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## Analyzing financial ratios; AICPA practice aid series 06-3

American Institute of Certified Public Accountants. Business Valuation and Forensic & Litigation  
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Business Valuation and  
Forensic & Litigation Services Section

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

# Analyzing Financial Ratios

*Supersedes Practice Aid 94-4*

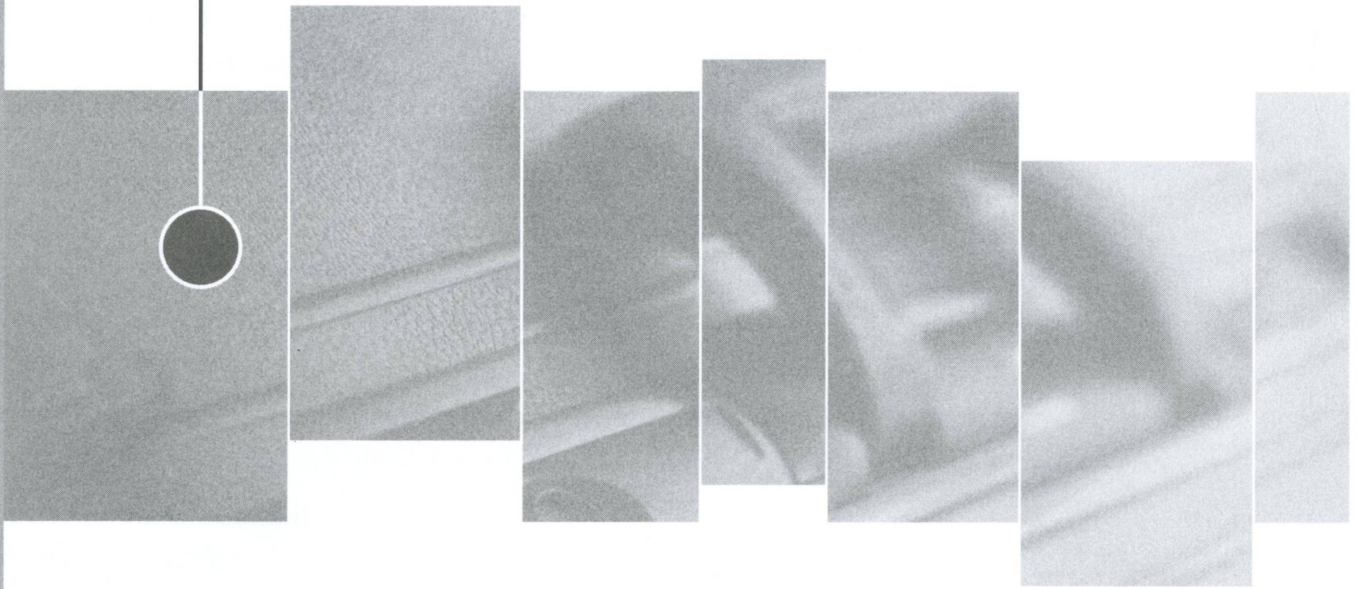
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Business Valuation and  
Forensic & Litigation Services Section

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS



# Analyzing Financial Ratios

*Supersedes Practice Aid 94-4*

**AICPA**<sup>®</sup>

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## Preface

This Practice Aid is one in a series intended to assist practitioners in applying their knowledge of organizational functions and technical disciplines in the course of providing consulting services. Although these Practice Aids often deal with aspects of consulting services knowledge in the context of a consulting engagement, they are also intended to be useful to practitioners who provide advice on the same subjects in the form of a consultation. Consulting services engagements and consultations are defined in the Statement on Standards for Consulting Services (SSCS), *Consulting Services: Definitions and Standards*, issued by the AICPA.

This series of technical consulting Practice Aids should be particularly helpful to practitioners who use the expertise of others while remaining responsible for the work performed. It may also prove useful to members in industry and government in providing advice and assistance to management.

Technical consulting Practice Aids do not purport to include everything a practitioner needs to know or do to undertake a specific type of service. Furthermore, engagement circumstances differ and therefore the practitioner's professional judgment may cause him or her to conclude that an approach described in a particular Practice Aid is inappropriate.

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# ANALYZING FINANCIAL RATIOS

## SCOPE OF THIS PRACTICE AID

**.01** The purpose of this Practice Aid is to illustrate the use of financial ratio analysis techniques in a comparative analysis of a client organization with other appropriate organizations. The financial ratio analysis techniques described in this Practice Aid can be useful in many different types of client engagements, but such other uses are not addressed directly in this Practice Aid. The intent is to provide practitioners with a document that they can draw upon in diverse engagement situations by focusing on one situation that is representative of the use of financial ratio analysis in consulting services practice.

**.02** The financial ratio analysis techniques are exemplified in the illustrative engagement for the Remlap Company, a fictitious manufacturing concern, which retains a CPA consulting firm to assist in the preparation of a loan package. Part of the loan package requires historical and comparative ratio analyses. The ratios selected for use in the illustration are interpreted in the appendixes. In addition to the financial ratios used in the illustration, there are others that may be useful to the practitioner.

**.03** A financial ratio analysis engagement is any consulting services study or project undertaken to assist a client in evaluating past, current, and future performance by ratio analysis and in interpreting any set of financial facts and circumstances. The ratios selected for presentation in this Practice Aid represent only those ratios commonly used in credit or comparative analysis.<sup>1</sup>

## TYPICAL ENGAGEMENT SITUATIONS

**.04** Financial ratio analysis engagements may be suggested by either a client or a practitioner. Very often, these engagements result from consultations in which a practitioner recognizes that further analysis or study is needed to achieve the client's objectives. Historical or comparative financial analysis may be beneficial in the following typical engagement situations:

- Financial ratio analysis can support a client's request for a bank loan. Depending on the nature of the loan, the bank's credit department will probably perform a financial ratio analysis. However, the practitioner may complete an analysis for the client before making the loan request to provide an indication of the bank's likely reaction and to suggest issues that may be raised by the loan officer.

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<sup>1</sup> As used in this Practice Aid, the term *comparative analysis* refers to the comparison of data about the client company with data from similar companies or about the industry. The industry data may be obtained from sources listed in Appendix A.

- Specific measures of performance can help a client evaluate past performance and possibly set objectives for future performance.
- Analysis can help a client evaluate its financial performance in relation to the industry's performance as a whole.
- Analysis can assist a client in determining whether to extend credit to a customer.
- Analysis can assist a client in evaluating a proposed acquisition by determining the financial strengths and weaknesses of the company to be acquired.
- Historical financial ratio analysis can be used as an effective preliminary step in preparing a budget or in making a forecast.
- Financial ratio analysis can be used as an initial indicator to determine if there are problems in aging accounts receivable, inventory, and accounts payable.
- Financial ratio analysis is usually performed in conjunction with most business valuation engagements.
- Analysis can assist in comparing operations or divisions within a company to evaluate performance or to allocate capital resources.

**.05** The use of a financial ratio checklist for all audited or reviewed financial statements and in selected compilation engagements can be helpful. The findings from the checklist can be included in a management letter and reviewed with the client to determine whether further action is required.

## **ENGAGEMENT ACCEPTANCE CONSIDERATIONS**

**.06** Financial ratio analysis engagements deal with important considerations that can be critical to a client's ultimate financial decisions. A client may request assistance if management or staff lack the knowledge or time to perform such an analysis. The client may also want the practitioner to serve as a sounding board.

**.07** In discussing the engagement with the client, the practitioner needs to effectively communicate to the client the considerations involved, the objectives to be achieved, the assumptions to be used, and the specific roles of the client's personnel and the practitioner. Of special importance is the relationship of the assumptions to the conclusions or recommendations. Both client and practitioner need to agree that conclusions or recommendations will be based on a set of assumptions or facts at a particular time. Any change in these assumptions, facts, or time frame may have a significant impact on the results.

**.08** Another important consideration is the approach to be taken in the engagement. Financial ratio analysis can involve many sophisticated methods and techniques that may enhance the recommendations or conclusions. However, if the approach used cannot be effectively explained to and understood by a client, the value of the engagement may be diminished. Simply put, the practitioner needs to be careful to select an approach that is appropriate in the circumstances.

**.09** Before accepting a specific engagement, practitioners should consider their own level of knowledge as well as the knowledge obtainable through study or other resources.

**.10** Financial ratio analysis, as a quantitative approach, may appear to be easily learned and applied, but pitfalls such as the following are to be avoided:

- If historical analysis covers an insufficient number of years, the practitioner may misinterpret trends and current performance. For example, if the analysis covers only a two-year period in which substantial capital investments were made, any ratio using total assets or net income will be affected by the capital investment.
- Failing to use an average or weighted average when applicable can distort ratios. For example, if the average accounts receivable balance is \$300,000, the ending balance \$500,000, and credit sales for the year \$3 million, the days sales outstanding would be 36 days, based on the average balance, as opposed to 60 days, based on the ending balance.
- Selecting an inappropriate basis for comparison can result in misleading conclusions. For example, a client may be a privately held, large-chain retailer. Using comparative information derived from single unit or small retailers may produce misleading results. A more meaningful comparative analysis might involve data about selected multiunit competitors that are public companies, which would be found in their Securities and Exchange Commission (SEC) 10-K reports.
- Most sources of comparative information do not always disclose the accounting methods used by the companies from which the figures or ratios have been compiled. Thus, considering the client's industry, the practitioner assesses the potential impact the differences in accounting methods might have on the findings of comparative analysis.
- The basis of the comparative analysis may be affected by the nature of the business, its size, geographic location, business practices, and other factors that may introduce differences between the client company and the comparable companies.

## **ENGAGEMENT OBJECTIVES AND CLIENT BENEFITS**

**.11** The objectives of an engagement involving financial ratio analysis are to (a) identify the appropriate facts, (b) determine the ratios to be studied, and (c) select the most appropriate comparative data.

.12 For example, the engagement objectives for the sample analysis (see Appendix C) in this Practice Aid are:

- To complete a historical and comparative financial ratio analysis of the Remlap Company.
- To prepare a narrative report identifying any positive or negative trends based on the interpretation of the financial ratios.
- To provide the findings of the analysis, including all supporting notes and assumptions.

.13 A financial ratio analysis engagement may provide the following direct benefits to clients:

- An evaluation of prior performance by comparison with the industry's performance. This assessment enables a client to identify its financial strengths and weaknesses.
- The ability to set expected financial objectives based on prior performance or industry performance.
- The ability to transform a difficult loan request into an attainable goal.
- A decision criterion for granting credit.

.14 In addition to the direct benefits, the following indirect benefits may result from a financial analysis engagement:

- A greater awareness of the interrelationship of the financial statements.
- A greater understanding of the financial statements and how their analysis may lead to improved profitability or cash flow.
- An ongoing means to evaluate a company's performance financially.
- The gaining of useful information concerning competitors.

## **ENGAGEMENT SCOPE**

.15 To avoid misunderstandings, the practitioner needs to be precise in defining the scope of an engagement. The practitioner clearly states the extent of the analysis, identifies the work to be performed by a client or other personnel, and specifies any constraints or limitations on resources or alternatives. For example, a company may have several divisions, but calculating each ratio for each division may not be cost-effective. In addition, the practitioner makes clear when the engagement is to be considered concluded and might also include information regarding follow-up engagements. A sample engagement letter is provided in Appendix D.

.16 In the illustrative engagement provided in this Practice Aid, the scope involves a four-year historical and comparative financial ratio analysis. The ratios used include those published by

sources of comparative information and those commonly used for credit analysis. To select the sources of comparative data, the client company must find the closest match with its industry's Standard Industry Classification (SIC) code. Client personnel provide average balances for specified accounts. The practitioner comments on the historical trends and on the comparability of each ratio and makes appropriate recommendations.

## **ENGAGEMENT APPROACH**

.17 To select an appropriate approach to the engagement, the practitioner needs to decide:

- Whether the analysis should emphasize liquidity ratios or profitability ratios.
- Which information is most comparable with that of the client's business.
- What period of time the analysis should cover.

.18 Since various approaches are possible, the practitioner and client need to agree on the approach to be used. If the practitioner does not have an adequate understanding of the client's business and of the objectives of the engagement, the wrong approach may be selected.

.19 The steps in a financial ratio analysis engagement are divided into two categories: preparation and analysis.

### **Preparation**

.20 The following steps are part of the preparation:

- Meet with client to identify objectives and key ratios.
- Obtain required financial statements and explanations.
- Determine whether a formal, written report is required and the nature and extent of its content.
- With the client's assistance, determine the comparative data to be used. (See Appendix A for suggested sources of comparative data.)

### **Analysis**

.21 Analysis involves the following steps:

- Select the specific ratios to be used. (Appendix B provides a listing of common ratios and their formulas and interpretations.)
- Determine the data needed for calculating ratios.

- Determine the data missing from the comparable sources and provide alternative means to develop these data. For example, if the amount of working capital is an important comparative figure but the comparable source gives only balance sheet amounts expressed in percentages, total asset dollars, and number of reporting sources, the practitioner can determine the amount of working capital by calculating the average total assets and comparing the percentages of current assets and current liabilities to the average assets.
- Develop working papers to spread appropriate data so it is easier to calculate and interpret the ratios.
- Calculate client ratios.
- Reconcile accounting differences between the client and comparable sources of information. These differences may be in accounting methods, ages of assets, or financing techniques.
- Compare the client's ratios to the comparative ratio and, if appropriate, indicate the possible causes of differences.
- If appropriate, recommend possible action the client may take to improve performance. (See the sample recommendations in Appendix C.)

Appendix D provides a description of a sample engagement approach in the sample engagement letter.

## **ENGAGEMENT OUTPUTS**

**.22** The results of a financial ratio analysis may be reported in various ways. One way is to present a summary of findings along with explanations of the calculations, approaches, assumptions, and other data and notes that clearly describe the analysis process. In some situations, recommendations based on the results of the findings may be given.

**.23** The engagement output for the illustration in this technical Practice Aid includes the following:

- A one-page summary of findings.
- The historical ratios.
- The comparative ratios.
- Comments on the trend and interpretation of each ratio.

**.24** Interview notes, memos, worksheets, and other source documents not pertinent to the report generally become part of the practitioner's own files.

**.25** Appendix C illustrates the basic report output for the Remlap Company. In addition, the sample engagement letter in Appendix D describes engagement outputs.

## APPENDIX A: SUGGESTED SOURCES OF COMPARATIVE DATA

The following sources of information are available in the business reference collections of most public and university libraries, as well as on electronic media including the Web. In addition to these sources, the sources listed in the bibliography will be helpful to practitioners.

- *Financial Ratios*

*Annual Statement Studies, Including Comparative Historical Data and Other Sources of Composite Financial Data.* Philadelphia: Risk Management Association. Annual. **Includes a bibliography of sources of financial ratios for individual industries.**

*Almanac of Business and Industrial Financial Ratios.* Prentice Hall. Annual.

*Industry Norms and Key Business Ratios.* Murray Hill, N.J.: Dun and Bradstreet Credit Services. Annual. **Covers more than 800 kinds of businesses, arranged by Standard Industrial Classification (SIC) code. More detailed editions covering longer periods are available.**

*IRS Corporate Financial Ratios.* Riverwoods, Ill.: Schonfeld & Associates, Inc., Annual. **Presents more than 70 financial ratios for each of over 200 industries based on an analysis of corporate tax returns.**

*Manufacturing & Distribution USA.* Farmington Hills, Mich.: Thomson Gale. Biannual. **Provides statistical profiles for 500 SIC and NAIC classifications in manufacturing, wholesale, and retail industries.**

*Statistics of Income: Corporation Income Tax Returns.* Washington, D.C.: Internal Revenue Service. Annual.

- *Publicly Held Corporations*

In addition to the annual reports and the Securities and Exchange Commission (SEC) 10-K reports of particular companies, information may be available in the following publications and databases.

*Compustat.* Englewood, Colo.: Standard and Poor's. (800) 525-8640; (303) 771-6510. **This database provides financial data on publicly held corporations.**

*Disclosure Database.* Bethesda, Md.: Disclosure, Inc. (800) 638-8076; (301) 951-1300. **This database provides an index to records filed from 1982 to the present with the SEC by publicly held companies.**

*InvesText.* Thomson Financial Networks. (800) 662-7878; (617) 345-2000. **This database provides the full text of investment research reports from about 50 leading brokers**

**and investment bankers. Reports from 1982 are available on approximately 11,000 corporations.**

*NAARS* (National Automated Accounting Research System). New York: AICPA. **This is a database of financial statements, proxy statements, and authoritative accounting literature. The most current five years are online. Data from 1972 to the present is available offline.**

*Standard Corporation Records*. New York: Standard and Poor's. Loose-leaf service.

*Standard and Poor's Stock Reports*. New York: Standard and Poor's. Loose-leaf service.

*Value Line Investment Survey*. New York: Value Line, Inc. Weekly. **Contains analyses of specific industries.**

- *Industry and Economic Data*

*Business Conditions Digest*. Washington, D.C.: Bureau of Economic Analysis, U.S. Department of Commerce. Monthly.

*County Business Patterns*. Washington, D.C.: Bureau of the Census, U.S. Department of Commerce. Annual.

*Indexes of Output Per Man-Hour, Selected Industries*. Washington, D.C.: U.S. Bureau of Labor Statistics. Published irregularly.

*Standard and Poor's Industry Survey*. New York: Standard and Poor's. Weekly loose-leaf service with quarterly bound volumes. **Discusses industry prospects and provides statistical tables.**

*Standard and Poor's Statistical Service*. New York: Standard and Poor's. Monthly with cumulations. **Provides industrial and financial data.**

*U.S. Industrial Outlook*. Washington, D.C.: Industry and Trade Administration, U.S. Department of Commerce. Annual. **Contains basic data, current year forecasts, and discussion of prospects for each industry.**

- *Business and Industry Information Sources*

*Encyclopedia of Business Information Sources*. 8th ed., 1991-1992. James Woy, ed. Detroit: Gale Research, Inc., 1990.

*Encyclopedia of Associations*. Detroit: Gale Research, Inc. Annual. **Provides information about trade and professional organizations such as the National Restaurant Association, the National Retail Merchants Association, and the American Trucking Association. Many of these organizations publish industry surveys and other useful information.**

*How to Find Information About Companies*. Washington, D.C.: Washington Researchers. Annual.



## **APPENDIX B: FINANCIAL RATIOS: FORMULAS AND INTERPRETATIONS**

A ratio by itself is meaningless until it is compared to prior years' experience, projections, and industry averages, as well as to other ratios. The benefit of ratio analysis is that it provides a benchmark to measure performance, target future goals, and help identify potential problem areas. The interpretation of financial ratios given here is only one example of how these ratios may be used in this type of engagement. There are other possible interpretations of these ratios.

### **Liquidity Ratios**

<i>Ratio</i>	<i>Formula</i>	<i>Interpretation</i>
current ratio	$\frac{\text{current assets}}{\text{current liabilities}}$	The extent to which current assets cover current liabilities. Attention should be paid to trends.
quick ratio	$\frac{\text{cash} + \text{cash equivalents} + \text{net receivables}}{\text{current liabilities}}$	A conservative view of creditors' protection, since inventory and prepaid items may not always be liquid. A company is usually in a good liquid position when quick assets exceed current liabilities.
working capital	current assets – current liabilities	A direct indicator of the company's ability to grow.
inventory to working capital	$\frac{\text{inventory}}{\text{working capital}}$	The percentage of working capital supporting inventory. A high percentage indicates operating problems.
current assets turnover	$\frac{\text{cost of goods sold} + \text{operating expenses} + \text{tax} - \text{noncash expenses}}{\text{current assets}}$	The number of times current assets must turn over to cover expenditures. Measures control of current assets.
inventory to current liabilities	$\frac{\text{inventory}}{\text{current liabilities}}$	The degree to which the company relies on inventory to meet its current obligations.

### Profitability Ratios

<i>Ratio</i>	<i>Formula</i>	<i>Interpretation</i>
gross profit percentages	$\frac{\text{gross profit}}{\text{net revenues}}$	An indication of control over cost of sales and pricing policies. The ratio must be viewed in relation to the client's past performance and the industry average.
operating profit percentages	$\frac{\text{operating profit}}{\text{net revenues}}$	An indication of the company's ability to control operating expenses. The ratio should be viewed in relation to increased sales and changes in gross profit.
net income before taxes (NIBT) percentage	$\frac{\text{income before taxes} + \text{extraordinary items}}{\text{net revenues}}$	A more consistent basis for comparisons. It is also used in the calculation of other ratios.
net income after taxes (NIAT) percentage	$\frac{\text{net income after taxes}}{\text{net revenues}}$	A reflection of the tax impact on profitability and of the profit per dollar of sales.
return on equity*	$\frac{\text{NIAT}}{\text{stockholders' equity}^{**}}$	A measure of the return to stockholders and of profitability. When compared to the return on assets, this ratio indicates the degree of financial leverage.
return on assets*	$\frac{\text{NIAT}}{\text{total assets}^{**} \text{ or } \text{MAT percentage} \times \text{assets turnover}}$	An indication of the earning power and effective use of all the resources of the company.

\* Can be calculated by using operating income, NIBT, or earnings before interest and taxes (EBIT).

\*\* When material transactions affecting the balance have occurred, an average balance should be used in the calculations.

### Efficiency Ratios

<i>Ratio</i>	<i>Formula</i>	<i>Interpretation</i>
accounts receivable turnover	$\frac{\text{credit sales}}{\text{average accounts receivable}}$	The number of times it takes receivables to turn into cash per year. Attention should be paid to credit terms, billing procedures, trends, and industry average.
accounts receivable collection period	$\frac{360 \text{ or } 365 \text{ days}}{\text{accounts receivable turnover}}$	The average length of time from sales to cash collection.

<i>Ratio</i>	<i>Formula</i>	<i>Interpretation</i>
inventory turnover	$\frac{\text{cost of goods sold}}{\text{average inventory}}$	The number of times the business liquidates its inventory over a period and an indication of whether too little or too much inventory is carried.
inventory to days in inventory	$\frac{360 \text{ or } 365 \text{ days}}{\text{inventory turnover}}$	The number of days it takes to sell the inventory. Used in conjunction with the accounts receivable collection period to determine the operating cycle.
operating cycle	accounts receivable collection period + days in inventory	The length of time it takes to convert inventory to cash. If the cycle increases, more permanent working capital is needed.
accounts payable turnover	$\frac{(\text{cost of goods sold} - \text{beginning inventory}) + \text{ending inventory}}{\text{average accounts payable}}$	The number of turns per period of time it takes for the company to pay its trade payable. It should be compared to credit terms.
accounts payable days outstanding	$\frac{360 \text{ or } 365 \text{ days}}{\text{accounts payable turnover}}$	Same as above but expressed in number of days rather than the number of turns.
assets turnover	$\frac{\text{net revenue}}{\text{total assets}}$	The turnover rate of total assets to achieve net revenue. When viewed historically, the ratio indicates the effectiveness of generating sales from assets expansion.
net revenue to working capital turnover	$\frac{\text{net revenue}}{\text{working capital}}$	An indication of the amount of working capital required to support sales. An increasing ratio may, for example, indicate insufficient working capital to support sales growth.
net fixed assets to stockholders' equity	$\frac{\text{net fixed assets}}{\text{stockholders' equity}^*}$	The proportion of stockholders' equity that is committed to fixed assets and is not available for operating funds. A low percentage would indicate a favorable liquid position.

\* When material transactions affecting the balance have occurred, an average balance should be used in the calculations.

*(continued)*

### Capital Structure Ratios

<i>Ratio</i>	<i>Formula</i>	<i>Interpretation</i>
debt to equity	$\frac{\text{total debt}}{\text{stockholders' equity}^*}$	An indication of the relation of the owners' and creditors' positions. This ratio should be compared with industry averages.
current debt to equity	$\frac{\text{current liabilities}}{\text{equity}}$	The proportion of debt to total equity that is current in maturity. A high ratio may indicate the need to restructure debt.
operating funds to current portion of long-term debt	$\frac{\text{NIAT} + \text{noncash expenses}}{\text{current portion of long-term debt}}$	An indicator of the ability of the company to meet its current payments.
times interest earned	$\frac{\text{NIBT} + \text{interest}}{\text{interest}}$	An indication of how well the company is able to cover interest from earnings. It measures the level of earnings decline to meet interest payments.
long-term debt to equity	$\frac{\text{long-term debt}}{\text{stockholders' equity}^*}$	A measure of the relationship of long-term debt to equity.

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\* When material transactions affecting the balance have occurred, an average balance should be used in the calculations.

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# **APPENDIX C: CASE STUDY: HISTORICAL AND COMPARATIVE FINANCIAL ANALYSES FOR THE REMLAP COMPANY**

## **SUMMARY OF FINDINGS**

**Historical Financial Ratio Analysis.** The four-year financial ratio analysis discloses a substantial improvement resulting from:

- An increase in working capital, current ratio, and quick ratio, all illustrating Remlap's improved liquidity position.
- Increased profitability in absolute dollars, affected chiefly by price, cost, and volume considerations. Gross profit, operating profit, and net income percentages all improved during the four-year period, illustrating this increased profitability.
- Increased efficiency indicated by improved inventory and payable turnover ratios, a stable receivable turnover, and a substantial improvement in the debt-to-equity ratio.

**Comparative Financial Ratio Analysis.** Overall, Remlap reflects a stronger financial position than the comparative. The following areas exemplify this strength:

- Remlap shows a stronger liquidity position illustrated by its better current and quick ratios.
- The comparative shows a higher gross profit percentage, but Remlap's operating profit and net income before taxes percentage are higher.
- Except for the accounts receivable turnover, Remlap's efficiency ratios are better.

## **RECOMMENDATIONS<sup>1</sup>**

The following are recommendations involving performance considerations for the Remlap Company:

- Operating expenses have increased as a percentage of sales, from 12.8 percent in 20XV to 15.5 percent in 20XY. Therefore, it is recommended that a detailed analysis of all operating expenses be conducted to determine those expenses that might be reduced. In addition, procedures should be established to control and evaluate operating expenses on an ongoing basis.

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<sup>1</sup> The practitioner may issue a letter to the client concerning various recommendations based upon the financial ratio analysis findings and discussions held with the client. In cases in which the financial ratio report is to be read or analyzed by someone other than the client, the practitioner may wish to place the recommendations in a separate document.

- The comparative shows five fewer days outstanding in its accounts receivable. Thus, it is recommended that the Remlap Company's credit and collection policies and procedures be reviewed to determine whether collections can be accelerated.
- It is recommended that, starting with 20XZ, the Remlap Company develop annual projected ratios as shown in this analysis, to be used as financial objectives and as measures of current performance.

## FINANCIAL STATEMENTS AND COMPARATIVE ANALYSES

The financial statements and comparative analyses on which the findings and recommendations are based are provided in Exhibits C-1 through C-6.

Exhibit C-1

<b>The Remlap Company</b>				
<b>Balance Sheet</b>				
<b>As of September 30</b>				
	20XU	20XV	20XW	20XY
<b>Assets</b>				
<b>Current assets</b>				
Cash and equivalents	\$ 63,075	\$ 379,331	\$ 307,557	\$ 697,227
Accounts and notes receivable	435,262	771,891	944,735	1,018,729
Inventory	271,644	327,912	363,882	277,039
Prepaid expenses	760	8,405	47,783	8,340
Total current assets	<u>770,741</u>	<u>1,487,539</u>	<u>1,663,957</u>	<u>2,001,335</u>
Net fixed assets	81,012	127,251	196,223	229,896
Intangibles	—	—	—	—
Other assets	<u>2,212</u>	<u>98,208</u>	<u>55,624</u>	<u>42,150</u>
Total assets	<u>\$853,965</u>	<u>\$1,712,998</u>	<u>\$1,915,804</u>	<u>\$2,273,381</u>
<b>Liabilities and net worth</b>				
<b>Current liabilities</b>				
Notes payable	\$ —	\$ —	\$ —	\$ —
Current portion of long-term debt	—	160,092	10,091	160,091
Accounts payable	270,444	503,737	396,954	431,065
Accrued expenses	143,106	359,040	318,790	370,350
Other current liabilities	—	—	—	—
Total current liabilities	<u>413,550</u>	<u>1,022,869</u>	<u>725,835</u>	<u>961,506</u>
Long-term liabilities and deferred credits	300,000	180,185	430,195	272,605
Stockholders' equity	<u>140,415</u>	<u>509,944</u>	<u>759,774</u>	<u>1,039,270</u>
Total liabilities and net worth	<u>\$853,965</u>	<u>\$1,712,998</u>	<u>\$1,915,804</u>	<u>\$2,273,381</u>

Exhibit C-2

**The Replap Company**  
**Condensed Statement of Income**  
**For the Period Ending September 30**

	20XU	20XV	20XW	20XY
Net sales	\$3,223,205	\$4,089,662	\$5,281,555	\$6,298,020
Cost of sales	<u>2,619,746</u>	<u>3,107,854</u>	<u>4,027,230</u>	<u>4,736,603</u>
	603,459	981,808	1,254,325	1,561,417
Operating expenses	<u>346,859</u>	<u>525,164</u>	<u>738,146</u>	<u>975,542</u>
Operating income	256,600	456,644	516,179	585,875
Other (expense) income	<u>(53,285)</u>	<u>(32,745)</u>	<u>(2,163)</u>	<u>(26,760)</u>
Income before taxes	203,315	423,899	514,016	559,115
Taxes	<u>—</u>	<u>149,360</u>	<u>208,526</u>	<u>233,438</u>
Net income	\$ 203,315	\$ 274,539	\$ 305,490	\$ 325,677
Depreciation and amortization	\$ 32,624	\$ 40,867	\$ 69,910	\$ 103,877

**The Comparative Balance Sheet  
As of September 30**

	20XU	20XV	20XW	20XY
<b>Assets</b>				
<b>Current assets</b>				
Cash and equivalents	\$ 209,236	\$ 234,840	\$ 215,004	\$ 302,339
Accounts and notes receivable	859,473	991,915	1,056,160	1,360,530
Inventory	746,808	799,140	916,596	1,153,931
Prepaid expenses	<u>45,066</u>	<u>56,080</u>	<u>52,808</u>	<u>80,624</u>
Total current assets	1,860,583	2,081,975	2,240,568	2,897,424
Net fixed assets	1,123,430	1,184,690	1,278,708	1,788,845
Intangibles	32,190	38,550	33,948	40,313
Other assets	<u>202,797</u>	<u>199,785</u>	<u>218,776</u>	<u>312,418</u>
Total assets	\$3,219,000	\$3,505,000	\$3,772,000	\$5,039,000
<b>Liabilities and net worth</b>				
<b>Current liabilities</b>				
Notes payable	\$ 295,847	\$ 276,900	\$ 309,304	\$ 388,003
Current portion of long-term debt	141,636	157,725	173,512	231,794
Accounts payable	572,982	613,375	686,504	866,708
Accrued expenses	209,236	238,340	245,180	302,340
Other current liabilities	<u>122,322</u>	<u>115,660</u>	<u>158,424</u>	<u>161,248</u>
Total current liabilities	1,342,023	1,402,000	1,572,924	1,950,093
Long-term liabilities and deferred credits	644,100	708,010	746,856	1,123,697
Stockholders' equity	<u>1,232,877</u>	<u>1,394,990</u>	<u>1,452,220</u>	<u>1,965,210</u>
Total liabilities and net worth	\$3,219,000	\$3,505,000	\$3,772,000	\$5,039,000



Exhibit C-4

**The Comparative Condensed Statement of Income  
For the Period Ending September 30**

	20XU	20XV	20XW	20XY
Net sales	\$5,865,000	\$6,552,000	\$7,023,000	\$9,121,000
Cost of sales	<u>4,363,560</u>	<u>4,855,032</u>	<u>5,211,066</u>	<u>6,795,145</u>
	1,501,440	1,696,968	1,811,934	2,325,855
Operating expenses	<u>1,167,135</u>	<u>1,310,400</u>	<u>1,383,531</u>	<u>1,869,805</u>
Operating income	334,305	386,568	428,403	456,050
Other (expense) income	<u>(70,380)</u>	<u>(58,968)</u>	<u>(105,345)</u>	<u>(145,936)</u>
Income before taxes	\$ 263,925	\$ 327,600	\$ 323,058	\$ 310,114
Depreciation and amortization	\$ 158,355	\$ 176,904	\$ 182,598	\$ 264,509

*Note:* No report is required on unaudited condensed financial statements because they are deemed to be "incidental financial data included in management advisory services reports to support recommendations to a client" (see section 91.07 of the AICPA Rules of Conduct).

**Ratio Analysis for the Remlap Company  
For the Years Ending September 30**

	20XU	20XV	20XW	20XY
<b>Liquidity ratios</b>				
Current ratio	1.86	1.45	2.29	2.08
Quick ratio	1.21	1.13	1.79	1.79
Working capital	\$357,191	\$464,670	\$938,122	\$1,039,829
Inventory to working capital	76.05%	70.56%	38.79%	26.64%
Current assets turnover	3.87	2.54	2.98	2.93
Inventory to current liabilities	65.68%	32.05%	50.13%	28.81%
<b>Profitability ratios</b>				
Gross profit	18.7%	24.0%	22.8%	24.8%
Operating profit	8.0%	11.2%	9.8%	9.3%
Net income before taxes	6.3%	10.3%	9.8%	8.8%
Return on equity*	144.8%	54.2%	33.4%	31.3%
Return on assets*	23.8%	24.7%	26.8%	24.5%
<b>Efficiency ratios</b>				
Accounts receivable turnover	7.01	6.77	6.15	6.41
Accounts receivable days outstanding	51	53	58	56
Inventory turnover	12.13	10.37	11.79	14.78
Accounts payable days in inventory	30	35	31	24
Operating cycle (days)	81	88	89	80
Accounts payable turnover	9.45	8.17	9.14	11.23
Days outstanding	38	44	40	32
Assets turnover (per year)	3.77	2.38	2.76	2.77
Net revenue to working capital turnover	9.02	8.80	5.63	6.05
<b>Capital structure ratios</b>				
Debt to equity	5.08	2.36	1.52	1.19
Current debt to equity	2.94	2.00	.95	.92
Operating funds to current portion of long-term debt	—	1.97	37.20	2.68
Times interest earned	5.11	12.65	9.40	8.88

\* Based on net income before taxes.

Note: Not all the defined ratios are used in this illustration.

Exhibit C-6

**Ratio Analysis of the Comparative  
For the Years Ending September 30**

	20XU	20XV	20XW	20XY
<b>Liquidity ratios</b>				
Current ratio	1.38	1.48	1.42	1.48
Quick ratio	.83	.91	.84	.89
Working capital	\$518,560	\$679,975	\$667,644	\$947,331
Inventory to working capital	144%	117%	137%	121%
Current assets turnover	2.89	2.87	2.86	2.90
Inventory to current liabilities	55.61%	56.99%	58.27%	59.19%
<b>Profitability ratios</b>				
Gross profit	25.6%	25.9%	25.8%	25.5%
Operating profit	5.7%	5.9%	6.1%	5.0%
Net income before taxes	4.5%	5.0%	4.6%	3.4%
Return on equity*	21.4%	23.5%	22.2%	15.7%
Return on assets*	8.2%	9.3%	8.6%	6.1%
<b>Efficiency ratios</b>				
Accounts receivable turnover	6.93	7.08	6.86	7.54
Accounts receivable days outstanding	52	51	52	48
Inventory turnover	5.97	6.28	6.07	6.56
Accounts payable days in inventory	60	57	59	55
Operating cycle (days)	112	108	111	103
Accounts payable turnover	8.01	8.27	8.20	9.05
Days outstanding	45	44	44	40
Assets turnover (per year)	1.82	1.86	1.86	1.81
Net revenue to working capital turnover	11.3	9.63	10.52	9.62
<b>Capital structure ratios</b>				
Debt to equity	1.61	1.51	1.60	1.57
Current debt to equity	1.09	1.00	4.08	.99
Operating funds to current portion of long-term debt	2.98	3.19	2.91	2.48
Times interest earned	5.00	4.60	3.70	2.40

\* Based on net income before taxes.

Note: Not all the defined ratios are used in this illustration.

## **NOTES AND COMMENT<sup>2</sup> TO THE HISTORICAL AND FINANCIAL ANALYSES OF THE REMLAP COMPANY**

The true benefit of the analysis is that it allows the trend over several years to be viewed and measured against the comparatives. The comparatives are calculated in a similar manner. Ratios that involve turnover calculations are based on beginning and year-end balances. Since these balances may not reflect the actual month-to-month activity, the resulting ratio may not be representative of the actual situation.

### **HISTORICAL FINANCIAL ANALYSIS**

**Current ratio.** The current ratio improved by more than 22 percent, from 1.86 in 20XU to 2.08 in 20XY.

**Quick ratio.** The quick ratio increased from 1.21 in 20XU to 1.79 in 20XY, indicating an improving liquidity position.

**Working capital.** Working capital increased during the four-year period and has kept pace with the sales growth.

**Inventory to working capital.** The percentage of working capital supporting inventory decreased from 76.05 percent in 20XU to 26.64 percent in 20XY, indicating a substantial decrease in reliance on unsold inventory to meet current obligations.

**Current assets turnover.** The stabilization of the current assets turnover from 20XV through 20XY indicates that management has reasonable controls over the employment of current assets.

**Inventory to current liabilities.** The percentage of inventory supporting current obligations decreased from 65.68 percent in 20XU to 28.81 percent in 20XY, indicating an increase in quick assets supporting current obligations.

**Gross profit.** The gross profit percentage has increased 6.1 percentage points since 20XU, while the operating profit has decreased from 11.2 percent in 20XV to 9.3 percent in 20XY, indicating that operating expenses in real dollars increased to support sales.

**Net income before taxes.** The percentage of net income before taxes decreased from 10.3 percent in 20XV to 8.8 percent in 20XY, resulting from an increase in operating expenses.

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<sup>2</sup> This Practice Aid focuses on financial factors relevant to the client and the comparative. Other nonfinancial factors are also important, such as equipment and warehouse rentals, and the like.

**Return on equity.** The return on equity shows a slight decrease from 33.4 percent in 20XW to 31.3 percent in 20XY. The higher return on equity for 20XU and 20XV reflected a roughly equivalent net income after taxes achieved from a lower equity base.

**Return on assets.** The return on assets increased in 20XW, from 23.8 percent in 20XU to 26.8 percent, whereas it decreased in 20XY to 24.5 percent. The decrease most probably resulted from the asset base increasing at a faster rate than the profits.

**Accounts receivable turnover and days outstanding.** The receivable turnover and days outstanding remained relatively constant, reflecting effective credit and collection policies.

**Inventory turnover.** The inventory turnover improved from 12.13 times in 20XU to 14.78 times in 20XY, reflecting effective management controls over inventory.

**Operating cycle.** The operating cycle has decreased since 20XV from 88 days to 80 days, indicating an improved cash position.

**Accounts payable turnover and days outstanding.** The accounts payable days outstanding have decreased since 20XV from 38 days to 32 days.

**Assets turnover.** The effective use of assets in supporting sales has remained constant since 20XW. The high asset turnover in 20XU, 3.77 percent, is probably a result of timing differences between sales growth and investment in working capital.

**Net revenue to working capital turnover.** The ratio of revenue to working capital has decreased from 9.02 to 6.05, reflecting an increasing amount of working capital to support the growth in sales.

**Debt to equity.** The debt-to-equity ratio decreased from 5.08 in 20XU to 1.19 in 20XY, primarily because of increased profitability.

**Current debt to equity.** The ratio of current debt to equity decreased from 2.94 in 20XU to .92 in 20XY.

**Times interest earned.** The number of times interest is earned has decreased since 20XV, reflecting higher current interest rates.

## **COMPARATIVE FINANCIAL ANALYSIS**

Remlap's competitors are mainly privately held companies or divisions of publicly held companies. The comparative figures used are from representative companies and are deemed to be appropriate for the purpose of this analysis.

**Current ratio.** Remlap's current ratio has increased from 1.86 to 2.08 over the four-year period, while the comparative has remained relatively constant at 1.48, an indication of Remlap's liquidity position being stronger than the comparative.

**Quick ratio.** Remlap's quick ratio is higher than the comparative, 1.79 compared with .89 and shows an increase; the comparative has remained constant, an indication of Remlap's liquidity position being stronger than the comparative.

**Inventory to working capital.** The comparative shows a greater reliance on unsold inventory to meet current obligations than does Remlap, 121 percent compared with 26 percent.

**Current assets turnover.** Both Remlap and the comparative appear to demonstrate the same degree of control over the management of current assets, since the ratio of each has not changed materially.

**Inventory to current liabilities.** The comparative shows a greater reliance on inventory to support obligations than does Remlap.

**Gross profit.** The comparative shows a higher gross profit than does Remlap, 25.5 percent compared with 24.8 percent, indicating a better price and cost-volume situation for the comparative.

**Operating profit.** Remlap shows a higher operating profit than the comparative, 9.3 percent compared with 5.0 percent, indicating Remlap's better controls over operating expenses.

**Net income before taxes.** Remlap's income before taxes is higher than the comparative's, 8.8 percent compared with 3.4 percent, reflecting Remlap's better controls over operating expenses and lower debt structure, possibly resulting in lower interest costs.

**Return on equity.** Remlap's return on equity is higher than the comparative's, 31.3 percent compared with 15.7 percent, but both reflect a decreasing trend. This is illustrative of Remlap's lower investment in fixed assets.

**Return on assets.** Remlap shows a higher return on assets than the comparative, 24.5 percent compared with 6.1 percent. Remlap's return increased in 20XY; the comparative's return decreased. This appears to be the result of Remlap's ability to generate a return on its assets without the large investment in fixed assets of the comparative.

**Accounts receivable turnover and days outstanding.** The comparative shows a more effective collection of receivables, averaging approximately 50 days outstanding compared with an average of 55 days outstanding for Remlap.

**Inventory turnover.** Remlap shows a more effective control of inventory by turning over inventory approximately twice as fast as the comparative does.

**Operating cycle.** Remlap is able to convert inventory into cash in an average of 84 days; this contrasts with 108 days for the comparative.

**Accounts payable turnover and days outstanding.** Remlap keeps its suppliers more current than the comparative does, 32 days compared with 40 days.

**Assets turnover.** Remlap turns over its assets quicker, with 2.77 turnovers per year in supporting sales, than the comparative does, with 1.81 turnovers per year. However, both appear to be maintaining a constant assets base to support sales. Remlap's higher turnover is a result of its smaller investment in fixed assets.

**Net revenue to working capital.** Remlap's ratio of revenue to working capital has been decreasing, from 9.02 in 20XU to 6.05 in 20XY, while the comparative has remained relatively constant, indicating that Remlap is in a stronger working capital position.

**Debt to equity.** Remlap has decreased its debt-to-equity ratio from 5.08 in 20XU to 1.19 in 20XY, while the comparative debt-to-equity structure has remained unchanged, illustrating that Remlap does not rely heavily on debt as well as its ability to generate sufficient cash flow to service its debt.

**Current debt-to-equity.** Both Remlap and the comparative show a decreasing ratio of current debt-to-equity, indicating stability in the total debt structure. Both are able to generate sufficient cash flow to effectively service debt.

**Times interest earned.** Both Remlap and the comparative show a decrease in times interest earned indicating both are similarly affected by interest rate fluctuations.

## **APPENDIX D: SAMPLE ENGAGEMENT LETTER**

Many sections of this Practice Aid contain examples of language that could be used in a proposal or a letter to describe the engagement. They refer to a financial ratio analysis engagement. The following outline of a complete engagement letter uses, when appropriate, the language from this Practice Aid. However, there is no standard format. In practice, proposals and engagement letters differ according to the circumstances of the specific engagement.

### **INTRODUCTION AND BACKGROUND**

(As appropriate for the engagement.)

### **ENGAGEMENT OBJECTIVES**

The objectives of this engagement are to:

1. Conduct a historical and comparative financial ratio analysis of your firm.
2. Develop a report indicating any positive or negative trends based on the interpretation of financial ratios.
3. Provide the findings of the analysis, inclusive of all supporting notes and assumptions.

### **ENGAGEMENT SCOPE**

This engagement will provide a four-year historical and comparative financial ratio analysis. The ratios will include those ratios published by the comparative source and those ratios commonly used for credit analysis (see attachment). The comparative source will be the closest match among companies in your industry's SIC and/or NAIC code.

Your personnel will provide average balances for specified accounts. We will comment on the historical trends and comparative nature of each ratio and make recommendations for improvement, if appropriate.

We will conclude the engagement with a presentation of a report and discussion of its contents.



## **ENGAGEMENT APPROACH**

We will conduct this financial ratio analysis in two phases, a preparation phase and an analytical phase. Steps in the preparation phase include:

- Meeting with appropriate management personnel to identify objectives and key ratios.
- Reviewing required financial statements.
- Determining the comparative to be used (with management assistance).

Steps in the analytical phase include:

- Selecting the specific ratios to be used.
- Determining the data needed for calculating ratios.
- Determining the missing comparative data and providing alternative means to develop the missing data.
- Calculating the firm's ratios.
- Reconciling accounting differences between your firm's financial statements and those of the comparative.
- Comparing your firm's ratios to the comparative ratios, indicating possible causes of differences.
- Recommending, if appropriate, possible corrective action that your firm may take to improve performance.

## **ENGAGEMENT OUTPUT**

The output of this engagement will include:

- A one-page summary of findings.
- The historical ratios.
- The comparative ratios.
- Interpretation of each ratio and comments on its trend.

If appropriate, we will make recommendations based upon the findings.

**PROJECT STAFFING AND SCHEDULE**

(As appropriate for the engagement.)

**FEES AND BILLING ARRANGEMENTS**

(As appropriate for the engagement.)

## **ATTACHMENT TO SAMPLE ENGAGEMENT LETTER: SUGGESTED RATIOS FOR ANALYSIS**

- Current ratio
- Quick ratio
- Working capital
- Inventory to working capital
- Current assets turnover
- Inventory to current liabilities
- Gross profit percentages
- Operating profit percentages
- Net income before-tax percentages
- Net income after-tax percentages
- Return on equity
- Return on assets
- Accounts receivable turnover
- Accounts receivable collection period
- Inventory turnover
- Inventory to days in inventory
- Operating cycle
- Accounts payable turnover
- Accounts payable days outstanding
- Assets turnover
- Net revenue to working capital turnover
- Net fixed assets to stockholder's equity
- Debt to equity
- Current debt to equity
- Operating funds to current portion of long-term debt
- Times interest earned
- Long-term debt to equity

## **BIBLIOGRAPHY**

Bernstein, Leopold A. *Analysis of Financial Statements*. Homewood, Ill.: Dow Jones-Irwin, 1990.

Lipkin, Lawrence. *Accountants Handbook of Formulas and Tables*. 3rd ed. Englewood Cliffs, N.J.: Prentice Hall, 1988.

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