

CHAPTER THREE

GENERATING ECONOMIC/NORMALIZED FINANCIAL STATEMENTS

*“There are plenty of good five-cent cigars in the country. The trouble is they cost a quarter.
What this country needs is a good five-cent nickel.”*

Franklin Pierce Adams

I. GENERATING ECONOMIC/ NORMALIZED FINANCIAL STATEMENTS

A. OVERVIEW

Performing a thorough analysis of the historical (and resulting economic) financial statements of a business is prerequisite to performing a meaningful and thorough valuation. Basic financial statements include the balance sheet, income statement, and statement of cash flows. A thorough analysis of these statements¹ is required in any valuation of a closely held business or business interest. A complete financial analysis of the business will assist the analyst in many ways including, but not limited to, the following:

1. Helping to identify strengths and weaknesses of the business
2. Helping to identify trends of the business over time
3. Allowing the valuation analyst to compare and analyze the subject company's historical performance and providing a basis for comparing the business to other similar businesses or industry averages
4. Help identify areas for potential normalizing adjustments

A thorough financial analysis will allow the analyst to draw conclusions relating to key financial variables critical to the valuation of a closely held business while allowing the analyst to quantifiably support those conclusions. Financial analysis should be initially performed prior to making economic adjustments, as an aid in identifying potential areas of adjustment. Financial analysis should also be performed after adjustments are made.

B. NECESSARY INFORMATION

In order to perform an adequate financial analysis, the analyst will require certain information from the client. This information should include, but not be limited to:

¹ NACVA's valuation software, called Business Valuation Manager Pro (BVMPPro), is a good place to start your valuation's financial analysis.

1. Financial information (historical and prospective) and other similar data on the subject company
2. Factual history of the company
3. Information about perceived competitors
4. Management's expectations and perceived strengths and weaknesses

Practice Pointer

Rev. Rule 59-60 suggests five years or more of data should be considered; perhaps this figure was used since it approximated the average business cycle. In this global economy it is imperative that the valuation analyst understand the subject firm's business cycle as well as the local, regional, and in certain instances, the international economy and how these impact the subject firm's industry, because accordingly, the period to analyze could be longer or shorter, based on the analysts' judgment.

The analyst should use a checklist when requesting and obtaining documents and information. A sample checklist is included in Appendix IV of this manual. Even though the analyst may not require all of the items on the checklist, or may require some additional items, a checklist should still be used as an aid to organization and administration over this portion of the engagement.

The availability of audited or reviewed financial statements (as opposed to compiled statements or tax returns) sometimes leads the analyst to place a high degree of confidence in the statements. However, as will be discussed later in this chapter, GAAP rarely equates to true economic value. Therefore, adjustments for purposes of valuation are often made to even unqualified audited financial statements.

There is no universal method for analyzing a company's financial statements. Each analyst will begin at a different point, but no area can be skipped. It is important for the analyst to evaluate all the information provided so a decision to use or not to use any of the data is conscientiously and deliberately made.

C. ECONOMIC/NORMALIZED FINANCIAL STATEMENTS

It is often assumed that a good estimate of the value of a closely held business can be made by merely looking at the company's most recent balance sheet or income statement. This is certainly not the case. It is commonly accepted that most financial statements, even if prepared using Generally Accepted Accounting Principles (GAAP) or using a Tax Basis of Accounting (TBA), often present a picture that is very different from economic reality.

As a result, the analyst will generally prepare economic or "normalized" financial statements. Normalized financial statements will allow the analyst to better compare the subject company's financial performance and position to similar companies or industry averages. It also allows the analyst to better measure true economic income, assets and liabilities.

1. Objective

The main objective for recasting or adjusting the financial statements of a closely held company can be stated as follows:

“To adjust the financial statements or income tax returns of a business to more closely reflect its true economic financial position and results of operations on a historical and current basis.”

Balance sheet adjustments are made to reflect the current market values of both assets and liabilities.

Income statement adjustments are made to reflect the true economic results of operation similar to what a prospective buyer might require to have reasonable knowledge of the relevant facts. Normalizing adjustments are hypothetical and are not intended to present restated historical results or forecasts of the future in accordance with AICPA guidelines.

2. Purpose of Economic/Normalized Financial Statements

- a) Should be useful for making comparisons to similar business or industry averages
- b) Should be useful in making meaningful projections and forecasts
- c) Should result in a representative level of benefits
- d) Should (as nearly as possible) represent market values of net assets

3. Categories (or Areas) Of Normalization Adjustments

Normalizing adjustments generally fall into these categories:

- a) Method of accounting (LIFO, FIFO, Weighted Average)
- b) Non-recurring (transactions that are not reasonably expected to recur in the foreseeable future)
- c) Non-operating/operating (this includes removal of non-operating assets and liabilities and their related earnings and/or expenses from historical financial statements)
- d) GAAP compliance

Many normalizing adjustments cross boundaries. The analyst should be alert to the potential issues.

Common examples encountered by analysts include:

1. Accounting under GAAP (Generally Accepted Accounting Principles) or TBA (Tax Basis Accounting) or a combination thereof often results in a distorted picture of economic reality
2. Closely held business financial statements frequently have the following characteristics:
 - a. Highly aggressive expensing policies to reduce income taxes
 - b. Historical or cost basis in nature
3. Economic (normalized) financial statements can be costly to generate:
 - a. Supportable data just may not be available
 - b. Unfortunately, often results in adjusting those items that are relatively easy to support or easy to identify. The valuation analyst should spend enough time interviewing management to identify those areas most likely in need of adjustment. This will likely require some research to ascertain the norms and eccentricities of the industry for the subject company
4. Excessive compensation, perquisites, rent and similar effects of current ownership

5. Non-controlling (minority) vs. Controlling interest adjustments
 - a. Some valuation analysts believe that when valuing a non-controlling interest, those elements of the financial statement over which the non-controlling interest has no control should not be adjusted; others debate the appropriateness of adjusting an owner's compensation

Practice Pointer

With respect to adjustments for a minority interest, if any, valuation analysts must look at how state statutory laws define "control".

With the exception of states that have super majority provisions, "control" or "controlling interest" generally refers to more than a 50 percent interest. A minority shareholder lacks the capacity to distribute earnings, fundamentally change the structure of the entity, hire or fire management, etc.

Where a majority interest is being valued, valuation analysts will typically make some or all of the following:

- "Control Adjustments" such as:
 - Adjust compensation and benefits (typically these are non-qualified employee benefits)
 - Remove discretionary spending
 - Adjust for operating inefficiencies
 - Adjust financial structure (It is important to underscore that debt is not necessarily "bad" and that the subject company may be under-performing because it is not using leverage. It is equally important to point out when the subject firm may be "over-leveraged".)

II. GAAP ACCOUNTING VERSUS ECONOMIC ACCOUNTING

A. GAAP PRINCIPLES THAT POTENTIALLY DISTORT TRUE ECONOMIC VALUE

"...within the framework of generally accepted accounting principles (GAAP), there is some latitude permitted in the preparation of financial statements."

George D. McCarthy/Robert E. Healy

Authors: Valuing a Company Practices and Procedures

1. Historical Cost Principle
2. Revenue Recognition Principle
3. Matching Principle
4. Consistency Principle
5. Objectivity Principle
6. Full Disclosure Financial Reporting Principle

7. Modifying (Or Exception) Principle

- a) Materiality Concept
- b) Conservatism
- c) Industry Peculiarities and Practices
- d) Cost-Benefit

B. COMMON ECONOMIC/NORMALIZING ADJUSTMENTS

Practice Pointer

This is an introductory valuation course. Therefore, in this chapter only a few of the most common normalization adjustments are presented. Candidates should note that an effort is underway to converge US GAAP and IASB GAAP; the latter is not addressed in this introductory course.

The following are some of the more common economic/normalizing adjustments that a valuation analyst will encounter when valuing closely held businesses. It should be noted that the type of historical financial statements used could have a dramatic impact on the number of economic adjustments that need to be made. These distinctions are more clearly illustrated when comparing audited financial statements to tax basis or management prepared financial reports. Tax basis financial statements and internally prepared reports tend to put a greater emphasis on cash basis accounting.

The following is a list of the areas of possible economic adjustments. The list is not intended to be all-inclusive. The type and number of adjustments will vary between assignments and will be dependent upon the facts and circumstances in each case.

It should be noted that the valuation analyst's economic adjustments usually represent departure from generally accepted accounting principles (GAAP). A balance sheet adjustment to a historical asset or liability will be made to reflect the market value of that item. These adjustments usually bring net depreciated-historical-cost to market value and are made for valuation purposes. Such valuation adjustments show the "normalized" market value and can be offset against retained earnings.

On the other hand, economic adjustments made to the historical income statement do not necessarily require a corresponding or offset adjustment to the balance sheet. Removal of a one-time or non-recurring historical expense does not change any balance on the economic balance sheet. It is, therefore, likely that many economic adjustments to the income statement can be treated as one-sided entries. However, some valuation analysts will handle these economic adjustments to the income statement as increases or decreases to retained earnings. This is common when using valuation software that tracks both sides of the normalized adjustments. In either case, the valuator must understand the effect these normalized adjustments have on the normalized income and net-adjusted assets.

The valuation analyst may also need to consider the income tax effects for each adjustment made. This will depend upon whether or not the value is to be calculated on an after-tax basis or pre-tax basis.

1. Allowances for Doubtful Accounts

Goal: Adjust so that net accounts receivable represent the market value (as of date of valuation) of such receivables.

The estimate of the allowance for doubtful accounts should be analyzed and adjusted as necessary. The allowances should be challenged as they apply to either:

- a) Trade accounts receivable
- b) Notes receivable

This analysis can be done by comparing historical write-off of bad debts to the current estimated write-off to determine reasonableness. This analysis can also be done by comparing an aging of receivables to the allowance account in order to determine the adequacy of the allowance.

2. Notes Receivable

Goal: To reflect the market value (as of date of valuation) of notes receivable.

For a loan by the company to a shareholder the standard practice has been to write off the Note Receivable against Retained Earnings. This is a generalization. Yet, the valuation analyst needs to be cognizant of the purpose of the valuation and the facts and circumstances concerning the note. For example, in a valuation of a minority interest for purposes of redemption or sale, a productive shareholder note at market rates should not be adjusted. Another example is a divorce; the note may be a marital asset separately accounted for by the state court. **(Hence, the valuation analyst needs to make the judgment regarding both shareholder loan receivables, as well as payables, based on the purpose of the valuation and the facts and circumstances concerning the terms of the loan.)**

Many issues exist with respect to notes receivable, especially when the analyst discovers such receivables concern related parties. Notes are presumed to be valued at face value unless the analysis clearly establishes a different value. The following are several additional issues to consider:

- a) Is there evidence of the indebtedness?
- b) Is the note secured or unsecured?
- c) If secured, what is the note secured by?
- d) What factors are established relative to the valuation of notes by estate and gift tax regulations?
 - (1) Interest rate
 - (2) Date of maturity

- (3) Full or partial inability to collect
 - (a) Insolvency of maker
 - (b) Insufficiency of collateral
 - (c) Other
 - i) Comparable sales
 - ii) Negotiable vs. non-negotiable
- e) Are discounts noted for loss of use of money?
 - (1) Change of interest rates during term of note resulting in FMV being different than unpaid principal
 - (2) Does any documentation provide evidence of arms-length bargaining
- f) Does the party intend to repay the obligation?

3. Inventory Valuation

Goal: Make adjustments to reflect the market value (as of the date of the valuation) of inventory.

- a) FIFO vs. LIFO (LIFO follows the conservative and matching principles under GAAP)

A common normalizing adjustment involves the valuation of inventories, particularly when the method of costing inventory is the last in first out method (LIFO). From a balance sheet standpoint, the first in/first out method (FIFO) may better reflect the current value of inventory. However, many businesses have adopted the LIFO method. During periods of inflation, more costs are charged against income under LIFO, thus resulting in a lower tax liability.

If the valuation analyst determines that an adjustment from LIFO to FIFO should be made, the amount of the adjustment to inventory is usually the amount in the LIFO reserve. The corresponding adjustments to income on historical income statements are the yearly change in the LIFO reserve. That said, many valuers would not adjust income on a yearly basis for yearly changes in LIFO reserve. Those espousing this position are of the opinion that the adjustment is not necessary because the earnings more fairly represent economic earnings in the future.

- b) Write down vs. Write-up

The company's write-down, write-off and costing policies should also be analyzed. These practices will often alert you to other required adjustments. The existence of obsolete inventory should also be considered. Any appropriate adjustments should be made here as well. The same consideration for adjustment may be made if the analysis of costing policies varies from the standard for a given industry.

4. Depreciation Methods

Goal: Restate, if necessary, depreciation allowances to reflect true economic depreciation. However, for comparative purposes restate depreciation to reflect what is commonly found in the subject company's industry. This will improve comparability to industry averages.

The company's depreciation methods should be evaluated and a determination should be made as to the appropriateness of the method used. The analyst needs to keep in mind that the methods of depreciation a company uses may be tax motivated and may require adjustments. The analyst should determine what methods are commonly used in the industry or other similar companies, as well as what estimated useful lives are used.

- a) Straight line method
- b) Declining balance method
- c) Sum-of-the-year's digits method
- d) Units of production method
- e) Tax methods (ACRS/MACRS, Section 179, Bonus Depreciation, etc.)

5. Leases (Capital vs. Operating)

Goal: To locate all material assets and liabilities and get these leases into the adjusted net assets of the company.

If the company being valued has equipment subject to a lease, the analyst should evaluate the lease and ascertain whether it is properly classified as a capital or an operating lease. A thorough understanding of Financial Accounting Standards Board Statement 13 (FAS 13), summarized in Appendix II, will help in making these determinations, and making any appropriate adjustment.

6. Adjust fixed asset values to reflect appreciation or impairment

7. Capitalizing vs. Expensing Policies

Goal: To adjust to industry standards if needed.

The capitalizing and expensing policies of the company should be analyzed in order to ascertain whether or not the policies are reasonable. Many companies have very aggressive policies in this regard and often exceed the limits of reasonableness. Any adjustments deemed necessary should be made to the economic financial statements. This should include an analysis of the company's capitalizing policies with respect to:

- a) Fixed assets
- b) Inventory
- c) Research and development costs

8. Timing of Income and Expense Recognition

Goal: To restate earnings to align the subject company with the industry and thereby reflect patterns within the particular industry. (Note: A thorough understanding of industry-specific practices is very important to properly adjust this area of financial statements.)

The company's accounting methods regarding the timing of income recognition should be analyzed for reasonableness. One area where this issue is of particular concern and is likely to surface is in accounting for long-term contracts and installment sales.

- a) Long-term contracts
- b) Installment sales
- c) Completed contract vs. percentage of completion
- d) Other

9. Accounting for Taxes

Goal: To recognize a potential deferred tax liability.

When a company maintains its books and records using different methods for financial statement purposes than for tax purposes, a deferred tax liability is, in some instances, recognized and booked as a liability. If it can be established that the deferred liability will not result in an actual liability, this liability may need to be removed.

- a) Deferred tax assets and liabilities
 - (1) Flow-through method
 - (2) Deferral method
- b) Net operating loss carryovers

10. Extraordinary or Non-Recurring items

Goal: To make adjustments to remove one-time and/or non-recurring income and/or expense items from the historical earnings.

Accounting Principles Board Opinion No. 30 defines an extraordinary item as one that is:

Unusual in nature – the underlying event or transaction should possess a high degree of abnormality and be of a type clearly unrelated to, or only incidentally related to, the ordinary and typical activities of the entity, taking into account the environment in which the entity operates.

Infrequent in occurrence – the underlying event or transaction should be of a type that would not reasonably be expected to recur in the foreseeable future, taking into account the environment in which the entity operates.

Businesses will occasionally have extraordinary or non-recurring income or expenses. Some possible extraordinary or non-recurring income or expense items are the result of settlements of litigation, gains or losses from the sale of assets, gains or losses from the sale of business segments or insurance proceeds from key man or property casualty claims. One of the requirements of economic or normalized financial statements is to reflect earnings on a consistent basis. Therefore, any amounts deemed to be extraordinary or non-recurring should be removed to properly reflect the economic or normalized results of operations.

11. Compensation of Owners and Managers, Including Perquisites

Goal: To adjust officer or owner compensation to more closely reflect the reasonable compensation of a replacement executive.

Practice Pointer

Numerous databases are available to help determine “reasonable compensation.” It is important to understand the differences between the databases.

A frequently encountered adjustment to the economic or normalized financial statements is for officer and owner compensation. Officers and owners typically compensate themselves based on what the business can afford. This amount of compensation is generally not commensurate with the true economic value of the services performed. The amount of the adjustment, if applicable, is the difference between the actual compensation paid and the average amount paid to other people in the same line of work in the same industry. Fringe benefits must be carefully considered in determining the full level of the officers’/owners’ compensation. Information for making such adjustments can be obtained from:

- a) Industry associations²
- b) Employment agencies or employment search firms
- c) Integra, Risk Management Associates, Annual Statement Studies³
- d) Specific compensation related publications such as NIBM Executive Compensation, Panel Publishing (800–248–6426)
- e) Economic Research Institute

12. Contingent Liabilities (usually not an income stream adjustment)

Goal: To consider including contingent liabilities in the adjusted net assets.

The analyst should attempt to ascertain whether any unrecorded or contingent liabilities exist. Some examples of these types of liabilities are:

² KeyValueData has established relationships with several industry associations.

³ Data available through KeyValueData – requires payment of copyright fee.

- a) Pending lawsuit(s)
- b) Unrecorded product service liabilities
- c) Unrecorded past service liabilities
- d) Unrecorded pension plan liabilities
- e) Unrecorded accrued warranty liabilities
- f) Environmental liabilities
- g) Capital gains tax on unrealized appreciation of assets

The financial statements should be adjusted to reflect the effects of any of the above items. FAS 5 states that any contingent liability, which is both probable and estimable, should be shown or accrued in the financial statements. Further, analysts should understand the current case law regarding the recognition of capital gains tax on unrealized appreciation of assets as it relates to the purpose for which the valuation is required.

13. Operating vs. Non-operating Items

Goal: To identify and remove non-operating assets (and any related liabilities) from the valuation process.

The analyst frequently encounters items that are non-operating in nature. In most cases, it is appropriate to value these items apart from the operating portion of the company. If the analyst values non-operating assets separately, it must be done so as to exclude any income generated or expenses incurred by the non-operating assets. Related income and expense should be valued separately from the earnings base capitalized in valuing the company's operations.

14. Intangibles

Goal: To identify and value intangible assets (see FAS 141, paragraph A 14 for a list of intangible assets). In many circumstances, the value of intangibles will be estimated through their impact on the benefit stream.

III. CONSTRUCTING ECONOMIC/NORMALIZED BALANCE SHEETS

A. OVERVIEW

In establishing a "market value" balance sheet, the analyst must convert or adjust the existing balance sheet, whether GAAP or Other Comprehensive Basis of Accounting (OCBOA), on a line-by-line basis. When using the balance sheet to establish the "fair market value" of a business, the market value of all the net assets and liabilities must be established.

B. ILLUSTRATION

The following chart demonstrates typical adjustments to the Balance Sheet:

Economic/Normalized Balance Sheet Adjustment Procedures

Note: "Replacement cost" refers to the cost to replace an asset under a particular fact situation.

Account Description	Potential Adjustment Procedure
Cash	Adjust for cash in excess of operating needs or consider as non-operating asset
Trade Note and Contracts Receivable	Generally, adjust to the amount collectible; remove owner receivable (although this is not always the case and is dependant on facts and circumstances); analyze policy for allowance for doubtful accounts.
Marketable Securities	Adjust to market value when appropriate.
Inventories:	
Raw Materials	Adjust to replacement cost and write-down unusable inventory.
Work-In-Progress	Adjust to replacement cost; analyze costing procedures/pricing policies.
Finished Goods	Adjust to replacement cost; analyze costing procedures/pricing policies; analyze write-down/write-off policies.
Excess Inventory	Potential adjustment if excessive inventory is carried.
Prepaid Items	Adjust to unamortized portion; analyze amortization policies; look for any prepaid expenses written off.
Fixed Assets	Adjust to market value or estimated depreciated cost to replace; analyze capitalization policy; analyze depreciation methods.
Leased Equipment	Adjust to replacement cost; analyze FAS 13 criteria and requirements; tax lease versus conditional sales contract; capital versus operating.
Real Estate	This asset may inflate the operating assets and distort ratios, returns on assets and capitalization of assets. You should consider whether to treat the real estate as a non-operating asset and reduce the benefit stream by any related revenues and expenses.
Intangible Assets:	
Goodwill	Adjust to estimated value, using prescribed method.
Patents	Adjust to estimated value, using prescribed method.
Franchise Agreements	Adjust to replacement cost.
Leasehold Interest	Favorable lease-present value of benefit over the term, discounted at several points above cost of debt.
Deferred Credits/Debits	Analyze for proper inclusion of any deferred tax liability, NOL carryovers, etc.
Non-Operating or Personal Assets	Consider removal from statement. Include related debt, if any.
Liabilities	Adjust to actual; analyze figures for unrecorded liabilities, either realized or contingent.
Capital Gains Tax	Recognize the tax effects from any adjustments in asset values above, if appropriate.

IV. CONSTRUCTING ECONOMIC /NORMALIZED INCOME STATEMENTS

A. OVERVIEW

Economic/normalized historical income statements are established for three main purposes:

1. To provide the analyst information for making comparisons.
2. To assist the analyst in making projections regarding future benefit streams or earnings.
3. To serve as a basis for determining/estimating additional value from unrecorded intangible assets (e.g., goodwill, etc.).

It should be noted that net pre-tax operating profit is often regarded as an important measurement of income. Therefore, economic adjustments to non-operating income or expense items may not be necessary. (Note: If the selected benefit stream is pre-tax, be sure that a pre-tax capitalization rate is used.)

B. ILLUSTRATION

The following chart illustrates possible adjustments to the Income Statement:

Account Description	Potential Adjustment/Procedure
Income	Remove all non-operating income (interest income, gain on sale of assets, etc.); analyze company's policies for recognizing revenue (cash basis versus accrual basis, completed contracts, etc.).
Cost of Sales	Analyze costing procedures for inventory and procedures involving write-ups and write-downs. Any adjustments to ending inventory should also be reflected as cost of goods sold (CGS). Adjustments should be made over the same period as the applicable balance sheet.
Officers' Compensation	In order to provide a meaningful comparison, officers' salaries should reflect comparable market salaries. This information is often available from trade associations, personnel managers and others in the same industry.
Other Salaries	Remove salaries (and benefits if any) of spouses, children, relatives, friends or others who are not contributing to the operation of the business.
Travel and Entertainment	Through discussions with the owner or the company's accountant, the analyst may discover travel and entertainment expenses are personal in nature and do not contribute directly to the operation of the company. These expenses should be eliminated to reflect economic earnings.

Rent	If the company either owns its own real estate or rents its facilities from the company owner(s), the analyst should compare the company's rent expense to the market and make any upward or downward adjustments as necessary.
Professional Fees	Quite often, owners of small businesses have personal expenses for legal, financial planning and tax preparation fees charged to their businesses. This area should be analyzed and adjustments should be made to more accurately reflect economic earnings.
Employee Benefits	This is an area that is often abused by owners of closely held companies. These expenses need to be adjusted to reflect realistic levels of employee benefits.
Auto Expense	Personal or other non-business automobile expense paid for by the company should be removed. Conversations with the owner/manager can often help to determine the amount of this adjustment.
Depreciation	If it is determined that the method(s) of calculating depreciation are too aggressive or conservative, adjustments must be made to more realistically reflect economic income as well as the economic balance sheet items.
Other	The analyst should search for other expenses that benefit the owners/managers that fall outside the normal costs of operations and make the appropriate economic balance sheet and income statement adjustments.

C. INCOME TAX EFFECT ON ECONOMIC AND NORMALIZING ADJUSTMENTS

Many analysts believe it is more theoretically sound to base their valuation and analysis on pre-tax earnings. One of the main arguments in support of this premise is that a company, through astute tax planning may be able to avoid in the short term the payment of income taxes. As such, the after-tax earnings will be the same as pre-tax earnings.

A crucial point to consider in dealing with income taxes is the nature of the investment being valued. A buyer who is considering acquiring an interest in a company as an asset purchase should be aware a step-up in basis will be received, resulting in additional depreciation and tax benefits. In this case, the tax liability for any capital gains will be with the former owner. As such, the buyer should be willing to pay full market price for the assets (less any commissions or broker's fees).

In most instances, however, the analyst is engaged to value the stock of a company to be purchased by a potential investor. In the case of a stock purchase, the buyer would not receive a step-up in basis on the underlying assets. In addition, a buyer would be assuming a contingent tax liability on the difference between fair market value and book value of the underlying assets.

Because of both of these factors, the buyer would surely discount any amount paid to the seller by an amount possibly as high as the contingent tax liability. If the purpose of the valuation is estate or gift tax, the valuation analyst should obtain an understanding of current case law regarding the treatment of contingent tax liability on unrealized gains on corporate assets.

In addition to the foregoing chapter of Fundamentals, Techniques and Theory, there are other sources of information which many professionals in the valuation business have read and/or added to their library. The valuation analyst, progressing through the steps in a valuation, should be generally familiar with the body of knowledge represented by this text and other publications. These can include books, papers, articles, seminars, classes and the experience of a valuation mentor or other business mentor the valuation analyst may know. Those at the top of the field continue to grow.

Recommended reading includes, but is not limited to:

- Burkert, Rodney P., “Adjusting Owner’s Compensation Usually Inappropriate When Valuing a Minority Interest,” Reader/Edition Exchange, Shannon Pratt’s *Business Valuation Update*, June 1998.
- Lurie, James B., “Normalization and Control Premiums,” *The Valuation Examiner*, M/J 2000.
- Taub, Maxwell, “Valuing a Minority Interest: Whether to Adjust Elements of a Financial Statement Over Which the Minority Shareholder Has No Control,” *Business Valuation Review*, March 1998, p. 7-9.
- Maxwell Taub Article “Valuing a Minority Interest: Whether to Adjust Elements of a Financial Statement Over Which the Minority Shareholder Has No Control,” *Business Valuation Review*, March 1998, pp. 7-9.

PARTICIPANTS NOTES

**BUSINESS VALUATIONS:
FUNDAMENTALS, TECHNIQUES
AND THEORY (FT&T)**

**CHAPTER 3
REVIEW QUESTIONS**

FT&T

CHAPTER REVIEW QUESTIONS

Chapter 3: Generating Economic/Normalized Financial Statements

Advanced Products Company, Inc.

Financial Ratios Based On Using:

An Unadjusted Balance Sheet and Income Statement

	Median	Advanced Products					
	RMA 2002	2002	2001	2000	1999	1998	1997
SIC Code							
RMA = 5047 for 35 companies	129466M						
Annual Sales	54283M						
Total Assets							
LIQUIDITY RATIOS:							
Current Ratio	1.6	3.4	2.8	2.1	1.7	1.6	1.6
Quick (Acid-Test) Ratio	0.1	2.1	1.6	1.3	0.8	0.9	0.7
Revenue/Accounts Receivable	7.7	9.9	9.7	10.4	9.4	8.1	8.1
Average Collection Period	47.4	36.9	37.6	35.1	38.8	45.1	45.1
Inventory Turnover	6.3	6.9	6.0	7.7	5.6	6.7	6.2
Days' Inventory	57.9	52.9	60.8	47.4	65.2	54.5	58.9
COGS/Payables	6.5	13.0	12.0	9.2	6.8	5.9	7.5
Days' Payables	56.2	28.1	30.4	39.7	53.7	61.9	48.7
Revenue/Working Capital	11.7	6.0	6.4	8.4	10.5	12.3	13.4
COVERAGE RATIOS:							
Times Interest Earned	1.8	13.5	12.2	8.3	4.8	18.9	3.9
LEVERAGE RATIOS:							
Fixed Assets/Tangible Worth	0.3	0.3	0.3	0.3	0.5	0.7	0.6
Debt-to-Tangible Net Worth	2.3	0.5	0.7	1.0	1.5	1.7	1.6
Debt-to-Equity	2.0	0.5	0.7	1.0	1.5	1.7	1.6
OPERATING RATIOS:							
Gross Profit Margin	39.70%	37.33%	38.24%	37.00%	36.00%	36.00%	35.12%
EBT/Tangible Worth	18.20%	27.06%	37.04%	32.70%	32.60%	30.36%	22.80%
EBT/Total Assets	3.40%	18.12%	22.13%	16.39%	13.06%	11.26%	8.74%
Fixed-Asset Turnover	26.6	19.0	22.2	20.3	17.7	13.5	14.1
Total Asset Turnover	2.6	3.4	3.4	3.5	3.4	3.4	3.5
EXPENSE TO REVENUE RATIOS:							
% Depreciation, Depletion, Amort./Revenue	1.00%	0.86%	0.88%	0.82%	1.32%	1.37%	1.49%
% Officer's and/or Owner's Comp/Revenue	5.20%	2.89%	2.61%	2.85%	2.53%	2.67%	2.92%

Risk Management Association, Philadelphia, PA

2002 – MEDICAL, DENTAL HOSPITAL EQUIPMENT & SUPPLIES

1. Using the above illustration for sample year 2002, a comparative analysis for the Advanced Products Company, Inc. shows the industry profit margin per RMA to be 39.7%, whereas Advanced shows:
 - a. 36.00%
 - b. 37.00%
 - c. 37.33%
 - d. 38.24%

2. Using the illustration for year 2002, a comparative analysis for the Advanced Products Company, Inc. RMA shows the industry accounts receivable turnover ratio to be 7.7 and Advanced accounts receivable turnover ratio to be 9.9.
 - a. This indicates industry as a whole is better managing accounts receivable than Advanced.
 - b. This indicates Advanced is better at managing accounts receivable than the industry as a whole.
 - c. This indicates that the industry as a whole and Advanced both carefully monitor accounts receivable.
 - d. This indicates that the industry as a whole and Advanced do not monitor accounts receivable with enough care, and both need to strive toward 5.0 as the ideal.
3. The valuation analyst needs historical performance data in order to:
 - a. Decide whether or not the subject company is using the proper taxed based accounting
 - b. Check and see whether or not the owner is taking too much in salary
 - c. Find whether or not national economic reality may be properly reflected in the current year data.
 - d. Analyze and compare various years in the company history to identify trends, strengths, weaknesses, and look for potential adjustments to normalize if adjustments are necessary and/or deemed appropriate
4. Advanced Product's accounting shows various items of machinery that were purchased three years ago for \$100,000. Their net book value today is \$50,000. To replace the machinery today would cost \$130,000. The estimated market value today (if sold as is today) is \$100,000. Would a balance sheet adjustment be advised?
 - a. Yes. The valuation analyst should adjust the balance sheet to fair market value and consider adjustment of depreciation expense on the income statement as well as the related tax affect on both the balance sheet and income statement.
 - b. No. Valuation analysts do not have control over equipment, and adjusting the balance sheet would negatively skew company value.
 - c. Yes. Since the company's inception, it has witnessed continually increasing costs for its inventory. As a result of these cost pressures, Advanced decided to convert to the LIFO method for costing its inventory in 1980. This data shows the adjustment was already made by the company.
 - d. No. The company owns two of its three facilities and leases the other. Advanced is not likely to update machinery for a leased facility.

5. Net Income can be based on GAAP (Generally Accepted Accounting Principles) or TBA (Tax Basis Accounting), but neither may be economic reality.
 - a. This is true because TBA is done to minimize payments to banks and other lending institutions.
 - b. This is true as GAAP is too specific, and each company is unique. Therefore—even using the same set of accounting practices—no two companies will keep their books in the same exact way.
 - c. This is true as corporations (all kinds), public companies, partnerships, sole proprietorships, privately held family businesses, and any varying degrees in between, all have different rules and principles under which they are found. These affect fiscal statements, and the valuation analyst must know what the underlying concept of any given company is as opposed to what it may state in the numbers.
 - d. This is true as GAAP accounting is so similar to TBA that the numbers for one company in the same year will be different. Economic reality does not need to be reflected in either GAAP or TBA.
6. When a valuation analyst is able to obtain audited GAAP compliance financial statements, most likely, normalized adjustments will not be necessary because of the high level of confidence placed on these issued financial statements.
 - a. True
 - b. False
7. The main objective for adjusting the financial statements of a closely held company is:
 - a. To determine if the owner is taking unreasonable compensation
 - b. To adjust the financial statements of a business to more closely reflect its true economic financial position and results of operations on a historical and current basis
 - c. To adjust the financial statements to ensure the financial statements are in conformity with Generally Accepted Accounting Principles
 - d. To adjust the financial statements so there is consistency in the financial statements over the time period the valuator is analyzing
8. Which one of the following is NOT a general category of normalized adjustments?
 - a. Removal of excess cash
 - b. Inventory adjustment when inventory is recorded on a FIFO basis
 - c. Reasonable compensation for owners
 - d. Bad debt adjustment for a significant write off due to an unexpected bankruptcy filing by a major customer
9. Which of the following are considered “control” adjustments?
 - a. Officers’ compensation and depreciation adjustments
 - b. Discretionary spending and depreciation adjustments
 - c. Discretionary spending and officers’ compensations
 - d. Depreciation adjustments and bad debt adjustments

10. A pending lawsuit, unrecorded pension liabilities, and capital gains tax on unrealized appreciation of assets are what type of normalized adjustments:
- Non-operating adjustments
 - Non-reoccurring adjustments
 - Contingent liability adjustments
 - Timing adjustments
11. The cost to replace an asset under a particular fact situation is known as:
- Fair market value
 - Fair value
 - Replacement cost
 - Strategic value
12. In 2006, a company purchased a new operating press costing \$300,000. The company elected Section 179 depreciation for this piece of equipment. An appropriate normalization adjustment would be:
- Do nothing
 - Adjust the income statement, only to add back Section 179 depreciation
 - Adjust the income statement to add back the Section 179 depreciation and adjust the balance sheet to reflect the fair market value of the asset
 - Adjust the balance sheet only to reflect the fair market value of the equipment

Bonus: Issues to Consider in Chapter 3

Item 1	The estimated reserve for non-collectible accounts receivable is \$50,000 and is based on approximately one percent of the company's most recent annual gross sales. Both the company and its auditors believe that the reserve is reasonable. However, after reviewing the receivable list, the president of the company estimates that actual bad debts on existing receivables will be only about \$20,000.
Note	Consider if the President has knowledge that supersedes the company and the auditors' position on the non-collectible accounts. Will this adjustment be self-serving to the President or does it accurately reflect the current financial position?
Item 2	Since the company's inception, it has witnessed continually increasing costs for its inventory. As a result of these cost pressures, Advanced decided to convert to the LIFO method for costing its inventory. Therefore, it is determined that Advanced's actual current inventory is understated by \$80,000.
Note	Consider an adjustment to inventory for the LIFO reserve. Consider if an adjustment must be made for each year or only the current year.
Item 3	The company owns two of its three facilities and leases the other. Due to a recent refinance proposal, the company obtained an MAI appraisal on both of the properties it owns. The total MAI appraisal for both properties is \$250,000 and the current book value for both properties is \$125,000.
Note	Adjust the property to fair market value. Consider adjustment for deferred taxes on the built-in gains of the property.
Item 4	The company has various items of machinery that were purchased three years earlier for \$100,000. Their net book value today is \$50,000. To replace the machinery today would cost \$130,000. The estimated market value today (if sold as is today) is \$100,000.
Note	Adjust the balance sheet to fair market value. Consider adjustment of depreciation expense on income statement, as well as the related tax effect on the balance sheet and income statement.
Item 5	The company has a negotiable note receivable, received in an arms-length transaction, bearing 12 percent interest over five years. If this note represents a safe loan with minimal risk of non-collection, its value is determined by comparison with similar safe notes. If the going rate for similar safe notes is 18 to 20 percent, then the face value of the note must be discounted to account for the interest rate differential.
Note	Consider reducing the face value of the note to reflect the present value at 12 percent versus similar safe notes at 18 percent.