

Attorney CLE Series



Analyzing Financial Statements and Their Impact on Value

AN ATTORNEY'S GUIDE TO UNDERSTANDING
FINANCIAL STATEMENTS (PART II)

May 29, 2014

presented by GYF Business Valuation Services

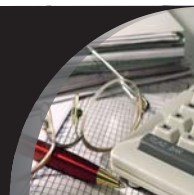


GROSSMAN YANAK & FORD LLP
Certified Public Accountants and Consultants

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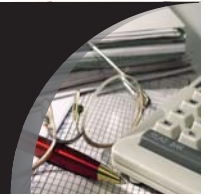
Headquartered in Pittsburgh, Grossman Yanak & Ford LLP is a regional certified public accounting and consulting firm that provides assurance and advisory, tax planning and compliance, business valuation and technology services. Led by five partners, the 23-year-old firm employs approximately 55 personnel who serve corporate and not-for-profit entities in Pennsylvania, Ohio, West Virginia and New York.

Our firm was founded on the idea that the key to successful, proactive business assistance is a commitment to a high level of service. The partners at Grossman Yanak & Ford LLP believe that quality service is driven by considerable involvement of seasoned professionals on a continuing basis. Today's complex and dynamic business environment requires that each client received the services of a skilled professional with a broad range of experience and knowledge who can be called upon to provide efficient, effective assistance.

Grossman Yanak & Ford LLP combines a diversity of technical skills with extensive "hands-on" experience to address varied and complex issues for clients on a daily basis. We pride ourselves on bringing value-added resolution to these issues in a progressive and innovative manner. Our ability to produce contemporary, creative solutions is rooted in a very basic and ageless business premise – quality service drives quality results. Our focus on the business basics of quality technical service, responsiveness and reasonable pricing has enabled the firm to develop a portfolio of corporate clients, as well as sophisticated individuals and nonprofit enterprises.

Our professionals understand the importance of quality and commitment. Currently, the majority of the professional staff in our Assurance and Advisory Services and Tax Services Groups hold the Certified Public Accountant designation or have passed the examination and need to complete the time requirements for certification. Each of our peer reviews has resulted in the highest-level report possible, attesting to the very high quality of our firm's quality control function. The collective effort of our professionals has resulted in our firm earning an exemplary reputation in the business community.

Grossman Yanak & Ford LLP...Quality You Deserve!



Robert J. Grossman, CPA/ABV, ASA, CVA, CBA



Bob brings extensive experience in tax and valuation issues that affect privately held businesses and their owners. The breadth of his involvement encompasses the development and implementation of innovative business and financial strategies designed to minimize taxation and maximize owner wealth.

His expertise in business valuation is well known, and Bob is a frequent speaker, regionally and nationally, on tax and valuation matters. He is a course developer and national instructor for both the American Institute of Certified Public Accountants (AICPA) and the National Association of Certified Valuators and Analysts (NACVA) and served as an adjunct professor for Duquesne University's MBA program. Bob has also written many articles for several area business publications and professional trade journals.

After graduating from Saint Vincent College in 1979 with Highest Honors in Accounting, Bob earned a Masters of Science degree in Taxation with Honors from Robert Morris University. He is a CPA in Pennsylvania and Ohio and is accredited in Business Valuation by the American Institute of Certified Public Accountants. Bob also carries the well-recognized credentials of Accredited Senior Appraiser, Certified Valuation Analyst and Certified Business Appraiser.

A member of the American and Pennsylvania Institutes of Certified Public Accountants (PICPA), Bob has previously chaired the Pittsburgh Committee on Taxation. He has also served as Chair of the Executive Advisory Board of NACVA, its highest Board. Currently Bob is the Chair of NACVA's Professional Standards Committee; he previously chaired its Education Board.

Bob received the NACVA "Thomas R. Porter Lifetime Achievement Award" for 2013. One award is presented annually to a single member, from the organization's 6,500 members, who has demonstrated exemplary character, leadership and professional achievements to NACVA and the business valuation profession, over an extended period of time.

Bob is a member of the Allegheny Tax Society, the Estate Planning Council of Pittsburgh and the American Society of Appraisers. He has held many offices and directorships in various not-for-profit organizations. He received PICPA's 2003 Distinguished Public Service Award and the 2004 Distinguished Alumnus Award from Saint Vincent College.

Bob and his wife, Susie, live in Westmoreland County. They have two grown children.



Melissa A. Bizyak, CPA/ABV/CFF, CVA



Melissa has practiced in public accounting for nearly 20 years and has significant experience in business valuation and tax-related issues for privately-held concerns and their owners. Her experience is diverse, with clients including both private and publicly-held companies in a wide variety of industries.

Melissa has performed valuations for various purposes, such as Employee Stock Ownership Plans (ESOPs), equitable distributions, buy/sell transactions, dissenting shareholder disputes, value enhancement and gift and estate tax purposes. She also provides litigation support services, including expert witness testimony.

After graduating from the University of Pittsburgh in 1994 with a B.S. in Business/Accounting, Melissa spent more than two years with a local accounting firm in Pittsburgh. She joined Grossman Yanak & Ford LLP in 1997.

Melissa is a certified public accountant. She is accredited in business valuation and certified in financial forensics by the American Institute of Certified Public Accountants (AICPA). She has also earned the AICPA Certificate of Achievement in business valuation. Additionally, Melissa carries the credentials of Certified Valuation Analyst.

Her professional affiliations include the AICPA and the Pennsylvania Institute of Certified Public Accountants (PICPA), as well as the Estate Planning Council of Pittsburgh. She is also a member and serves on the Executive Advisory Board of the National Association of Certified Valuators and Analysts (NACVA).

Melissa has authored articles appearing in professional publications and has written business valuation course-related materials for NACVA and the AICPA. She serves as a national instructor for NACVA.

Melissa is a graduate of Leadership Pittsburgh, Inc.'s Leadership Development Initiative. She serves on the Board of Directors of the Children's Museum of Pittsburgh and is a member of the Executive Leadership Team for the American Heart Association's "Go Red for Women" initiative. Melissa is a mentor for women business owners in Chatham University's MyBoard program and serves on Robert Morris University's Professional Advisory Council.

Melissa resides in the South Hills of Pittsburgh with her husband and their two sons.



Brett Fulesday, CVA



Brett has practiced in public accounting for 10 years and has experience in providing valuation and litigation support services for public and privately-held concerns. He has served clients in numerous industries, including consumer goods, energy, entertainment, financial services, health services, manufacturing, pharmaceutical, food and beverage, media, retail and software.

Brett's experience includes providing valuation services for purposes of financial and tax reporting (goodwill impairment testing, purchase price accounting and stock compensation); gift and estate tax planning; dissenting shareholder litigation; and general business planning. His experience in litigation support includes the determination of lost profits and economic damages arising from disputes in various industries.

After graduating from Boston University in 2003 with a B.S. in Business Administration and a concentration in Accounting, Brett spent more than four years with a local consulting firm in Pittsburgh and nearly six years with an international accounting firm in Pittsburgh. He joined Grossman Yanak & Ford LLP in February 2014.

Brett has earned the Certified Valuation Analyst (CVA) designation conferred by the National Association of Certified Valuation Analysts (NACVA). He is also actively pursuing the designation of Accredited Senior Appraiser (ASA) through the American Society of Appraisers.

He was selected to participate in Leadership Development Initiative XXI, a Leadership Pittsburgh Inc. program.

Brett is a member of NACVA and the Northern Allegheny Rotary Club. He serves on the Audit & Finance Committee of the Western Pennsylvania Golf Association and the Finance Committee for the Sewickley Heights Golf Club.

Brett resides in the Wexford area with his wife.



Steven M. Heere, CPA



Steve has practiced in public accounting for more than 18 years. He has extensive experience in audit and accounting for both privately-held companies and not-for-profit entities. Steve serves a wide array of industries, including manufacturing, construction, real estate and technology development.

Steve brings experience in dealing with acquisitions and divestitures, due diligence procedures, contract accounting, and financial statement analysis. He also specializes in providing accounting and auditing services to not-for-profit organizations, including the enhanced auditing and reporting requirements for federal, state and local funding. Steve has provided guidance on revenue recognition, fund account-

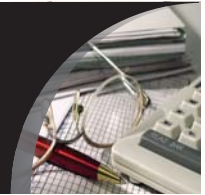
ing and other issues pertinent to not-for-profit organizations.

After graduating from Grove City College with Highest Honors in Accounting, Steve joined Grossman Yanak & Ford LLP in 1995. As a CPA in Pennsylvania, he is a member of the Pennsylvania and American Institutes of Certified Public Accountants.

Steve's service to the community includes serving as treasurer for Shoulder to Shoulder Pittsburgh-San Jose, Inc., a not-for-profit organization that provides medical and nutritional support to a rural area of Honduras.

Steve is also very involved as an elder in his church, serving as a member of the Budget, Finance and Stewardship committees. He is also the president of a local preschool and a youth soccer coach.

He resides in Shaler Township with his wife, Heather, and their children, Noah and Laura.



GYF CLE Course Offerings

The following courses have been presented by our professionals:

The Business Valuation Process: *Understanding Professional Requirements, Fundamental Procedures & Practical Considerations in Business Valuations*..... (February 26, 2009)

Understanding Standards of Value and Levels of Value: *A Precursor to the Application of Valuation Premiums and Discounts* (June 11, 2008)

The Income Approach to Business Valuation: *Understanding the Methods and Their Basic Application*..... (June 4, 2009)

The Market Approach to Business Valuation: *Understanding the Methods and Their Basic Application*..... (October 7, 2009)

The Cost/Asset Approach to Business Valuation: *Understanding the Approach and Reviewing Expert Reports* (February 4, 2010)

Quantification and Application of Valuation Discounts: *Understanding the Uses and Misuses of Discounts for Lack of Control and Lack of Marketability* (October 1, 2008)

S Corporations vs. C Corporations: *Understanding Valuation Differences* (March 6, 2008)

Special Purpose Valuations: *Understanding the Nuances of Valuation in the Context of ESOPs and Buy-Sell Agreements* (June 3, 2010)

Special Purpose Valuations: *Business Valuations for Estate & Gift Tax Planning* (October 7, 2010)

Economic Damages: *Lost Profits Determinations* (February 10, 2011)

An Attorney's Guide to Financial Statements: *A Primer for Understanding, Interpreting and Analyzing Financial Statements* (June 15, 2011)

Marcellus Shale: *A Discussion of Income Tax & Valuation Issues Related to Landowners* (October 11, 2011)

Family Limited Partnerships: *The Realities of Estate Planning with FLPs* (February 8, 2012)

Business Entity Selection & Structuring Transactions: *Understanding the Options and How to Effectively Use Them in Planning*..... (June 14, 2012)

Fraud & Forensic Accounting: *Schemes, Investigative Techniques & Prevention/Detection* (October 9, 2012)

Navigating the New Tax Laws: *Recent Changes & 2013 Planning*..... (February 7, 2013)

Intangible Assets: *Identification, Valuation and Controversial Issues*..... (June 19, 2013)

Employee Stock Ownership Plans: *Understanding ESOPs and Their Use In Exit Planning*.... (October 10, 2013)

Advising Individual Tax Clients: *For 2013 and Beyond* (February 12, 2014)

Handouts and slides from these presentations can be downloaded at www.gyf.com

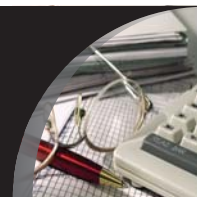
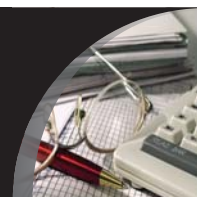


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Analyzing Financial Statements and Their Impact on Value

Chapter I – *Introduction*

Approximately three years ago, Grossman Yanak & Ford LLP authored a CLE program titled, *An Attorney's Guide to Understanding Financial Statements*, which was intended to serve as a primer for understanding, interpreting and analyzing financial statements for those in the legal community. We have presented that program several times, including specific single firm presentations, upon invitation. The reception of and impact on our friends in the practice of law has been astounding, and we have been overwhelmed with compliments and congratulations on that program. We are pleased that we have been able to provide some valuable insights into your use of financial statements.

As with all of our CLE programs, we have much to say and little time in which to say it. Given the many constraints of a two-hour program format, we have often been asked in evaluations to do a “repeat” of the earlier program, as well as adding content to take our CLE participants and users of financial statements to the next level. Today's program is designed to answer those requests.

We clearly understand that many of you in attendance today do not read financial statements on a daily basis. However, we also understand that the great percentage of projects in which most of you participate are driven by economic issues and in many, if not most, of these instances, financial statements and the information contained therein, will serve as the very foundation for developing successful resolution to those matters. To that end, today's program will encompass a review of a portion of the content set out in the earlier course. The purpose for this, of course, is to allow a refresher to those in the session that may require such and, for those that may not have attended the earlier program, to provide that fundamental baseline information necessary to properly understand where we are going in the second part of today's program. The balance of the program is designed to expand on financial statement analytics so as to enhance participants' understanding of what the financial statements really mean, as compared to what is actually spelled out in those statements.

It is, of course, well known that financial accounting is the basic language of business. When learning to speak another language, such as Spanish or French, fluently, it is first necessary to understand the many nuances, inflections and interpretive variations used by those speaking that language as their first language. Learning to properly interpret financial information issued in the form of financial statements requires a similar approach.

The general steps encompassed in the determination of the meaning of financial statements and how best to use that information in any related decision-making process, including those in the legal realm, is predicated upon generally-accepted diagnostic procedures and analyses derived over very many decades of financial, economic, statistical and accounting theoretical development.



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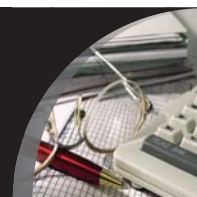
Today's program will start with a focus on "double-entry" accounting. Double-entry accounting serves as the core principle at the heart of the accounting profession and all that is done within that profession. The evolution of double-entry accounting dates back to a beginning in the 13th century and serves to ensure that data entry errors are minimized by virtue of a "balancing" of each side of a particular transaction entry. The term, "balancing the books" comes from double-entry accounting.

The primary element, or least common denominator in business, is generally referred to as a "transaction." A transaction is recorded in the books and records of an accounting system by virtue of making an adjustment to at least two separate "accounts." One of the adjustments will be reflected as an increase in assets, a decrease in liabilities, a decrease in equity or an expense. The other adjustment will be reflected as a decrease in assets, an increase in liabilities, an increase in equity or an item of income. Generally, the first type of adjustment is known within accounting lingo as a "debit transaction," and the latter is known as a "credit transaction." As a result of this type of accounting balance for all transactions undertaken by a business enterprise, we are able to easily discern what is owned, what is owed, how much has been invested in the business, what has been earned and what has been spent or disbursed.

Thinking of financial statements as the finished goods of the business, it is important to consider the many raw materials that go into their development. Any financial statements are the result of many transaction records, numbering from the hundreds, to thousands, to hundreds-of-thousands of transactions, if not more. It is the combined result of these many transactions that reflect the current status of the business at any point in time (its balance sheet) and its income or loss over some measurement period such as the current fiscal year (its income statement).

Mechanically, and as will be demonstrated as we progress through the session, there is an important integrated relationship between each of the financial statements presented in compliance with generally-accepted accounting principles. Thus, it is imperative that the readers of financial statements, in addition to understanding each particular statement, understand the relationship of the balance sheet to the income statement and changes in owner(s) equity, as well as the statement of changes in cash flows. In addition, it is important to understand that the footnotes to the financial statements are an integral part of the financial statements taken as a whole, and must be considered in interpreting the financial statements.

Accounting under the double-entry system, and the resultant financial statements tell a story. While the story may not be absolute from the information set forth therein, if one assumes proper recordkeeping, a careful reading of the financial statements, in conjunction with commonly accepted analytical processes, can very often lead one to the plot of that story, as well as the means by which the business got to that end.



Analyzing Financial Statements and Their Impact on Value

Today's program is split into the following chapters to enable the authors to separate related concepts into smaller, more succinct units of information so as to allow for a building block process as we move forward into the session. As such, and as can be observed in the Table of Contents, today's program will evolve over seven chapters, including:

Chapter I – Introduction

Chapter II – Financial Statement Basics

Chapter III – Financial Statement Analysis

Chapter IV – Financial Ratios

Chapter V – Assessing Company-Specific Risk

Chapter VI – Determining the Impact on Company Value

Chapter VII – Conclusion and Practical Observations

We are, of course, limited once more to just a two-hour timeframe, which imposes numerous limitations on how much information can be shared. However, we hope that in this seminar we can provide each of today's participants with a foundational understanding of financial accounting and the financial statements that come from that process, as well as how to read financial statements and generally interpret their meaning.

As always, the authors and speakers will be available at any time to answer specific questions about today's program. Should you have further questions, please feel free to speak to us after the session or contact us at the email addresses and phone numbers indicated below.

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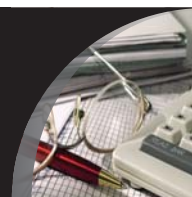
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We greatly appreciate the continuing support we receive from those in the legal community and we thank you for spending part of your busy day with us.



Analyzing Financial Statements and Their Impact on Value

Chapter II – *Financial Statement Basics*

Financial statements are a key tool for understanding the financial health and direction of a business. Being able to read and understand financial statements, therefore, is a valuable skill for any professional that seeks to better serve his or her business clients. Properly prepared financial statements can inform the reader about a company's ability to:

- Meet its obligations;
- Generate a profit; and
- Provide a return to its owners/investors.

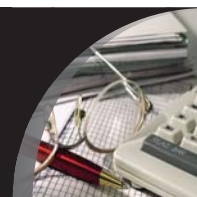
However, developing an accurate picture of these business basics will usually require the reader to gather information from a variety of places throughout the financial report; not doing so may lead the reader to form inaccurate conclusions. The reader will also need to know how to analyze the financial information in light of historical trends, budgeted expectations, and comparable industry statistics.

There are no presentation requirements for internally-prepared financial statements – those prepared by the company for its own analysis and decision-making purposes. As a result, such financial statements may not include all of the information necessary for an outside reader to formulate accurate conclusions about the company. Externally-prepared financial statements, which include an opinion rendered by an independent accountant, are designed to provide the reader with greater assurance and clarity regarding the information contained within the report. For this reason, the accounting industry has promulgated a host of rules and guidelines for externally-prepared financial statements to attempt to clarify the financial story being presented.

The body of rules and principles that has been developed for financial reporting is referred to as “generally accepted accounting principles,” (GAAP). These principles are promulgated by the Financial Accounting Standards Board, (FASB), which is a non-governmental body that meets to research accounting issues and make revisions to GAAP as determined to be appropriate for the improvement of the financial reporting process.

While not all externally-prepared financial statements look exactly the same, the following are the basic elements that are common to most of them (in order of presentation):

- Accountant's report;
- Required financial statements;
- Required footnote disclosures; and
- Other supplementary information.



Analyzing Financial Statements and Their Impact on Value

Required Financial Statements

Each financial statement is one piece of the company's overall financial puzzle. Without each piece, the picture will not be complete, and the user will not be able to accurately assess a company's ability to achieve its business objectives. A complete financial statement presentation should include the following statements:

- Balance sheet;
- Income statement;
- Statement of changes in equity;
- Statement of cash flows; and
- Required footnote disclosures.

Balance Sheet

The balance sheet presents the assets, liabilities and equity of a company as of a point in time. This is usually the end of a company's fiscal year, but it could also be an interim date, such as a quarter- or a month-end, or it may be as of the date of a particular event, such as the date of the company's formation or an acquisition date.

The assets are those items that are owned by the company. They can be tangible (or physical) assets, such as cash, inventory or property, or intangible, such as intellectual property, customer lists and trade names/trademarks. They are also described in terms of their ability to be converted into cash. Assets that are expected to be converted into cash or consumed during the business's operating cycle (typically, one year) are called **current assets**. Common current assets include cash, accounts receivable, inventory and prepaid expenses. Other assets may take a longer time to consume or convert into cash and are called **noncurrent assets**. This category would generally include fixed assets (such as real estate and personal property), intangible assets, notes receivable and pension-related assets.

The nature and classification of assets is important for financial statement analysis (as discussed later). Thus, the balance sheet should be presented in order of liquidity, with current assets listed first, followed by noncurrent assets. For example, cash, generally being the most liquid asset, is usually the top line of the balance sheet. Many balance sheets will present a subtotal for current assets, although this is not a requirement under GAAP.

Liabilities are those amounts that are owed by the company. The settlement of a liability may be through the payment of cash, the forfeiture of a non-cash asset, or the exchange of the liability for another liability. Similar to assets, liabilities are differentiated by the timing of when they will be settled. Liabilities that are expected to be settled during the business cycle (typically, within one year) are considered to be **current liabilities**. Common current liabilities include accounts payable, accrued payroll and other expenses, deferred revenue and tax liabilities. Long-term liabilities



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are those that will not be settled within one year. Notes payable, capital leases and pension obligations are common examples of long-term liabilities. It is important to note, however, that these liabilities may have a component that will be settled within one year, and that component is considered to be a current liability. Scheduled monthly debt repayments on a mortgage due within one year would be a current liability even though the remaining balance of the mortgage is a long-term liability.

This differentiation is important because, like assets, liabilities are presented in order of their expected settlement. Accounts payable may be the most current liability, as vendor payment terms are typically within 30 days. A subtotal for current liabilities is often presented, though not required.

The excess of assets over liabilities is the company's equity. Equity is usually composed of ownership units, such as stock for corporations, membership units for limited liability companies or capital accounts for partnerships. The ownership structure can be very complex. A corporation may issue preferred stock and common stock. Each class of stock can be assigned different voting rights, dividend rights and liquidation preferences. In addition, stock options or warrants may exist and have a multi-year vesting period. Corporations may also choose to buy back their own stock. These shares may be retired and canceled or held in treasury by the company for future reissuance (*treasury stock*).

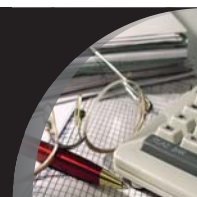
Partnerships and limited liability companies also have a lot of flexibility in establishing their capital structure and ownership rights. These terms will be specified in their operating agreements.

A company may have more liabilities than assets and, in such case, have a deficiency rather than equity. This will generally occur when a company has experienced losses from operations. A company should present a capital deficiency on the balance sheet even though the owners may not be obligated to fund the shortfall (such as in a limited liability company).

Income Statement

The income statement presents the results of the company's revenue and expense transactions. It covers a period of time (most often, one year) rather than a point in time, like the balance sheet.

The income statement is basically a process of reduction. It begins with the company's total revenue from sales and subtracts its cost of goods sold to arrive at gross profit. Cost of goods sold includes those costs directly related to the product or service being sold and can vary depending on the industry. For a manufacturer, cost of goods may include significant costs for materials, production facilities and equipment, as well as production labor. For a service company, direct service labor may be the main component, and materials costs may be less significant.



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From gross profit, other operating expenses are subtracted to arrive at income from operations. Operating expenses include all costs related to and attributable to the company's ongoing operations.

Other income and expenses are then factored into the income statement. These items are not a part of the company's operating process. Gains and losses from the sale of fixed assets, interest expense, miscellaneous revenue ancillary to the company's business and any unusual/infrequent income or expense items not attributable to operations are included in this section. While some of these items may be common and recurring, such as interest expense, they are not considered to relate directly to the operating process and, therefore, are excluded from operating income.

Income taxes, if they are applicable to the type of entity being presented, are also subtracted as a separate income statement line item to arrive at net income from operations, which may be the bottom line of the income statement. A company may also have discontinued operations (discussed below), extraordinary items or comprehensive income. In these cases, additional lines would be presented at the end of the income statement to further adjust net income (from continuing operations) to overall comprehensive income.

Statement of Changes in Equity

A company's components of, and changes in, its equity must also be presented. The components of equity can be presented in the balance sheet, in a separate statement of equity or in the footnotes. As noted above, the equity structure can range from very simple to very complex. A separate statement of changes in equity is often preferred when there is a complex equity structure or numerous equity transactions. In addition to any net income or loss generated during the year, other equity transactions may include issuing additional shares of stock, repurchasing stock into the treasury, paying dividends, issuing stock options or warrants or reflecting a change in accounting principles.

A company's equity may also include a noncontrolling interest in the equity of a subsidiary. This will occur when consolidated financial statements are presented for a parent company and one or more subsidiaries that are under the control of the parent. Control is usually, but not exclusively, achieved through voting power. The noncontrolling interest represents the equity attributable to the other owners of the subsidiary based on their ownership percentages and rights. This equity does not belong to the parent company; thus, it is segregated from the other components of the parent company's equity.

Statement of Cash Flows

The statement of cash flows provides the financial statement user with information regarding the way in which the company generated and utilized cash. Similar to the income statement, the statement of cash flows reports on a period of time, such as one year. It categorizes all activities into three categories: operating, investing and financing.



Analyzing Financial Statements and Their Impact on Value

Operating activities relate to the company's ongoing current operations and are generally computed as the company's net income adjusted for transactions that are noncash in nature or have not yet been settled in cash. Depreciation expense is commonly a significant noncash adjustment between net income and operating cash flows. Changes in current asset and current liability balances also affect operating cash, as these balances do not become cash activity until settled (for instance, when receivables are collected or when inventory is sold).

Investing activities relate to the use of cash for long-term investment and are typically associated with the company's noncurrent assets. Purchasing or selling property and equipment (with the exception of real estate companies), issuing notes receivable and purchasing or selling investments (with the exception of investment companies) are all investing activities.

Financing activities relate to transactions involving lenders or owners and are typically associated with the company's long-term debt obligations or equity. Borrowings and repayments of debt, proceeds from the issuance of stock, and dividend payments are examples of financing activities.

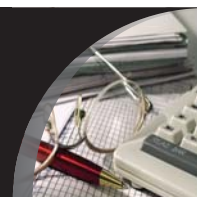
Companies may engage in investing or financing transactions that are noncash and would not be included in the statement of cash flows. These transactions are reported below the statement. Examples include the financed purchase of property through the issuance of a note payable to the bank or the conversion of debt into equity.

Required Footnote Disclosures

A complete financial report must include certain required disclosures to supplement the basic information presented in the financial statements. Many of these disclosures are contained in footnotes that accompany the financial statements and are an integral part of the financial report. The footnotes provide explanatory information to supplement the raw numbers in the financial statements, frame the reader's perspective and clarify areas that may be ambiguous to the reader.

The first footnote should identify the legal structure of the company, where and when it was organized and its tax status. This could inform a reader as to where a company is in its lifecycle, as well as the legal environment in which it operates. This footnote should also describe the nature of the company's operations, including its product lines and their significance.

Also, if the company is experiencing significant financial difficulties and there is substantial doubt about its ability to continue operating for one year beyond the balance sheet date, the footnotes may also describe the nature of the difficulties and management's plan to alleviate the condition. This is referred to as a *going concern disclosure*.

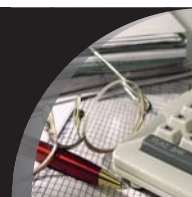


Analyzing Financial Statements and Their Impact on Value

The first or second footnote should also describe the company's significant accounting policies. Financial statement readers should be especially aware of changes in a company's accounting policies, as such changes could affect comparability of the financial statements. Policy changes must be justified by management as resulting in better accounting practices; companies are not permitted to simply change accounting policies at their discretion. The disclosure of accounting policies may be lengthy and cover a range of financial statement areas, such as the recognition of revenue; valuation of inventory; capitalization and depreciation of long-lived assets; estimation of an allowance for doubtful receivables; treatment of research and development costs; treatment of shipping, advertising and warranty costs; and valuation of certain assets (i.e., at historical cost or fair market value).

A reader should be aware of any amounts that either are susceptible to future refinement as additional facts and circumstances are presented or are so uncertain that they cannot be recorded in the financial statements. Financial reports must also contain significant future commitments, such as an operating lease or a long-term supply agreement with a vendor. A financial statement reader should also be aware of related-party relationships and transactions.

The financial statements, together with the disclosures, provide a reader with information that will form the basis for making financial decisions about the company. They work in harmony to recount the performance of a company, present an inventory of what belongs to the company and describe how the ownership of the company is structured.



Analyzing Financial Statements and Their Impact on Value

Chapter III – *Financial Statement Analysis*

It is important to understand that one of the primary objectives of accounting and the preparation of financial statements is to provide information that is useful in connection with decision making. Decisions are made by many different users of financial statements for a multitude of reasons, including bankers determining whether or not to extend credit; investors deciding to purchase or invest in a company; management of the company deciding to purchase a piece of equipment, rewarding management and employees, and determining the value of the company for purposes including shareholder buyouts, litigation involving stock value and marital dissolution, to name a few.

Financial statements are intended for general purposes and, thus, are not prepared with a particular end-user in mind. Condensing and reporting complex business transactions at a level easily understood by non-professional investors or end-users is increasingly difficult. Some disclosed information, therefore, may be irrelevant to some users, but vital to others.

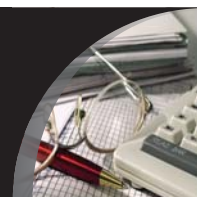
Analyzing a company's financial health includes consideration of the full set of financial statements, including the balance sheet, income statement, statement of cash flows and footnote disclosures.

It was a long-standing tradition that accounting statements began with the historical cost at which assets were acquired and financing raised, which were not designed to measure the current value of assets. Further, the market price of an asset was often viewed as much too volatile and too easily manipulated to be used as an estimate of value for an asset for financial reporting purposes. The only assets reported at or close to market value were current assets. As a consequence, the liabilities and the shareholders' equity from an accounting statement were not true measures of the current values of either.

Fair value accounting, now adopted in both U.S. and international accounting, aims to bring asset values in accounting balance sheets closer to their current market values. When there is more than one approach to valuing an asset, accounting convention takes the view that the more conservative and reliable estimate of value be used.

As noted earlier in this material, internally-produced financial statements provided by your clients may not be prepared in accordance with generally accepted accounting principles. In conjunction with analyzing a company's financial statements, care should be taken to understand the difference in how transactions are recorded and, therefore, reported.

This chapter will outline the key considerations when analyzing financial statements with the emphasis on understanding economic reality.



Analyzing Financial Statements and Their Impact on Value

Assets

The strength of a company's balance sheet begins with the nature of its assets. When focusing on the assets of a business, users of financial statements typically have the following questions in mind:

- What are the assets in place?
- How valuable are these assets?
- How risky are these assets?

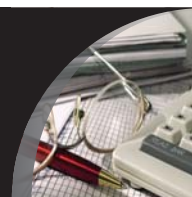
Generally, cash and receivables are considered to be highly-liquid assets; however, the reader should not make that assumption in all circumstances. Instead, he or she should read the footnotes to determine whether there are any restrictions on the use of significant cash balances.

Receivables may include trade accounts from normal operations, receivables from related parties, secured notes receivable and other miscellaneous receivables, as well as an allowance for potentially-uncollectable accounts. Each of these categories may carry different risk considerations with respect to the timing of collectability and the potential for default. Thus, it is important to know the nature of the receivables and the industry to fully assess the liquidity and risk associated with receivables. Companies must disclose the components of their receivables; however, this detail information might only be presented in the footnotes to the financial statements.

In analyzing a company's balance sheet, it is beneficial to review a number of prior year's financial statements to discern any patterns of collections and bad debt write-offs, as well as any trends in receivables that are not considered trade (i.e. receivables from related parties).

Inventory often also consists of many details that are only known through a careful study of the footnotes. The method of recording inventory (such as first-in first-out, last-in first-out, average cost or standard cost) will impact both the carrying value of inventory on the balance sheet and the cost of sales and, ultimately, the net income reflected in the income statement. Consider the following impact of inventory methods on the financial statements and resulting analysis.

Inventory and cost of goods sold are interdependent. If a last-in first-out (LIFO) method is used in an environment of rising-prices and increasing-inventory, more of the higher-cost goods (last items in) will be accounted for in the cost of goods sold, as opposed to inventory recorded under a first-in first-out (FIFO) method. Under this scenario (using LIFO), net income will be lower when compared to a company that used FIFO accounting.



Analyzing Financial Statements and Their Impact on Value

Understand that there is a tax impact on the choice of inventory method. If a company uses the FIFO method in a rising-price and increasing-inventory environment, it will generate lower cost of goods sold resulting in higher net taxable income, and, therefore will pay higher taxes. Tax expenses are a real cash outflow, thus lowering a company's cash flow.

When calculating working capital (defined as current assets minus current liabilities) of a company, it is important to be aware of the inventory method. If one method produces a higher inventory value, working capital will increase. An increase in working capital translates to a use of cash and, therefore, a reduction in cash flow.

The composition of inventory among raw materials and finished goods, as well as the provision of a reserve for obsolete or unsalable inventory, are important considerations in the quality of a company's overall inventory balance. Finished goods that are ready for sale may be more liquid and carry less risk than raw materials that still need to undergo the production process.

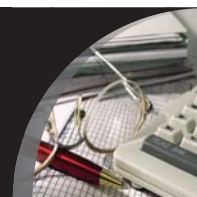
The same considerations apply to noncurrent assets. Real and personal property may be recorded at cost or at fair market value (which may be significantly different) and are subject to estimates of useful life and impairment, if applicable. Fair market value may improve the balance sheet by increasing the carrying value of assets, but it introduces more subjectivity and volatility into the balance sheet value.

It is becoming increasingly, and continually, more apparent that management of all operating companies, large and small, focus on the development and maintenance of the organization's intangible assets. Examples of intangible assets include patents, trademarks, customer lists, copyrights and internet domain names. Intangible assets, including goodwill, which are recorded on the balance sheet as a result of an acquisition, may be the most subjective of a company's assets and, depending on the nature of the specific assets and the marketplace, they may also be the least-liquid of the company's assets. Please keep in mind that a company is likely the owner of other intangible assets beyond those that are listed on its balance sheet. If intangible assets are significant to the balance sheet, the reader will need to know the basis for amortizing these assets and to what extent impairment reserves have been reflected. If the financial statements indicate impairment of a particular intangible asset or goodwill, the user of the financial statement should look to changes in the income and cash flow of the business, which led to the impairment.

Liabilities

A financial statement reader's analysis of liabilities should consider two primary attributes:

- Value of outstanding debt obligations (including how much estimation is imbedded in liability's balance); and
- Timing of the payments (i.e., when company is expected to make a cash outflow to satisfy debt obligations).



Analyzing Financial Statements and Their Impact on Value

A company's financial strength generally improves to the extent that it is able to defer its liabilities to future dates. A company whose liabilities are primarily accounts payable due in the next month has tighter cash flow demands than a company with a large-term note payable to the bank over 15 years. Generally, from a working capital perspective, a company can enhance operating cash flow by satisfying payables at the stated due date rather than making payment as soon as an invoice is received.

Greater reliance can be placed on a liability that is fixed in nature versus one that is subject to estimation. Consider an accrued liability for real estate taxes, which can be determined based on stated tax rates, versus an accrued liability for estimated environmental remediation costs, which could fluctuate depending on the level of effort needed to remediate the affected area. This type of liability indicates substantial risk attendant to its ultimate value.

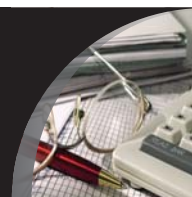
A reader should also consider whether there are unrecorded liabilities that impact the financial analysis. For example, operating leases represent future obligations that are not included in the balance sheet; however, significant lease obligations should be disclosed in the footnotes. Also, the company may have contingent liabilities associated with future uncertainties. A potential loss depending on the outcome of a litigation matter, or contingent consideration to be paid to the seller upon the occurrence of a stated sales volume, may be considered contingent liabilities. Although these are not recognized in the balance sheet and may never come to pass, a financial analysis of the company would not be complete without considering the potential effects of such items.

Equity

The last of three main components of a company's balance sheet is owners' equity, which is simply the remainder of assets less liabilities. Shareholder equity is also known as the "book value" of a company. A company's book value is not the same as its "fair market value." As previously noted, many companies have intangible assets contributing to the cash flow of the business that are not recorded on the balance sheet. Additionally, other long-term assets may have actually appreciated in value at the same time the accountant was properly depreciating them. As this suggests, typically, a company's market value exceeds its book value. Conversely, a company that has recently purchased significant assets, but is unable to operate profitably, may have a fair market value this is less than its book value.

Quality of Earnings

The income statement should also be analyzed in detail by looking at the key components that drive net income. Increased sales volume and increased gross profit and operating income are positive indicators of strong earnings. However, if the net income is generated by a nonrecurring transaction unrelated to the company's normal operations, such as a gain on the sale of a large piece of equipment, this would have less value to a financial reader.



Analyzing Financial Statements and Their Impact on Value

Note that the degree of discretion granted to companies on revenue recognition and extraordinary items is used to manage earnings and may provide misleading pictures of profitability. A company may have a long-term supply arrangement with a customer that is generating a significant amount of the company's sales. A reader would want to know how significant this customer activity is in relation to the overall financial statements and when this agreement will expire. Any concentration of activity with one customer is a long-term risk factor.

Going Concern

Financial statement readers should be alert for disclosures regarding the company's ability to continue as a going concern (that is, a company that continues to operate) for a period of one year beyond the date of the balance sheet. Doubts regarding a company's ability to continue operating may be fueled by the following financial characteristics:

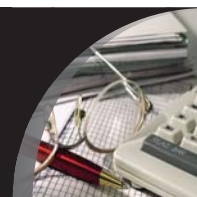
- Recurring losses for a period of years;
- An excess of current liabilities over current assets;
- A deficiency (negative amount) of equity; and
- Industry-specific events, such as changes in technology or regulations.

As previously noted in these materials, the first footnote will describe the events or circumstances that cause doubt regarding the company's ability to continue as a going concern. If that doubt has been alleviated by management's plans for future operations, that plan will also be disclosed.

Comparability

Most financial reports are presented on a dual-year basis, meaning that information for the two most-recent reporting periods is presented together. Generally, the data is presented side-by-side in order to facilitate a reader's ability to compare the two reporting periods. For the balance sheet, this comparison will be as of two points in time, for instance, December 31, 2013, and December 31, 2012. For the income statement and cash flow statement, the presentation will compare two periods of time, most often a year.

By comparing two (or, ideally, more) years against each other, financial statement users can identify positive or negative trends in the company's earnings, liquidity or other performance measures. The income statements may be used to identify top-line changes in sales volume or bottom-line net income. The balance sheets may be used to determine whether the company is investing more or less in its inventory from year-to-year. The cash flow statements may be used to assess the company's typical debt retirement obligations or history of dividend payments.



Analyzing Financial Statements and Their Impact on Value

A useful tool in financial statement analysis is to place the income statement on a common-size basis, meaning that every line item is shown as a percentage of sales. Further, when two or more years of financials are available, computing year-over-year growth is another useful method to uncover trends.

The reader must be aware of circumstances that may affect the comparability of multiple years' financial statements. Occasionally these items may be discernible directly on the financial statements, such as new line items. However, a careful read of the footnote disclosures may reveal other events that were unusual or nonrecurring. A well-prepared financial report will refer to these footnote disclosures from within the financial statements in order to facilitate the reader's understanding of all pertinent information. Examples of some typical events that affect comparability are listed below.

Reclassifications

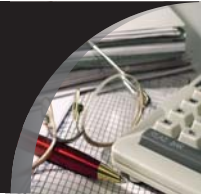
A reclassification is a change to previously-issued financial statements for the express purpose of improving the comparability of the two years being presented. A company may change how certain account balances or transactions are classified in order to improve its financial reporting relative to GAAP. The prior-year financial statements will then be adjusted, as well, in order to maintain comparability of the two reporting periods. However, the reclassification only covers reporting periods that are included in the financial report; thus, if a user is attempting to compare and analyze a longer period of time, he or she may have difficulty in applying a similar reclassification to the older financial information.

New or Discontinued Operations

Business operations evolve over time. New or discontinued operations affect the comparability of financial statements in which one period reflects the operations of a particular business line or segment, but another period does not. Discontinued operations that result from the sale or closure of a business segment are segregated from normal operations and presented below income from operations in order to improve comparability and report income from ongoing operations. The balance sheet, though, will still include assets and liabilities related to the discontinued operations. In a similar fashion, any newly-acquired business lines would impact the financial statement presentation for periods after the acquisition.

Unusual or Infrequent Transactions

A company may experience a significant transaction in one reporting period that is not encountered in other reporting periods. For instance, a legal settlement may result in substantial income in the year in which the settlement is negotiated. As a result, the company may report favorable earnings when, in reality, the results of ongoing operations have been declining for a number of years.



Analyzing Financial Statements and Their Impact on Value

Some unusual or infrequent transactions are not directly related to operations and can be identified on the income statement as a component of other income or expense. Examples of such transactions include legal awards or settlements, gains or losses on the sale of long-term assets, restructuring costs and impairments of tangible or intangible assets. Financial statement readers may use an intermediary measure of income, such as income from continuing operations, in order to exclude the effects of these items.

Other significant transactions may be a part of operations for the reporting period. Severance costs, research and development costs, legal costs and start-up costs are just a few of the many types of operating expenses that could fluctuate significantly from year-to-year based on a wide range of factors. While the footnotes may provide information as to the underlying situations resulting in performance variations, this would most likely occur in the course of fulfilling some other disclosure requirement. There is no requirement to describe the nature of fluctuations in performance, except in the case of going concern questions.

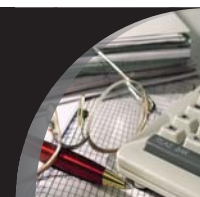
Consider the example on the following page, wherein XYZ, LLC experienced a non-recurring event in the form of litigation involving patent infringement. Comparison of the financial statement over a three-year period, combined with review of the footnote disclosures, assisted the user in making sense of the fluctuations in certain income and expense items.

Conclusion and Final Thoughts

There are a number of items that can have an impact on the analysis of a company's financial statements. Understand that different industries may be impacted by special accounting procedures, unique policies, government regulations or other industry attributes. Even within an industry, a particular business may require more or less working capital than the industry norm or average.

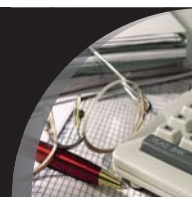
When analyzing financial statements, changes in general economic trends should be considered from year-to-year. Changes in interest rates and fuel costs rendered historical guidelines for evaluating such expenses obsolete.

Financial statement analysis is only as reliable as the data on which it is based. Although most companies follow generally accepted accounting principles, a wide variety of acceptable accounting methods is available from which to choose, including different inventory and depreciation methods, different schedules for recognizing revenue, and different ways to account for oil and gas exploration costs.



Analyzing Financial Statements and Their Impact on Value

XYZ LLC HISTORICAL INCOME STATEMENTS AND COMMON SIZE ANALYSIS FOR THE YEARS ENDED DECEMBER 31, 2011 THROUGH 2013						
	2011		2012		2013	
Sales	\$5,000,000	100.0%	\$5,250,000	100.0%	\$ 5,600,000	100.0%
Cost of Goods Sold	3,250,000	65.0%	3,412,500	65.0%	3,640,000	76.5%
Gross Profit	1,750,000	35.0%	1,837,500	35.0%	1,960,000	23.5%
Operating Expenses						
Officer's Compensation	450,000	9.0%	500,000	9.5%	525,000	1.6%
Office Salaries	100,000	2.0%	110,000	2.1%	115,000	2.3%
Payroll Taxes	27,000	0.5%	29,000	0.6%	32,000	0.8%
Office Expense	5,000	0.1%	5,200	0.1%	5,300	0.4%
Consulting	2,000	0.0%	40,000	0.8%	1,800	2.4%
Professional Fees	15,000	0.3%	95,000	1.8%	18,000	0.2%
Dues and Subscriptions	4,100	0.1%	4,500	0.1%	4,600	0.2%
Licenses and Permits	900	0.0%	1,400	0.0%	1,800	0.1%
Commissions	10,000	0.2%	12,500	0.2%	16,000	0.3%
Telephone	8,000	0.2%	8,400	0.2%	8,600	0.4%
Advertising/Promotion	20,000	0.4%	22,000	0.4%	25,000	0.1%
Travel and Entertainment	30,000	0.6%	34,000	0.6%	35,000	0.4%
Total Operating Expenses	672,000	13.4%	862,000	16.4%	788,100	14.3%
Operating Income	1,078,000	21.6%	975,500	18.6%	1,171,900	9.2%
Other Income (Expense)						
Interest Income	400	0.0%	400	0.0%	400	0.0%
Other Income	1,200	0.0%	1,500	0.0%	500,000	8.9%
Interest Expense	(50,000)	-1.0%	(52,000)	-1.0%	(55,000)	-1.2%
Total Other Income (Expense)	(48,400)	-1.0%	(50,100)	-1.0%	445,400	-1.1%
Income before Taxes	1,029,600	20.6%	925,400	17.6%	1,617,300	8.0%
Provision for Income Tax	411,840	8.2%	370,160	7.1%	646,920	0.0%
Net Income	\$ 617,760	12.4%	\$ 555,240	10.6%	\$ 970,380	8.0%



Analyzing Financial Statements and Their Impact on Value

Chapter IV – *Financial Ratios*

Financial ratio analysis is the evaluation and interpretation of a company's financial data using standard financial ratios or accounting ratios to determine a company's financial condition.¹ Simply stated, a ratio is a mathematical relation between one quantity and another. There are numerous ratios that can be calculated for a company; selecting the appropriate ratios will depend on the purpose of the exercise (for example, determining credit-worthiness) and the type of company.

When performing financial analysis, calculating ratios can be a useful tool. However, a ratio by itself is meaningless until compared to prior years' experience, projections and industry averages, as well as to other ratios. Ratio analysis provides a benchmark to measure performance of a company and identify potential problems. Ratios can be classified as follows:

Coverage – is the measure of a company's ability to satisfy particular obligations.

Return – is a measure of the net benefit relative to a resource expended.

Turnover – is a measure of the gross benefit relative to a resource expended.

Component Percentage – is the ratio of one financial statement component to another.

Operating performance and the financial condition of a company can be evaluated through financial ratios including liquidity ratios, activity ratios, financial leverage ratios and profitability ratios, as well as through an analysis of growth rates.

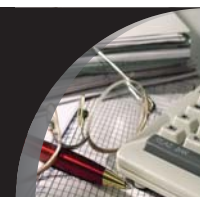
Liquidity Ratios: Short-Term Solvency

Liquidity ratios indicate the ease of converting certain assets into cash. These ratios are of particular interest to those extending short-term credit to a company. Assets that may be converted into cash in a short time period are referred to as liquid assets and are listed on the financial statements as current assets. The amount by which current assets exceed current liabilities is referred to as *net working capital*. The following are the most common liquidity ratios.

The *current ratio* is a measure of short-run solvency – the ability of a company to meet its debt requirements as they come due. Current liabilities are used as the denominator of the ratio, as they are considered to represent the most urgent debts requiring payment within one year or operating cycle.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{1,796,421}{644,233} = 2.79$$

¹ Modernanalyst.com Business Analysis Glossary



Analyzing Financial Statements and Their Impact on Value

The minimum acceptable current ratio is 1:1; however, this relationship does not allow much margin for safety relative to possible inventory shrinkage or uncollectable accounts receivable.

A *quick ratio*, or *acid test ratio*, is a more rigorous test of short-term solvency than the current ratio because the numerator eliminates inventory, which is considered the least liquid current asset and most likely source of loss.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}} = \frac{1,004,080}{644,233} = 1.56$$

An acid test of 1:1 is considered satisfactory unless the majority of the “quick assets” are in accounts receivable, and the pattern of collections lag behind the schedule for payment of current liabilities.

The *cash ratio* is the most conservative liquidity ratio, as it excludes all current assets except the most liquid: cash and equivalents.

$$\text{Cash Ratio} = \frac{\text{Cash} + \text{Marketable Securities}}{\text{Current Liabilities}} = \frac{193,658}{644,233} = 0.30$$

The cash ratio is an indication of a company’s ability to satisfy its current liabilities in the event that immediate payment was demanded. Generally, the higher the aforementioned liquidity ratios, the better able a company is to satisfy its immediate obligations. A company with a long operating cycle² may have more need to have liquid assets than one with a short operating cycle. Longer operating cycles indicate that cash is tied-up in inventory or receivables for a longer length of time.

Working capital is measured in dollars rather than as a ratio. It is calculated by subtracting total current liabilities from total current assets. Bankers focus on net working capital over time to determine a company’s ability to weather financial crises. Loans are often tied to minimum working capital requirements. Companies want to not only demonstrate positive working capital, but also to minimize the amount of working capital requirements for efficiency.

Activity Ratios

Activity ratios are measures of how well assets are employed. They can be used to evaluate the benefits produced by specific assets, including accounts receivable and inventory. A company invests in an asset (i.e. inventory or equipment) and then uses the asset to generate revenue. The greater the turnover, the more effective a company is at producing benefits from its investment.

² Operating cycle is defined as the duration between the time that cash is invested in goods and services (i.e., inventory) to the time that investment produces cash.



Analyzing Financial Statements and Their Impact on Value

Accounts receivable (AR) turnover indicates how many times, on average, accounts receivable are collected during the year.

$$\text{AR Turnover} = \frac{\text{Net Sales}}{\text{Average Accounts Receivable}} = \frac{6,799,900}{605,686} = 11.23$$

The turnover represents the average number of times receivables convert to cash. The ratio is calculated using net accounts receivable (net of the allowance for doubtful accounts) and net sales. The average collection period helps to gauge the ability of the company to collect from its customers. It also helps to provide information regarding a company's credit policies, as the ratio is typically compared to the company's stated credit policies.

Inventory turnover indicates the number of times that inventory is created and sold during a period. It measures how efficiently a company manages and sells inventory.

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \frac{4,483,081}{938,657} = 4.78$$

Generally, a high turnover indicates efficient inventory management. The faster that inventory sells, the fewer funds are tied-up in inventory. However, a high turnover can indicate under-stocking and lost orders, a decrease in prices or a shortage of raw materials. Additionally, the type of industry is also important in assessing inventory turnover. Produce retailers would be expected to have high inventory turnover as opposed to retailers of high-end equipment.

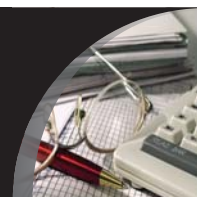
Current asset turnover indicates the ability of the company's management to employ its current assets to generate revenue.

$$\text{Current Asset Turnover} = \frac{\text{Net Sales}}{\text{Current Assets}} = \frac{6,799,900}{1,796,421} = 3.79$$

Generally, the higher the ratio, the smaller the investment required to generate sales.

Fixed asset turnover indicates the ability of the company's management to employ its fixed assets to generate revenue.

$$\text{Fixed Asset Turnover} = \frac{\text{Net Sales}}{\text{Fixed Assets}} = \frac{6,799,900}{380,412} = 17.88$$



Analyzing Financial Statements and Their Impact on Value

This ratio is important for capital-intensive businesses, such as manufacturers with significant investments in long-lived assets. Generally, the higher the ratio, the smaller the investment required to generate sales.

Total asset turnover indicates the extent to which a company's investment in total assets results in sales.

$$\text{Total Asset Turnover} = \frac{\text{Net Sales}}{\text{Total Assets}} = \frac{6,799,900}{6,561,178} = 1.04$$

As with the current asset and fixed asset ratios, the higher the ratio the smaller the investment required to generate sales. When asset turnover ratios are low relative to the industry or company's historical ratios, either the investment in assets is too great and/or sales are sluggish. However, a low ratio could be explained by an extensive plant modernization.

Leverage Ratios: Debt Financing and Coverage

Companies can finance their assets through equity, debt or a mix of both. Financial risk is the extent to which debt financing is used relative to equity. The amount and proportion of debt in a company's capital structure is extremely important due to the trade-off between risk and return. The use of debt involves risk because of the fixed commitment (in the form of interest and principal repayment) debt carries. The higher the proportion of debt, the greater the degree of risk to the company and its owners because debt obligations have priority and must be satisfied before any benefits are available to owners. Failure to satisfy the fixed charges associated with debt could ultimately result in bankruptcy. Additionally, when a company has a high debt load, it will have difficulty obtaining additional debt financing if or when needed, or credit will be extended at very high interest rates.

When a company properly uses debt there is potential for increased benefits to the shareholders. If operating earnings exceed fixed charges associated with debt, the returns to shareholders are increased through financial leverage.

Leverage ratios are used to assess how much financial risk a company holds. Component percentages compare a company's debt with either its total capital (debt plus equity) or its equity capital. Coverage ratios reflect a company's ability to satisfy fixed obligations, including interest, principal repayment or lease payments.

The *debt ratio* indicates the proportion of assets financed with debt (including both short- and long-term debt).

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} = \frac{3,121,744}{6,561,178} = 0.48$$



Analyzing Financial Statements and Their Impact on Value

The debt ratio can be further refined to include only long-term debt rather than total debt, as follows:

$$\text{Long-Term Debt to Total Assets} = \frac{\text{Long-Term Debt}}{\text{Total Assets}} = \frac{3,114,416}{6,561,178} = 0.47$$

Note that debt ratios depend upon the classification of long-term leases and upon the classification of some items as long-term debt and equity.

The *debt-to-equity ratio* indicates the relative uses of debt and equity as sources of capital to finance the company's assets. This ratio is typically evaluated using book values of the capital sources. The problem with analyzing risk of a company through a financial ratio that uses book value of equity is that there is little to no relationship between the book value and its market value. The book value of equity on the financial statements of a company consists of the proceeds of all the stock issued since incorporation less any treasury stock (which is stock repurchased by the company) and the accumulation of all the historical earnings of the company less any dividends paid since inception.

Historical earnings are recorded in accordance with accounting principles, which may not reflect the true economics of transactions. The market value of equity is the value of equity as perceived by an investor and will include consideration of both tangible and intangible assets. If market value of equity is known it can be replaced for book value in the following equation:

$$\text{Total Debt to Equity} = \frac{\text{Total Debt}}{\text{Total Shareholders' Equity}} = \frac{3,121,744}{2,169,196} = 1.44$$

In addition to leverage ratios there are a number of financial leverage ratios that capture the ability of a company to satisfy its debt obligations. The two most common financial leverage ratios are described below.

The *debt-service coverage ratio* compares the earnings of a company – as measured by earnings before interest and taxes (EBIT) – that are available to meet the interest and principal payments on debt obligations.

$$\text{Debt-Service Coverage} = \frac{\text{EBIT}}{\text{Total Debt Service}} = \frac{776,121}{826,967} = 0.94$$

In order for a company to benefit from debt financing, the debt-service payments must be more than satisfied by operating earnings. The more times that a company can cover its annual interest and principal payments from operating earnings, the better the position for the equity holders.



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The *fixed charge coverage ratio* is a broader measure of coverage capability, as it includes any fixed charges, such as lease payments. The ratio can also include preferred dividends as a fixed charge.

$$\text{Fixed Charge Coverage} = \frac{\text{EBIT} + \text{Lease Payments}}{\text{Interest} + \text{Lease Payments}} = \frac{784,868}{578,744} = 1.36$$

The fixed charge coverage ratio is important for companies that operate extensively with leasing arrangements, either operating or capital leases. You will see coverage ratios used in debt covenants to help protect creditors.

Profitability Ratios

Profitability ratios compare components of income with sales, which in essence, measure the success of a company to translate sales dollars into profits at different stages of measurement.

The *gross profit margin* is a measure of the gross profits earned on sales. The gross profit margin shows the relationship between sales and the cost of products sold and measures the ability of a company to control costs of inventory or manufacturing of products, as well as to pass along price increases through sales to customers.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Net Sales}} = \frac{2,316,819}{6,799,900} = 0.34 \text{ or } 34\%$$

Calculation of this ratio will depend on the type of company. For example, service firms will likely not have cost of goods sold and, therefore, no gross profit margin.

The *operating profit margin* is the ratio of operating profit (EBIT) to sales. The operating profit margin is a measure of overall operating efficiency and incorporates all of the expenses associated with ordinary business activity.

$$\text{Operating Profit Margin} = \frac{\text{Operating Income}}{\text{Net Sales}} = \frac{776,121}{6,799,900} = 0.11 \text{ or } 11\%$$

The *net profit margin* measures profitability after consideration of all revenue and expenses, including interest, taxes and non-operating items.

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}} = \frac{(130,081)}{6,799,900} = (0.02) \text{ or } -2\%$$



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Another important perspective on operating performance is the relationship between cash generated from operations and sales, as it is cash rather than accrual-based earnings that a company needs to service debt, pay dividends and invest in capital assets. The *cash flow margin* is the measures the ability to translate sales into cash.

$$\text{Cash Flow Margin} = \frac{\text{Cash Flow from Operating Activities}}{\text{Net Sales}} = \frac{424,909}{6,799,900} = 0.06 \text{ or } 6\%$$

Return on total assets and *return on investment* are measures of how effectively a company's assets are used to generate profits.

$$\text{Return on Assets} = \frac{\text{Net Earnings}}{\text{Total Assets}} = \frac{(130,081)}{6,561,178} = (0.02) \text{ or } -2\%$$

Return on equity is the bottom-line measure for the shareholders of a company. It measures the profits earned for each dollar invested in the company's stock.

$$\text{Return on Equity} = \frac{\text{Net Earnings}}{\text{Shareholders' Equity}} = \frac{(130,081)}{2,169,196} = (0.06) \text{ or } -6\%$$

Businesses that generate high returns relative to their shareholders' equity pay their shareholders handsomely and create substantial assets for every dollar invested. These businesses are typically self-funding and require little to no additional debt or equity investments.

To quickly gauge whether a company is an asset creator or a cash consumer, an analyst will look at the return on equity it generates. By relating the earnings to shareholders' equity, an investor can quickly see how much cash comes from existing assets. If the return on equity is 20%, for instance, then 20 cents of assets are created for every dollar originally invested. As additional cash investments increase on the asset side of the balance sheet, the return on equity reflects whether additional dollars invested are dollars of return from previous investments.

Z-Score

Z-scores are used to predict corporate defaults. The Z-score uses multiple corporate income and balance sheet values to measure the financial health of a company. The ratio weights five financial ratios and sums the amounts to determine the actual Z-score of the subject company. The five ratios used in the calculation are the working capital-to-total assets ratio, retained earnings-to-total assets ratio, EBIT-to-total assets ratio, book value of equity-to-total liabilities ratio, and sales-to-total assets ratio.



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These five ratios are used, as they each are significant in predicting the likelihood of default and capture a different credit-relevant aspect of a company's operations. The Z-score calculation varies depending upon whether the subject company is in a manufacturing or non-manufacturing industry.

For a manufacturing company, the Z-score calculation, complete with the weightings of the ratios, is as follows:

$$.717 \times (\text{working capital}/\text{total assets}) + .847 \times (\text{retained earnings}/\text{total assets}) + .310 \\ \times (\text{EBIT}/\text{total assets}) + .420 \times (\text{book value of equity}/\text{total liabilities}) + .998 \times (\text{sales}/\text{total assets})$$

The Z-score for non-manufacturing companies is calculated as follows:

$$6.56 \times (\text{working capital}/\text{total assets}) + 3.26 \times (\text{retained earnings}/\text{total assets}) + 6.72 \\ \times (\text{EBIT}/\text{total assets}) + 1.05 \times (\text{book value of equity}/\text{total liabilities})$$

The Z-score is not intended to predict when a company will file a formal declaration of bankruptcy, rather, its purpose is to measure how closely a company resembles other companies that have filed for bankruptcy. While this ratio should not be the sole form of analysis used to gauge a company's financial health, it can be a solid indicator of corporate financial distress.

A Z-score of 2.9 or greater is preferred, while a score of less than 1.23 indicates significant risk of bankruptcy for a manufacturing company. For non-manufacturing companies, a Z-score of 2.6 or greater is preferred, while a score of less than 1.1 indicates significant risk of bankruptcy.

Growth Rates

Growth rates measure the change in a line item (typically, sales) over a period of time. Two common types of growth rates are described below.

The *annual growth rate* measures growth from one year to the next.

$$\text{Annual Growth Rate} = \frac{\text{Net Sales}_{\text{Year } n+1}}{\text{Net Sales}_{\text{Year } n}} = \frac{6,799,900}{6,126,707} = 0.110 \text{ or } 11\%$$

The *compound annual growth rate (or CAGR)* measures year-over-year growth over a specified period of time. To build upon the above example, assume that Net Sales_{Year n+2} are \$7,244,300 and that Net Sales_{Year n+3} are \$7,751,000.



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The CAGR between Year_n and Year_{n+3} would be calculated as follows:

$$\text{CAGR} = \frac{\text{Net Sales}_{\text{Year } n+3}}{\text{Net Sales}_{\text{Year } n}} ^{(1/\# \text{ of years}) - 1} = \frac{7,751,000}{6,126,707} ^{(1/3) - 1} = 0.082 \text{ or } 8.2\%$$

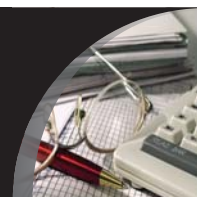
The financial ratios of our sample company as used throughout this material are included in the Appendix.

Concluding Thoughts

Financial ratio analysis, as a quantitative approach, may appear easy to learn and apply, however, there are some common mistakes in application that should be noted:

- Failing to use an average or, when applicable, weighted average, can distort ratios. For example when computing accounts receivable turnover, if the average accounts receivable balance is \$250,000, the ending balance is \$500,000 and credit sales for the year are \$4 million; the days sales outstanding would be 22.5 days based upon the average balance, as opposed to 45 days based upon the ending balance.
- Most sources of industry information do not always disclose the accounting methods used by the companies contained in the figures or ratios that are compiled by the source, which could negatively affect the comparability of such information. Further, the basis of a comparative analysis may be impacted by the nature of the business, its size, geographic location, business practices and other factors that may differentiate the subject company from the industry as a whole.
- If an historical analysis covers an insufficient number of years, certain trends and performance measures could be misinterpreted. For example, if the analysis only covers a two-year period in which a company invests in substantial capital improvements, any ratio using total assets or net income will be affected by the capital investment.

Any exercise in selecting, calculating and interpreting financial ratios can be a difficult process to undertake. However, done properly, review and analysis of financial ratios can assist in determining the strengths and weaknesses of a company, as well as identifying areas warranting additional inquiry or investigation.



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Chapter V – Assessing Company-Specific Risks

The review and analysis of a company's financial statements in conjunction with a valuation assignment is used as the backbone in assessing risks specific to the subject company. Company-specific risk represents unsystematic risk, which accounts for the uncertainty of future returns as a function of something other than movements in market rates of return, such as the characteristics of an industry, enterprise or type of investment.

This risk is estimated, albeit mostly based upon valuator judgment, and used as an additional premium in the quantification of the overall risk (discount) rate applied to the subject company's expected future cash flows.

Unsystematic Risk

Classic financial theory assumes that rational investors will eliminate their exposure to unsystematic risk through maintaining fully-diversified portfolios. However, this assumption is based upon the existence of other interlocking assumptions – the absence of which, in a privately-held company setting, requires the valuation analyst to identify and quantify unsystematic risk as a part of an overall rate of return. Some of these assumptions include: investors have access to perfect information for decision-making purposes; there are no taxes to be considered; and the decision-maker is fully rational.

Unsystematic risk has four primary sources:

- *Size* – the smaller the company, the greater the risk;
- *Macroenvironment* – six forces (economic, technological, sociocultural, demographic, international and political) that companies must monitor to minimize the negative effect of sudden macroenvironmental changes; and, the ability of companies to influence these forces is minimal;
- *Industry* – five forces (threat of new entrants, bargaining power of suppliers, bargaining power of customers, threat of substitutes and rivalry), which companies can influence through their actions; and
- *Company-specific attributes* – companies must monitor change and adapt accordingly.

Company-Specific Risk Adjustments

Company-specific risk adjustments are “intended to account for company-specific factors affecting a company's competitive position in the industry or unique characteristics that would cause investors to view that company's risk differently than the average risk characteristics of the pure play guideline public companies to which it would be compared.”³

³ Shannon P. Pratt and Roger J. Grabowski, *Cost of Capital: Applications & Examples*, 4th ed. (Hoboken: NJ: John Wiley & Sons, Inc., 2010): 287.



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Company-specific risk factors could include, but are not limited to, the following:

- Abnormal present or pending competition;
- Concentration of the customer base;
- Dependence upon a key person;
- Dependence upon a key supplier;
- Financial forecasts or projections are biased high;
- Pending lawsuits; and
- Pending regulatory changes.

In addition, stakeholders in privately-held companies may be subject to a type of information risk that is not as applicable to stakeholders in publicly-traded companies. For instance, public companies must file audited financial statements and certain disclosures with the Securities and Exchange Commission (SEC); privately-held companies, however, are not subject to the same requirements, and they may not even have audited financial statements.

Challenges

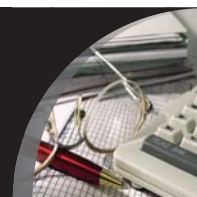
Quantifying company-specific risk is difficult (oftentimes, subjective) – and controversial. Chancellor Strine of the Delaware Court of Chancery, which hears more valuation-related cases than any other court, and to which other courts look for guidance, stated:⁴

Much more heretical to [the capital asset pricing model, or CAPM], however, the build-up method typically incorporates heavy dollops of what is called “company-specific risk,” the very sort of unsystematic risk that the CAPM believes is not rewarded by the capital markets and should not be considered in calculating a cost of capital. The calculation of a company-specific risk is highly subjective and often is justified as a way of taking into account competitive and other factors that endanger the subject company’s ability to achieve its projected cash flows. In other words, it is often a back-door method of reducing estimated cash flows rather than adjusting them directly.

To judges, the company-specific risk premium often seems like the device experts employ to bring their final results into line with their clients’ objectives, when other valuation inputs fail to do the trick...

[Petitioners’ expert’s] own analysis also contains a subjective specific risk premium of 2%, the quantification of which cannot be explained by reference to objective factors...

⁴ *Delaware Open MRI Radiology Associates, P.A. v. Howard B. Kessler et al.* (Court of Chancery of State of Delaware, Cons C.A. 275-N).



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In 2012, the Chancery Court criticized the application of a company-specific risk premium in estimating a discount rate:⁵

I do not believe that a company-specific risk premium should be used in a CAPM calculation of a discount rate, especially in a case like this. A company-specific risk premium is not an addition to the CAPM that is accepted by corporate finance scholars, but is sometimes added to the discount rate by practitioners valuing a company to reflect that the company has risk factors that they believe have not already been captured by the equity risk premium as modified by beta and (if applicable) the small company size premium. “Pure proponents of the CAPM argue that only systemic risk as measured by beta is relevant to the cost of capital and that company-specific risks should be addressed by appropriate revisions in cash-flow estimates.”⁶

More generally, for a corporation that operates primarily in the United States and where there are sound projections, the calculation of a CAPM discount rate should not include company-specific risk for the obvious reason that it is inconsistent with the very theory on which the model is based. If there are concerns about projection risk because the projections were generated by an inexperienced management team, the company’s track record is such that estimating future performance is difficult even for an experienced management team, or projections seem to be infected with a bias, it would be better for the expert to directly express his skepticism by adjusting the available projections directly in some way, to make plain his reasoning. Admittedly, this would involve as much subjectivity as heaping on to the discount rate, but it would also force more rigor and clarity about the expert’s concern. Here, where management under the control of Dimensional came up with various scenarios and Orchard’s expert gave overwhelming weight to management’s base case scenario, no extra discounting is warranted and the CAPM method should be applied on its own terms, and not be infected by an ingredient from the build-up method.

Quantification

There is no observable third-party information available by which company-specific risk adjustments can be implied or calculated. However, some practitioners have proffered guidance that would, at the least, allow company-specific risk to be determined in a documented, systematic manner:

- Calculate a company-specific risk premium by comparing “the subject company to either guideline companies or, in their absence, other forms of industry investment information.”⁷

⁵ *In re Orchard Enterprises, Inc.*, 2012 WL 2923305, at *20-21.

⁶ Citing *Union Ill. 1995 Inv. LP v. Union Financial Group Ltd.*, 847 A.2d 340, 354 n.28 (Del. Ch. 2003); *Del. Open MRI Radiology Assoc. v. Kessler*, 898 A.2d 290, 339 (Del. Ch. 2006); and *Solar Cells Inc. v. True N. Partners LLC*, 2002 WL 749163, at *6 n.11 (Del. Ch. Apr. 25, 2011).

⁷ Gary R. Trugman, *Understanding Business Valuation: A Practical Guide to Valuing Small to Medium Sized Businesses*, 3rd ed. (New York: American Institute of Certified Public Accountants, 2008): 370.



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- Identify the potential risk factors and assign each adjustment based upon the extent to which it differs from the industry baseline risk.⁸
- Consider “all available information and all available alternatives, and avoid vague, unsupportable statements. Instead, analysis should present thoughtful, reasoned, and well-developed analysis. In many cases, risk-adjusting the cash flows directly will produce the most reliable and supportable analysis to reflect company-specific risks.”⁹
- Use the risk-free rate of return, equity rate of return, industry risk premium and size-adjusted premium to “create a baseline or benchmark required rate of return based on a baseline or benchmark investment. The analysis then compares the risk attributes of this benchmark investment to the risk attributes of actual subject investment. Based on that comparison, the analyst decides how much (if any) additional risk is associated with the subject investment compared with the benchmark investment. Based on this comparison, the [analyst] decides whether a [company-specific risk premium] is appropriate.”¹⁰

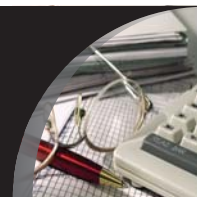
Concluding Thoughts

It is not a question as to whether company-specific risks will play a role in a business valuation. The question is: To what extent will they affect business value? While financial ratio analysis is one tool for the valuator to use in identifying risk factors, a thorough valuator will analyze all forces – those that companies can influence, as well as those that are beyond its control – to identify company-specific risks. Regardless of the means by which the valuator quantifies the company-specific risk, it is imperative that the valuator present his or her analysis in a cogent, documented fashion.

⁸ Ibid.

⁹ Jaime d’Almeida and Seth Fliegler, “From the Parlor to the Courtroom: The Use of a Company-Specific Risk Premium in Valuations,” *Value Examiner* (March/April 2011): 25.

¹⁰ Israel Shaked and Robert F. Reilly, *A Practical Guide to Bankruptcy Valuation* (Alexandria, VA: American Bankruptcy Institute, 2013): 29.



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Chapter VI – *Determining the Impact on Company Value*

Every business has a broad range of stakeholders. Different from equity holders, a stakeholder is anyone that has some interest, or *stake*, in the well-being of the enterprise. Stakeholders include customers, equipment and inventory providers, other service and asset vendors, lenders, investors, employees and even the government.

To motivate stakeholders to invest time, effort and money into any business requires that they be rewarded for the risk associated with that investment. In the ordering process, the last stakeholders to be rewarded for investing in any enterprise are the *common equity* investors.

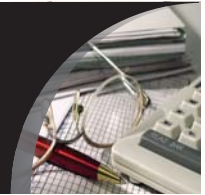
By way of example, various stakeholder returns can be envisioned as follows. Customers look for value purchasing. That is, customers are happy to pay fair remuneration for useful and desired products or services. As net free cash flow is a critical element in the determination of value, it would seem that by simply increasing the prices at which the products and services are offered, net free cash flow can be increased and, therefore, value will increase.

The matter is not so easily addressed, however, as the issue becomes one of product or service utility. At the pricing point at which the customers decide that the utility does not meet the asking price, they will select an alternative route to meet their needs, whether by purchasing an alternative product or service of similar utility or by purchasing the same product or service for a lesser cost from another provider.

A second example could be based upon employee labor expense. Noting again that higher expected net free cash flow equates to higher value, one might be driven to reduce wage and salary costs below market. While this action might put the business at a more profitable position than its competitors in the short term, cutting wages and salaries below market rates reduces the bargain for which the employee base accepted its current positions. As a result, it is likely that such an action will lead to higher employee turnover, employee dissatisfaction and reductions in product and/or service quality. Thus, in the longer run, such an action is possibly detrimental to value.

In light of these two examples, it is important to fully understand where, and how, the common equity investors obtain their return on investment. In simple terms, they expect some kind of return on investment commensurate with the risk anticipated at the time of that investment. Generally, this return on investment contemplates a cash distribution (usually, dividends) and capital gains. The key concept in understanding the level of return on investment to these common equity investors is that all other stakeholders must first be accommodated before any of the required return on investment to the common equity holders can be paid.

Another way to look at this concept is to understand that all other stakeholders must first be optimized (return on investment must equal the risk and return associated with their stakes in the business) before any return is paid



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to the common equity investors. When all stakeholders are optimized, the remaining net free cash flow will be one of the key determinants of the value of the business.

Understanding the basic precept of stakeholder risk and reward will aid readers in the assessment of financial statement anomalies on the value of the business. In performing the financial statement ratios and other financial statement analyses previously discussed, it is possible to identify and quantify the risk associated with any number of operational and financial aspects of the business.

Role of Financial Statement Analysis

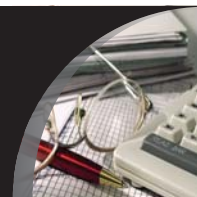
Recall that ratios are generally classified into four categories: coverage, return, turnover and component percentage. As was discussed in Chapter IV, each of these ratio groupings serve the specific task of calculating some measure of company performance. If the history of company performance is useful in predicting future economic benefits, as is often the case with operating companies with at least a moderately consistent financial history, that information can be utilized to establish the value of the business. The same theme holds for the use of other avenues of financial analysis, including horizontal and vertical integration analysis, wherein financial statements of the business under analysis are broken down into detailed line items and compared as a percentage of totals.

What are the ratio and financial analyses over this historical period intended to accomplish in the course of the business valuation? To properly answer this question, it is critical to understand the basic mechanics of the business valuation calculation. While the three broad approaches to business valuation – income, market and cost/asset approaches – offer a number of different methodologies to estimate value, the primary capitalization model under the income approach offers the most fundamental view of the valuation calculation.

Capitalized Future Economic Benefit Model

Under a capitalized future economic benefit model, the use of a simple fraction answers the question succinctly. Under this model, there are two primary elements. The first is the numerator, which reflects the business valuator's expectations as to the businesses' expected future economic benefits. Often, this is defined in business valuation projects as net free cash flow. The second element of the future economic benefit model is the denominator, which reflects the investment risk associated with the future expected net free cash flows. The denominator represents the risk of getting the expected cash flows, in the amounts, and at the times expected, in the future. The risk rate is called the capitalization rate and includes expected long-term sustainable growth in the expected future economic benefits.

Using a simple example for illustration purposes, assume that the future expected economic benefit is \$10,000. Assume further that the discount (risk) rate assigned to the investment is 23%, and the long term growth rate is 3%.



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Based on these assumptions, the capitalization rate is 20% (the discount rate of 23% less the 3% long-term growth rate). This rate acts as the denominator in the calculation methodology. The numerator, of course, is \$10,000. Dividing the numerator of \$10,000 by the capitalization rate of 20% results in an estimated value of the business of \$50,000.

The intent of the ratio and financial analysis, then, is to evaluate the credibility and propriety of both elements in the capitalization of expected future benefits calculation. It is critically important in this process to ensure that all risk inherent in the business is identified and quantified in one of these two elements. It is also in this process that the value drivers of the business are identified.

Value Drivers

Value drivers are usually explained and defined as the specific aspects of the business that have the greatest effect on valuation. Just as each business is different from every other, value drivers can vary widely from one business to the next. Once identified, however, specific ratio and financial analysis procedures are often designed to facilitate an understanding of the strength of the operational and financial history of those value drivers and how they might be enhanced in the future. Depending upon whether the value drivers can be enhanced, the effect can be incorporated into the numerator or denominator of the capitalized expected future benefits method.

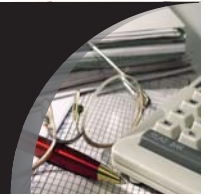
While such ratio and financial analysis can be extremely extensive, depending upon the business valuation assignment, the primary concepts can be illustrated through a simple example, as detailed below.

Example

Assume that, in a financial statement analysis undertaken for business valuation purposes, the single most important value driver of Technology Business A is Product X. Product X was developed by the Research and Development Group of Technology Business A. Upon approval from federal regulatory agencies, Product X was patented. Commercialization started three years ago with annual growth in Product X sales averaging 18%.

The first critical question in evaluating this value driver is to understand whether the sales will continue to grow at the historical rate and exactly when the growth rate will move closer to industry norms. Second, it must be determined whether competitor products can displace some portion of the expected sales of Product X. Such displacement can occur via improved competing products or more price-efficient alternatives.

Ratio and financial analysis allows for comparison of Technology Business A's performance against historical trends of its own, as well as against competitor and industry performance. Critical areas of analysis with respect to this par-



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ticular value driver might include looking at the research and development costs incurred by Technology Business A as compared to industry data. A substantially lower-percentage cost allocation for research and development to total sales might indicate that Technology Business A is slowing its research activities, perhaps leaving room for alternative product development by competitors.

To account for this circumstance in the course of the business valuation (assuming that it is concluded that Technology Business A is not maintaining necessary research activity levels), the valuator is posed with two alternative solutions. The first is to reduce the numerator in the calculation methodology to account for the lower expected future economic benefits associated with Product X. The second is to modify the denominator, or risk factor, to account for greater risk associated with the forecasted expected economic benefit stream due to lower ongoing research activities.

Interpreting the Results

In looking at the results of applied ratio and financial analysis, the process attempts to identify both strengths and weaknesses of the business under valuation. For example, under the coverage ratios (and specifically, the liquidity ratio, whereby a businesses' ability to meet its current obligations is measured), a ratio below the normal level for the industry would pose some question as to whether the subject company had too few current assets or too many current liabilities. In either case, the situation calls for more substantial analysis and a possible increase in the capitalization rate to account for additional risk.

This same type of assessment threads through all of the ratios and financial analyses. The comparative aspects of such analyses require that the subject company's analytical results be compared against its own historical data (to discern trends, both positive and negative), which is commonly referred to as trend analysis. It also requires that the subject company's analytical results be compared against competitor data (if available), as well as industry data.

A company's failure to align closely to particular competitor data is not, in and of itself, fatal to value, thereby causing the value to decrease. However, such differences should be understood as well as possible to ensure that their effects are properly considered.

The subject company's failure to align with industry data is more concerning. Presentations of industry data generally include a number of operators in the same line of business. As such, the data is much stronger, and it is a fairly reliable indication of financial statement information applicable to others operating within the same industry. Variations from industry norms can be attributable to both subject company strengths and weaknesses and can provide insight into current operational trends.



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For example, lower debt-to-equity ratios at the subject business as compared to the industry could be a strength, in that the company has less debt and, supposedly, greater equity than the industry. On the other hand, it might also mean that the subject business has more equity capital and, therefore, a higher cost of capital. If the subject company's cost of capital is greater than that of its competitors in the industry, it is likely to have lower net earnings and, correspondingly, less future expected cash flow. Such conditions equate to additional investment risk and must be considered in the assessment of value.

Concluding Thoughts

In summary, the effect of financial statements on any business valuation will be predicated upon the meaning of the information contained therein, and, how the subject company compares to its history and the industry in which it operates. Often the most complex part of the business valuation engagement – the ratio and financial analysis – provides an interpretation of the financial statements so the valuator can incorporate the effects into the valuation conclusion.



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Chapter VII – *Conclusion and Practical Observations*

We hope that this material presents a thorough review of the material covered in the first *Attorney's Guide to Understanding Financial Statements*, as well as provides an introduction to how review and analysis of financial statements translates into risk assessment and, ultimately, impacts business value. Participants in today's presentation have gleaned that the absolute numbers contained in the financial statements are of little use for analysis on their own. Rather, these numbers must be woven into meaningful relationships to assess a company's financial performance and condition. Additionally, the notes to the financial statements are essential to proper analysis of financial statements.

As financial reporting has evolved, it is crucial for users of the financial statements, including members of the legal community, to have a basic understanding of how to deconstruct the statements and focus in on relevant performance indicators.

It is important to understand that a company's financial statements reflect a summary of real world events (or transactions), as well as certain estimates and judgments on the part of management. In conjunction with a complete and thorough financial analysis, which primarily entails a quantitative assessment, having awareness of the underlying realities, including what the company does (its products and/or services), the status of the industry in which it operates and how the economy impacts performance, will result in a more meaningful process.

As many of the participants of today's program have attended our seminar on the topic of the Business Valuation Process, you are well aware that the analysis of the financial statements of a company is the backbone of any valuation and provides a basis for the calculations undertaken, as well as the application of valuation discounts.

Should you have any questions regarding this material or encounter a complex issue involving financial statement or business valuation, please feel free to contact any of the presenters, all of whom welcome the opportunity to assist you and your clients.



Grossman Yanak & Ford LLP – Services Provided

A&A Services

- Audits
- Reviews
- Compilations
- Agreed-Upon Procedures Reports
- Attestation Engagements

Tax Services

- Individual Tax Compliance and Planning Services
 - Compensation Planning
 - Tax Aspects of Investment Strategies
 - Passive Activity Considerations
 - Rental Property Tax Analysis
 - Optimization of Interest Deductions
 - Education Expense Planning
 - Retirement Planning
 - Alternative Minimum Tax Planning
 - Charitable Giving Strategies
- Family Tax Compliance and Planning Services
 - Business Continuation Strategies
 - Minimizing Family Tax Costs
- Business Tax Compliance and Planning Services
 - Business Structure Analysis
 - Compensation Planning
 - Inventory Methods Analysis
 - S Corporation Analysis
 - Tax Accounting Methods Analysis
 - Information Return Reporting Analysis
 - Deferred Compensation and Retirement Planning
 - Operational Tax Strategies
 - Tax Strategies Related to Asset Acquisitions
 - Employer/Employee Tax Strategies

Valuation Services

- Corporate Management Applications
- Commercial Activity Transaction Structure
- Valuations for M&A Transactions, Bankruptcy, Tax Planning and Accounting-based Purposes
- Fairness Opinions
- Marital Dissolution and Equitable Distribution Support for Attorneys
- Matters of Civil Controversy
- Expert Witness Testimony
- Recapitalization for Business Growth and Owner Diversification
- Value Enhancement Services

Consulting Services

- Technology Consulting
- Due Diligence Procedures Related to Mergers, Acquisitions & Divestitures
- Business Planning
- Forecasts and Projections
- Restructuring and Bankruptcy Consultation
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- Special Projects
 - Cost Accounting Systems
 - Cash Flow Analysis
 - Analysis of Insurance Programs
 - Lease vs. Buy Analyses
 - Business Valuations
 - Fixed Asset Accounting and Related Technology Implementations

