	Total Asset Turnover	Sales / Assets	59.32%	4
13	Return on Equity (ROE)	NI / Equity	57.63%	5
14	Dividend Payout	Dividends Per Share / EPS	56.25%	3
15	Quick Ratio	Cash + AR + Mkt Sec) / Current Liabilities	49.28%	4
16	Receivables Turnover	Sales / Average AR	46.00%	6
17	Days Sales in Inventory (DSI)	365 / Inventory Turnover	45.95%	5
18	Days Sales Outstanding (DSO)	365 / Receivables Turnover	45.90%	5
19	Inventory Turnover	COGS / Average Inventory	44.44%	4
20	Return on Assets (ROA)	NI / Assets	40.00%	11
			Minimum	1
			Maximum	11
			Mean	3.60
			Median	3.50
			Mode	4.00

AR = Accounts Receivable COGS = Cost of Goods Sold
EBIT = Earnings Before Interest and Taxes EPS = Earnings Per Share
Mkt Sec = Marketable Securities NI = Net Income
WAvg = Weighted Average

Table A2
TOP 20 RATIOS BY FREQUENCY OF APPEARANCE IN COLLEGE TEXTBOOKS
(Mankin & Jewell, 2014)

RANK	RATIO NAME	FREQUENCY	PERCENT OF BOOKS
1	Current Ratio	74	96.10%
2	Inventory Turnover	72	93.51%
3	Return on Assets (ROA)	70	90.91%
4	Quick Ratio	69	89.61%
5	Times Interest Earned	68	88.31%
6	Net Profit Margin (Return on Sales)	66	85.71%
7	Days Sales Outstanding (DSO)	62	80.52%
8	PE Ratio	61	79.22%
9	Total Asset Turnover	60	77.92%
	Return on Equity (ROE)	60	77.92%
11	Receivables Turnover	51	66.23%
	Debt Ratio	51	66.23%
13	Debt to Equity	49	63.64%
14	EPS	42	54.55%
15	Days Sales in Inventory (DSI)	37	48.05%
	Gross Profit Margin	37	48.05%
17	Dividend Payout	32	41.56%
18	Dividend Yield	31	40.26%
	Fixed Asset Turnover	31	40.26%
20	Market to Book	28	36.36%
	Total Ratios	1,051	

Table A3
TOP 20 HIGHEST RATED FINANCIAL RATIOS BY ANALYSTS
(Gibson, 1987)

Rank	Ratio Name	Significance (0-9)
1	Return on Equity After Tax	8.21
2	Price / Earnings Ratio	7.65
3	Earnings Per Share	7.58
4	Net Profit Margin After Tax	7.52
5	Return on Equity Before Tax	7.41
6	Net Profit Margin Before Tax	7.32
7	Fixed Charge Coverage	7.22
8	Quick Ratio	7.10
9	Return on Assets After Tax	7.06
	Times Interest Earned	7.06
11	Debt to Equity Ratio	7.00
12	Return on Total Invested Capital After Tax	6.88
13	Stock Price / Book Value	6.75
14	Degree of Financial Leverage	6.61
15	Long-Term Debt / Total Invested Capital	6.52
16	Debt / Assets	6.50
17	Total Debt / Total Assets	6.42
18	Return on Total Invested Capital Before Tax	6.40
19	Degree of Operating Leverage	6.36
20	Current Ratio	6.34