University of Mississippi
eGrove

Income reconstruction : a guide to discovering unreported incom
Kalman A. Barson

Follow this and additional works at: https://egrove.olemiss.edu/aicpa_guides
Part of the Accounting Commons, and the Taxation Commons

## AICPA



## INCOME

 RECONSTRUCTION:A GUIDE TO DISCOVERING UNREPORTED INCOME

Edited by
Kalman A. Barson, CPA, CVA, CFE, ABV

# INCOME RECONSTRUCTION: 

Edited by
Kalman A. Barson, CPA, CVA, CFE, ABV

# NOTICE TO READERS 

Income Reconstruction: A Guide to Discovering Unreported Income does not represent an official position of the American Institute of Certified Public Accountants, and it is distributed with the understanding that the authors, editor, and publisher are not rendering legal, accounting, or other professional services in this publication. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

## Copyright © 1999 by

American Institute of Certified Public Accountants, Inc., New York, NY 10036-8775

For information about permission to copy any part of this work for redistribution or for inclusion in another document or manuscript, please call the AICPA Copyright Permissions Hotline at 201-938-3245. A Permissions Request Form for emailing requests is available at www.aicpa.org by clicking on the copyright notice on any page. Otherwise, requests should be written and mailed to the Permissions Department, AICPA, Harborside Financial Center, 201 Plaza Three, Jersey City, NJ 07311-3881.

## ACKNOWLEDGMENTS

My acknowledgments are brief and to the point. Frankly, I am sure very few people, other than the author and his or her family, ever really read these things.

First, I would like to express my thanks to Laura Inge at the AICPA for her attentiveness and hard work in helping to move this project along. Her role was crucial to this project coming to fruition. Of a similar level of credit for making this work is the secretarial staff of my office, in particular, Sandra Heater, who knows better how to control the flow of work than any of us, and the other secretaries who put up with the craziness, deadlines, and pressures-in particular Vicki Geis, Bernadette Roberts, Rachael Tanner, and Marlene Van Nest.

Frankly, what book or other project would be complete without also thanking family members who are particularly dear. To my parents, Harry and Naomi Barson, for their constant love and encouragementand a comment here about their fifty-six years of marriage and my father's approximately fifty-six years in accounting. I suspect that a not insignificant part of my interest and involvement in and enthusiasm for accounting directly derives from the fine example my father has long set. To my wife Janet, to whom I have been married thirty-one years at the time of this publication, for her constant love and encouragement and the nice way she always reminds me that while I may be the writer in the family, she runs circles around me in being able to proofread whatever I think is worth writing.

Finally, to the absolute delights of my life, my daughters Rebecca and Emily. The first time I wrote a book, going back to the early 1980s, they were but little children. They have since grown to be wonderful young women with strong minds and senses of personal being and a lot of self-
motivated drive. They are indeed a never-ending source of pride and pleasure for me.

The following are members of the Litigation and Dispute Resolution Services Subcommittee and others who provided direction for and reviews of this book.

David M. Gannett, CPA
Needham, Massachusetts
Carl F. Jenkins, CPA
Brown \& Brown, LLP
Boston, Massachusetts
Holly Sharp, CPA
LaPorte Sehrt Romig \& Hand
Metairie, Louisiana
William E. Simpson, JP, CPA
Simpson \& Company LLP
Los Angeles, California
James Spear, CPA
Tim Gay \& Associates
Phoenix, Arizona

## AICPA Acknowledgments

Acquisition
Editor
Book Design
Production

Laura Inge
Karen Coutinho
AICPA Creative Services
Ingrid Anderson

## CONTENTS

Introduction ..... ix
SECTION I GENERAL INFORMATION ..... 1
Sample Checklists ..... 3
Richard M. Wise, FCA, ASA, CFEWise Blackman
Use of the Net Worth Method to
Reconstruct Income ..... 11
Holly Sharp, CPA, CFP, CFE
LaPorte, Sehrt, Romig \& Hand
Geoffrey P. Snodgrass, Esq.
Snodgrass \& Associates
SECTION II CASE STUDIES ..... 21
Case Study A-Fuel Oil Wholesaler/
Retailer ..... 23
Donald J. DeGrazia, CPA, ABV
Gold Meltzer Plasky \& Wise, PA
Case Study B-Medical Supply Company ..... 33
Carl F. Jenkins, CPA, ABV, CFEBrown \& Brown, LLP
Case Study C-Architect ..... 51
Nicholas L. Bourdeau, CPA/ABV
Nicholas L. Bourdeau, CPA/ABV
Case Study D-Launderette ..... 63
John T. Lally, CPA, ABVRosenfield, Holland \& Raymon, PC
Case Study E-Auto Body Repair ..... 75
Theresa M. Simonds, CPA, ABV
Amper, Politziner \& Mattia, PA
Case Study F-Gasoline Retailer ..... 83
William Ackerman, CPAPutnam, Hayes \& Bartlett, Inc.
Case Study G-Car Dealership ..... 97
Donald H. Minyard, Ph.D., CPA/ABV, CFE
Minyard \& Associates, PC
Case Study H-Fish Wholesaler ..... 107
Linda J. Schaeffer, CPA, CFE
Schaeffer, Lamont \& Associates, PC
Case Study I-Restaurant ..... 117
Robert N. Pulliam, CPA, ABV
Vance Horner, CPA, ABV
Pulliam Financial Group, PLLC
Case Study J-Law Practice ..... 131
Ron J. Anfuso, CPA/ABV
Ron J. Anfuso, CPA/ABV
Case Study K-Garment Industry ..... 141
David E. Politziner, CPA, ABV
Philip K. Kleckner, CPA, CFE
Amper, Politziner \& Mattia, PA
Case Study L-Landscaping ..... 149
Stanley M. Heller, CPA
Robert S. Peare, CPA
Peare \& Heller, PC
Case Study M-Gaming Casino ..... 161
Carlton R. Marcyan, CPA, JD, CFP, DABFASchiller, Du Canto \& Fleck
Case Study N-Accounting Practice ..... 167
Drew S. Dorweiler, CPA/ABV, CBV, ASA, CFEWise Blackman
Case Study 0-Construction ..... 191
Sheri L. Betzer, CPA, CFE
Betzer \& Company, PC
Case Study P-Electronic Repair ..... 197
John W. "Ted" Ibex, CPA, ABV
Sharyn Maggio, CPA, PFS, ABVAlan C. Winters, CPA, CFE, ABVRosenfarbWinters and Co.
Case Study Q-Pasta ..... 207
Leonard M. Friedman, CPA, ABV, CVA
Rosenberg Rich Baker Berman \& Company
Case Study R-Car Stereo Systems ..... 217
Kalman A. Barson, CPA, CVA, CFE, ABV
Rosenberg Rich Baker Berman \& Company
Case Study S-Retail Clothing ..... 225
Earl Salsman, CPABrown Smith Wallace, LLC
Case Study T—Stunt Pilot ..... 231
Nicholas L. Bourdeau, CPA/ABV
Nicholas L. Bourdeau, CPA/ABV
Case Study U—Skating Rink ..... 241
Donald H. Minyard, Ph.D., CPA/ABV, CFEMinyard \& Associates, PC
Biographies ..... 249

## INTRODUCTION

This book was the direct outgrowth of years of financial litigation-related accounting. Numerous professionals have expended much effort in investigating businesses and, from that, reconstructing the true level of income generated by those businesses. Clearly, each business is somewhat different, and there is always a learning curve about what is important in that business in terms of its income and expense flow. Understanding the areas that might be the most fruitful for attack and where and how income may go unreported is critical in much of what we do. Thus, a book devoted to the determination of unreported income should have a substantial and receptive market.

I have previously written three texts on investigative accounting, including sections on business valuation and divorce taxation, and including numerous sample reports, some of which dealt with the matter of unreported income. I believe the time is right to concentrate solely on the matter of reconstructing income when dealing with unreported income. This is not to say that income and perquisites are mutually exclusive, nor that we wouldn't have potentially substantial perquisites in a business with unreported income, but that perquisites and the expression of same tend to be the easier elements of what we do when we investigate businesses. That is because perquisites, virtually by definition, are items that have gone into and through the books and therefore are rather clearly traceable-even if sometimes not necessarily easily defined or determinable. Even if the item is open to subjective interpretation on whether it's a perquisite or an ordinary, necessary, and legitimate business expense, there is nevertheless a trail in the books. Unreported income-determining that it exists, proving how much, illustrating how it was determined-is where the "action" is, where the excitement or the truly interesting application of our skills lies. Thus, a book focusing on this issue should be very useful and timely.

I also believed that, even though I personally have conducted a few hundred financial investigations, many of which dealt with aspects of unreported income, this book's goals would be best served by calling on the experiences and skills of many other very capable and experienced CPAs. Thus, I sought out contributions from CPAs throughout the United States and Canada who could share with me-and with you-their experiences in dealing with a myriad of businesses in which unreported income was determined to exist. The intent was to gain from their experiences what no single person could possibly have experienced and be able to express. Also, each of us has different ways of approaching a situation. My goal was, and remains, to produce, and to continue to improve upon, a book that would prove to be the premier source for CPAs, as well as litigating attorneys, to refer to for inspiration, ideas, and approaches for as many different types of businesses as possible. My intent is to help us understand where there is likely to be unreported income, how to go about determining the amount of same, and how to present our findings in a report.

To that end, and to secure as widespread a source of contributing authors as possible, I sought out contributing authors through several avenues:

- My firm belongs to two associations of CPA firms. I polled all their members to identify any with the experience and interest to contribute a chapter.
- Through my experience with my state's CPA society (New Jersey), committees on which I have served, and other CPAs with whom I have been involved-whether through litigation, sharing speeches, or in other ways-I invited my peers to contribute.

Finally, with the assistance of the AICPA and, in particular, with the help of Laura Inge, I sought out those who had been lecturers for AICPA seminars and conferences in the field of investigative accounting, litigation support, and business valuation.

I was most pleased to secure the participation of more than twenty fellow CPAs from many parts of the United States and Canada. They all gave generously of their time to share their experiences and develop interesting and useful reports illustrating their thought processes, techniques, and determination of unreported income. I believe the readers of this book will also agree that some contributors carried their enthusiasm a step further, with creative writing skills and a style of presentation that go well beyond and are far superior to the typically dry financial report we might expect. All authors, however, took pains to change the names of the parties, to ensure privacy and protection for all involved.

My goal is to augment this book every year or so with a supplement that will probably include a few more chapters dealing with different businesses, so we can continually increase the range and depth of this book and offer our readers true value. To that end, I invite my readers to contact me about contributing a chapter to a future supplement to this book. I have no doubt that many readers will themselves have done a number of financial investigations, perhaps several involving unreported
income, and likely for types of businesses not represented here. Even if you have investigated a type of business that is represented here, perhaps you took a different approach and used different tools and reference points for the determination of unreported income. Please consider sharing those experiences with me. If you have any interest at all in contributing a chapter, please contact me at 908-231-1000; fax 908-2316894; mailing P.O. Box 6483, Bridgewater, New Jersey 08807.

I think it is important for all of us to keep in mind when reading through this book that perhaps the most important thing we bring to the tablethe way we do our jobs best-is using our experience and knowledge in a creative fashion. The uncovering and determination of unreported income calls upon us, requires us, to truly think, to use creative approaches and processes, and to be alert to transactions, happenings and, in many cases, the lack of transactions or the lack of happenings that we might not normally bother with in a nonadversarial situation. Our willingness to look beyond and behind the reported figures and the obviousness of the records presented to us-to be suspicious and inquisitive when appropriate-are critical elements in being able to function well and successfully in an arena involving unreported income.

Finally, for those of us who practice in the divorce field, and with a nod to the unreported income issue, let me urge you all to make sure you are proficient in the innocent spouse rules and, of course, in divorce tax rules in general. It is important that we understand this area so we can best serve our clients and the attorneys with whom we work. Don't ignore that the guilty party may be your client, and how you can best handle that situation. Let's face it, where unreported income exists, I would expect that, give or take, 50 percent of us are working for the guilty party. Even they deserve our efforts and expertise-not to hide the facts or mislead, but to help mitigate the magnitude of the problem and contain possible damages.

## SECTION I

## GENERAL INFORMATION

## SAMPLE Checklists

Richard M. Wise, FCA, ASA, CFE<br>Wise Blackman<br>Montreal, Quebec

The investigative accountant does not have the "search and seizure" powers necessary to obtain documents. In some cases, however, a subpoena duces tecum may have been served on the party under investigation. The burden of proof is on the plaintiff, through the expert, to substantiate the defendant's alleged undisclosed income. Proof of undisclosed income can be made directly or indirectly. In the case of omitted gross receipts, it is difficult to obtain direct proof; therefore, the CPA must rely on indirect or circumstantial evidence. Such proof is based not on prima facie documentary evidence, but rather on the reconstruction of accounting records and financial statements.

Documentary forensic accounting evidence is presented in court in two forms:

1. Primary, which includes individual accounting documents in their original form, obtained directly from the individual (or business) with respect to whom (or which) the income is being reconstructed, or from other parties, such as suppliers
2. Secondary, which includes schedules, exhibits, summaries, graphs, and charts that are based on the original source documents
Even though secondary evidence may not, in and of itself, be evidence, it has been admitted to assist the "trier of fact" in understanding the primary evidence. The CPA can prepare and file, in court, summaries and schedules based on such primary-source documents as receipts, canceled checks, receiving slips, shipping slips, inventory cards, and credit-card charges, which can be categorized between business expenses (for example, travel and meals) and personal expenses (for example,
vacations, golf clubs, home repairs, and clothing) over a period of three or four years. Graphics can assist the court in understanding trends and correlations or can highlight the sales and profit trends of the business.

The methods employed in suppressing gross income typically include, among others-

- Not recording cash receipts (also known as under-the-table income).
- Characterizing income as capital.
- Deferring income to another period.
- Bartering.
- Diverting income to another entity.

Net income may be understated by overstating the cost of sales, for example, through inventory "reserves" or manufacturing cost overstatement by using dummy suppliers or middlemen. Another method of understating net income is overstating selling and administrative expenses, which may include booking personal, non-business-related expenses through the business; having nonproductive family members on the payroll; conducting transactions with non-arm's-length parties at other than fair market value; and expensing items that should otherwise be capitalized.

Even though the CPA applies various procedures when uncovering hidden income, to do a proper job of reconstruction, he or she must start with the fact-gathering process. The checklists that follow are aids in discovering or locating income or income-producing assets. The first checklist is for information and documents needed in reconstructing personal income; the second is for reconstructing business income. The lists are not all-inclusive and cannot be used in every situation, because there may be significant differences from business to business or professional practice to professional practice. The CPA should tailor them to fit the specific business for which the income is being reconstructed.

The Internal Revenue Service publishes the Handbook for Special Agents. It also issues Audit Technique Guides, which are industry specific. These publications may assist the CPA in developing an appropriate investigative checklist to be used in the income-reconstruction process.

## Checklist I: Reconstruction of Personal Income

Information and documents required for the purposes of reconstructing personal income include, but are not limited to:

1. Copies of all personal balance sheets and financial statements prepared for any reason during the immediately preceding five years.
2. Personal income-tax returns for the immediately preceding five tax years, including all accompanying schedules thereto, wherever filed. The CPA may be able to use IRS Form 4506 to obtain copies of returns directly from the Internal Revenue Service.
3. Copies of any amended income-tax returns (or, the originals, if the returns already provided are amended returns).
4. Copies of notices of assessment and reassessment, if any, for the said tax years issued by the tax authorities with respect to the returns referred to in items two and three, above.
5. Copies of all correspondence received from and sent to any income-tax authorities during the immediately preceding thirty-six months.
6. Copies of financial statements, including related income-tax returns, of all closely held business entities (including, without restriction, professional practices, joint ventures, and co-ownerships) in which the party has a financial interest, for the five immediately preceding fiscal years.
7. A detailed list of investments in shares in-
-The capital stock of publicly traded and closely held corporations.
—Stock rights.
-Stock options.
-Share warrants.
-Bonds.
-Debentures.
-Guaranteed investment certificates.
-Term deposits.
-Bankers acceptances.
-Treasury bills and bonds.
-Interests in limited partnerships.
-Interests in commercial partnerships.
-Interests in joint ventures.
-Pension plans.
-Individual Retirement Accounts.
-Employee Stock Option Plans and profit-sharing plans.
-Put options.
-Call options.
-Tax shelters and all other investments of any nature whatsoever, held directly, indirectly, or in any manner whatsoever, wherever located throughout the world.
8. A schedule of loans, accounts, and claims receivable, with full particulars of relevant terms thereof.
9. A schedule of all credit cards, including account numbers for each, in the party's name and in the names of any nominees. These include, but are not limited to, Visa, MasterCard, American Express, Diner's Club, department stores, and oil companies.
10. Copies of all credit card statements and supporting vouchers with respect to the credit cards referred to in item 9 , above.
11. A schedule of all credit cards, including account numbers, held for which the party's company or employer pays all or a portion of the charges thereon, for the immediately preceding thirty-six months.
12. A schedule of all credit card chits to which the party's expenses have been charged, or for which the party's company or employer paid.
13. A list of all bank accounts in the party's name and, if applicable, the party's nominees, wherever located, indicating-
-The banks' names.
-Location of each bank.
-Account numbers.
-Type and status of account (for example, savings, current).
Also, a list of all bank accounts closed during the immediately preceding five years, including their locations.
14. Copies of all bank statements and bank books for accounts referred to in item 12, above, including canceled checks, debit and credit memoranda and advices, and deposit slips for these accounts.
15. A schedule of all deposits held in escrow for or by the party.
16. A list of all safety deposit boxes in the party's name and the names of the party's nominees, if applicable, including the location of each box, as well as-
-A list of any persons having access to these boxes.
-A schedule of all visits to these boxes during the immediately preceding thirty-six months.
17. Names and addresses of stockbrokers, investment dealers, and similar institutions or persons through whom the party has placed buy or sell orders for marketable securities and other similar investments.
18. Copies of all statements received during the immediately preceding thirty-six months from the stockbrokers, investment dealers, or other persons referred to in item 17, above.
19. A copy of any insurance policies covering personal effects and other assets owned by the party, directly, indirectly, or in any manner whatsoever; also, copies of life insurance policies.
20. Copies of any wills and trust indentures under which the party is either a capital beneficiary or income beneficiary, to the extent available.
21. Copies of all contracts, leases, employment agreements, shareholders' agreements, buy-sell agreements, partnership agreements, jointventure agreements, option agreements, and co-ownership agreements currently in effect, including all amendments thereto, to which the party is a party, directly, indirectly, or in any manner whatsoever.
22. Copies of all applications for credit made with banks and any other lending or mortgage institutions, wherever located, during the immediately preceding thirty-six months, including copies of all accompanying and supporting documentation.
23. Schedule of all vehicles owned or leased by the party or for the party's personal use, including, but not limited to, automobiles, boats, snowmobiles, "sea-doos," aircraft, and motorcycles.
24. A schedule of all real estate and interests therein owned by the party, directly, indirectly, or in any manner whatsoever, wherever located throughout the world; also, copies of any real estate mandates, listings, and advertisements to purchase or sell real estate on the party's behalf or on behalf of any group of co-owners or joint ventures of which the party is a member, within the immediately preceding eighteen months.
25. Copies of municipal tax assessments for this real estate.
26. Copies of co-ownership and joint venture agreements, if any, in respect of these real estate interests directly or indirectly held.
27. Copies of any offers received, during the immediately preceding thirty-six months in respect of the party's real estate holdings.
28. Details of any alterations, improvements, and renovations in excess of $\$ 2,000$ made to the party's residence (including, without restriction, country chalets, condominiums, apartments and other similar facilities), wherever located, during the past thirty-six months, including-
-A description and nature.
-Copies of contracts and mandates.
-Cost.
-Copy of specifications and drawings by architect and interior designer.
-Methods of payment.
-Dates of payment.
-Copies of invoices from architect, designer, engineer, contractor, painter, landscape architect, gardener, and other suppliers, as appropriate.
29. A schedule of all gifts or transfers in excess of $\$ 2,000$ made by the party to individuals, corporations, trusts, or any other persons or entities, during the immediately preceding thirty-six months, including the nature of the gifts, their value, names of donees or transferees, relationship, date of transfer of ownership, as well as copies of all relevant documentation with respect to these gifts.
30. A detailed breakdown of all sources of remuneration, including, but not limited to, salaries; bonuses; expense allowances; car allowances; golf club, yacht club, and other club dues and expenses; entertainment, sports events, and other emoluments received by the party, directly, indirectly, or in any manner whatsoever, including constructively.
31. Copies of all pages of the party's current passport and, if said passport was issued within the immediately preceding eighteen months, copies of all pages of prior passport.
32. Names and addresses of all travel agents used during the past three years to book the party's travel.
33. A schedule of all the party's out-of-town travel (outside a radius of 100 miles from home and office), including-
-The purpose of the visit.
-The places visited.
-The duration of the stay.
-Copies of invoices for hotel and other accommodations.
-Copies of airline tickets.
-Names of the people who accompanied the party.
-The approximate cost per trip.
34. Copies of frequent-flyer statements and other air-miles program statements for the immediately preceding thirty-six months.
35. Details of the party's non-arm's-length transactions in excess of $\$ 5,000$, within the immediately preceding five years, and details of all investment, commercial, and real-estate transactions outside of the United States during the immediately preceding five years.
36. A copy of the party's expense accounts filed for reimbursement by the party's employer or any other party during the immediately preceding thirty-six months.
37. Details of any contingent assets and liabilities, including litigious claims by or against the party, and the respective status of each.
38. Minute books of companies controlled directly or indirectly by the party, or by a group of which the party is a member, including (without restriction) articles of incorporation; amendments thereto; bylaws, minutes, and resolutions of shareholders and directors; and internal corporate policy statements, if any.
39. A schedule of jewelry; antiques; paintings; coin, stamp, and wine collections; and horses and other animals valued in excess of $\$ 1,000$, wherever situated in the world, including copies of purchase invoices and any appraisals relating thereto made within the immediately preceding twenty-four months.
40. A list of all persons, if any, to whom the party has given power of attorney (whether general or specific) during the immediately preceding five years.
41. A list of any trusts established by the party during the immediately preceding five years, including the names of all capital (principal) and income beneficiaries.

## Checklist II: Reconstruction of Business Income

Information and documents required for the purposes of reconstructing business income include, but are not limited to:

1. Financial statements for the five most recent fiscal years.
2. Monthly and quarterly financial statements for the five most recent fiscal years.
3. Copies of corporate income-tax returns, including all related schedules, for the five most recent taxation years.
4. Copies of any amended income-tax returns (or the originals, if the returns already provided are amended returns).
5. Copies of notices of assessment (and reassessment, if any) issued by the taxation authorities, if applicable, with respect to the five most recent taxation years.
6. Copies of all correspondence to and from the Internal Revenue Service and any other taxation authorities, including state revenue departments, and other government agencies during the most recent three years.
7. Copies of forecasts, budgets, and projections as of the valuation date.
8. The business plan, if any.
9. Copies of all applications made for credit with any financial institution, wherever located, within the immediately preceding thirty-six months, including all related and supporting documentation provided to such lending institutions.
10. Copies of all credit-card statements, with underlying details, on a monthly basis, for the immediately preceding thirty-six months.
11. A schedule of all credit cards held for which the company pays all or a portion of the charges, for the immediately preceding thirty-six months.
12. Copies of any applications for government grants made within the immediately preceding three years, including all accompanying documentation.
13. Copies of all contracts to which the company was a party at the valuation date, as well as any contracts that have been terminated or have expired within the last five years.
14. Copies of monthly bank statements and canceled checks, debit memoranda, deposit slips, and other relevant advices for the immediately preceding thirty-six months, from all banks and other financial institutions, wherever located.
15. Detailed breakdown of management remuneration, including, but not limited to, salaries; bonuses; expense allowances; car allowances; golf club, yacht club, and other club dues and expenses; entertainment, including sports events; and other emoluments provided to management, directly, indirectly or in any manner whatsoever.
16. Access to the sales journal, purchases journal, cash receipts book, cash disbursements book, fixed asset ledger, general journal, general ledger, and subsidiary ledgers (receivables and payables), including aged accounts receivable and payable schedules, with write-off and reserve details.
17. Copies of purchase, expense, and petty cash invoices for the last three years.
18. A list of suppliers accounting for 5 percent or more of purchases.
19. The names and addresses of all travel agents used during the past three years.
20. A schedule of out-of-town travel of the owner and the manager, including:
-The purpose of the visit.
-The places visited.
-The duration of the stay.
-Copies of invoices for hotel and other accommodations.
-Copies of airline tickets.
-Names of the people who accompanied the owner or manager.
21. A schedule of all related and non-arm's-length entities, including the nature of the relationship.
22. Details of all significant third-party and non-arm's-length party transactions within the immediately preceding thirty-six months.
23. A list of all trade associations of which the company is a member.
24. Copies of accountants' working papers, including adjusting and closing journal entries, for the immediately preceding three fiscal years.
25. A list of all trade publications to which the company subscribes.
26. Details of all nonrecurring and unusual expenses during the immediately preceding five fiscal years.
27. Inventory count and costing sheets for the immediately preceding three fiscal years; basis of inventory valuation (for example, last-in, first-out and first-in, first-out; bill and hold information; consignment arrangements; and obsolete inventory reports).
28. Costing and production records.
29. Cost of trade shows and promotional material, if appropriate.
30. Degree of cyclicality and seasonality of the business.
31. A list of all safety deposit boxes, wherever located.
32. Copies of all one-time contracts entered into within the last three years.
33. Particulars relating to any deferred billings.
34. The nature of notes receivable and notes payable, if any.
35. A schedule of all unrecorded deposits held in escrow by third parties.
36. Particulars relating to any nonrecurring bad debts during the immediately preceding three years.
37. Copies of insurance policies, if any, on the lives of the shareholders of the company and affiliated companies, if applicable.
38. Details of redundant, excess, and nonoperating assets as of the last balance sheet date.
39. Detailed breakdown, for the immediately preceding three fiscal years, of the following expenses-
-Travel.
-Entertainment.
-Advertising.
-Repairs and maintenance.
-Automobile expense.
-Management salaries.
-Management fees.
-Consulting fees.
-Professional fees (for example, legal, audit, and accounting).
40. A tour of the operating facilities and interviews with managers, if possible, although it may be necessary to get a court order.
41. A list of names, addresses, and ownership percentages of all shareholders.
42. A copy of all senior management and owner employment contracts.
43. Union contracts.
44. Promotional materials, including price lists and catalogs, as well as a printout of Web site pages.

# Use of the Net Worth Method TO RECONSTRUCT INCOME 

Holly Sharp, CPA, CFP, CFE<br>LaPorte, Sehrt, Romig \& Hand<br>Metairie, Louisiana<br>Geoffrey P. Snodgrass, Esq.<br>Snodgrass \& Associates<br>New Orleans, Louisiana

Established to identify unreported income in tax fraud cases, the net worth method provides that the increase in net worth, adjusted for nontaxable receipts and nondeductible expenditures, equals gross taxable income. Net worth is calculated by comparing assets (shown at original cost rather than at fair market value) net of liabilities on a year-by-year basis. An opening net worth figure or total net value of assets is determined for the beginning of a given year. Net worth is calculated for succeeding years, and the difference is noted. Unreported taxable income is determined by adjusting for nondeductible expenditures and nontaxable income. If the change in net worth is greater than taxable income reported for each year, the difference represents unreported taxable income.

The Internal Revenue Service (IRS) has successfully used the net worth method to reconstruct income of a taxpayer who either fails to maintain adequate records or is suspected of tax fraud. The evolution of the net worth method began with the notable case, Capone v. United States (51 F.2d 609 [1931]). Al Capone had built up a bootlegging and racketeering empire in Chicago but had evaded indictment for any crime. The government mobilized against him with a mandate from President Herbert Hoover to convict "Public Enemy Number One." While Eliot Ness
pursued the bootlegging issues, (IRS) agent Elmer Irey worked to establish Capone's income-tax evasion.

The Supreme Court had ruled in 1927 in United States v. Sullivan (274 U.S. 259 [1927]) that illicit income was subject to income tax and that requiring such income to be reported did not violate the Fifth Amendment protection against self-incrimination. Coincidentally, Sullivan's illegal business was bootlegging.

Capone had extravagant tastes but either used cash or had third parties take care of his expenditures. He purchased brewing magnate Clarence Busch's Florida estate, and this asset provided IRS agent Irey with proof of Capone's illicit income. Irey documented the income through spending; despite Capone's use of cash for most transactions, the Florida estate was tangible evidence of Capone's income. Capone was convicted of tax evasion in 1931.

The Supreme Court considered and accepted the net worth method of proof in Holland v. United States (348 U.S. 121 [1954]). ${ }^{1}$ In this case, the government computed an increase in the net worth of Mr. and Mrs. Holland to be approximately $\$ 20,000$ greater than their taxable income could support. The petitioners were convicted of attempting to evade income taxes, which was affirmed by the Supreme Court, using the net worth method. ${ }^{2}$

## Dangers in the Use of the Net Worth Theory

This method is "fraught with danger for the innocent," as noted by the Supreme Court in the Holland case, and the Court pointed out some of these dangers. The Supreme Court, however, also concluded that the pitfalls inherent in the net worth method do not foreclose its use; they only require the exercise of great care and restraint.

One danger is the initial net worth figure may be incorrect because cash accumulations have been omitted. For example, Mr. and Mrs. Holland argued that they had accumulated $\$ 104,000$ in cash over several years and that this was not reflected in the initial net worth figure. They argued this cash was subsequently used to acquire assets or pay their expenditures. However, the court did not accept this argument, because their income had been insufficient to enable them to save this amount. The Court further noted that amounts spent and assets acquired during the period in question were bought in installments, supporting that amounts came from earnings rather than accumulated cash. The taxpayer may have legitimate sources of cash accumulations, such as stock or real estate sales proceeds, inheritances, gifts, and loans; therefore, it is

[^0]important to establish beginning cash on hand in calculating the opening net worth figure.

In addition, the method may reflect an increase in net worth over a period of years, but may not allocate the increase to the proper tax years. When it is necessary to associate the unreported income to a particular tax year, the net worth method may be inadequate. This is particularly important in cases with statute of limitations issues.

The accountant may draw inferences from direct evidence in calculating net worth by substantiating assets and liabilities and then adjusting for accountable cash inflows (both taxable and nontaxable) and expenditures. The proof in a criminal case must be beyond a reasonable doubt, but the proof in civil cases must be only by a preponderance.

## Calculation of Net Worth

The net worth of an individual is the difference between what is owned (assets) and what is owed (liabilities). Asset values should be reflected at cost. Any increase or decrease in asset value after acquisition is disregarded. This differs from stating asset values at fair market value in financial statements submitted for financing purposes or reporting to other third parties, when assets are generally stated at fair market value, regardless of cost.

A starting date is selected and assets and liabilities are determined as of that point. The difference represents net worth, which is then calculated for each succeeding period, and the differences are measured. Living expenses are added to each year and funds from known sources are subtracted. The difference equals funds from unknown sources. Calendar years are generally selected as the measuring period to correlate with income-tax returns and other reporting documents, such as Form 1099. (See appendix A for the equation.)

An alternative, the expenditures method, may be used to establish income from unknown sources. ${ }^{3}$ Total expenditures are reduced by known sources of income, and the difference equals income from unknown sources. This method may be useful when income is used primarily for expenditures and not to acquire assets or reduce liabilities.

Information necessary to establish net worth may be obtained from the individual, third parties, and public records. Examples include the following:

- Tax returns:
-Income tax returns
-Sales tax returns
-Tax returns of related business entities
- Real estate records:
-Purchase and sale documents
-Assessment records

[^1]- Financial institution records:
-Loan applications
-Financial statements
—Bank statements
-Deposit slips
-Canceled checks
-Cashier's checks
- Legal records:
—Lawsuits and judgments
—Depositions
- Other
-Investment accounts
-Insurance records
-Accounting working papers


## Case Study

Will I. Wynne, a 37-year-old male, was involved in an automobile accident on March 15, 1994. He was employed by his wholly owned construction company and claimed his annual earnings at the date of the accident were $\$ 40,000$. He alleges that his total wage loss is $\$ 1,000,000$, measured from the date of the accident through his work life expectancy, as provided from life insurance industry statistics. The insurance company suspects fraud: The injuries from the accident are considered minor by some physicians, who support a prognosis of full recovery with no loss of ability to work. The individual's physician, however, disagrees and reports that the accident has caused brain damage, resulting in diminished mental capacity and precluding future work. The attorney for the insurance company hires a CPA to evaluate the loss-of-income claim.

The CPA finds that the individual's employment earnings have ceased since the accident, but that the individual's income-tax returns show an increase in assets. Interest income is increasing, but taxable income is insufficient to fund the increase in assets. Several rental properties are added each year; however, available funds do not support these purchases.

The CPA reviews Wynne's income-tax returns and his accountant's working papers for years 1990 through 1997. The CPA also reviews the business records, the accountant's working papers, and tax returns of Wynne's construction company for years 1990 through 1995. The company had no activity during 1995 and was liquidated in 1996. Wynne alleges the liquidation occurred because of the accident.

The income-tax returns of Wynne reflect increasing interest income after the accident and indicate the increase is from numerous sellerfinanced mortgages and loans to individuals. The tax returns also reflect the addition of several residential rental properties after the accident. The CPA identifies bank accounts of Wynne from Forms 1099 in the accountant's working papers and asks the defense attorney to subpoena the bank records for each of these accounts. The CPA also obtains information on financial institutions from the accountant's working
papers supporting interest expense on Schedule $E$ of the individual income-tax returns. This schedule provides descriptions of the real estate acquisitions, and the depreciation schedules in the working papers attached to the return provide property cost information. The CPA obtains information on seller-financed mortgages and loans to individuals from Schedule B of the individual income-tax returns. The attorney reviews real estate records of the local counties to obtain information on these properties, as well as locate other properties acquired by Wynne.

## Analysis of Bank and Real Estate Information

The CPA receives boxes of records from three financial institutions and reviews the information. Financial statements prepared by Wynne support the CPA's suspicion that net worth has been increasing since the accident. The statements also provide evidence of a new boat and new truck acquired in 1996; no bank indebtedness was used to acquire these two assets. Information from one financial institution includes five cashier's checks for $\$ 9,900$ each, issued to Wynne in 1997. (There was no reporting of this cash transaction to the IRS, because each transaction was under $\$ 10,000$.) The cashier's checks were used to purchase annuities.

Included in the records is mortgage information on the rental properties, which reflects that Wynne paid 20 percent of the purchase price in cash and financed the balance. Beginning and ending liability amounts are also obtained from the bank information.

Wynne is acquiring numerous properties each year with funds used for a 20 percent down payment. The properties are residential rental properties containing two, three, or four units.

## Analysis of Construction Company Records

Gross income had declined dramatically since 1990, and losses were being incurred each year. Wynne had not taken any salary in 1991 and 1992, but company records reflect a $\$ 40,000$ annual salary to him in 1993 and 1994. Review of the disbursement register reflects that $\$ 40,000$, net of applicable payroll taxes, was paid to Wynne in April 1994 and recorded as 1993 salary. Another check reflects $\$ 10,000$, less applicable payroll taxes, was paid to Wynne in April 1994 and recorded as 1994 salary. The CPA notes that both amounts were paid after the accident.

Corporate tax returns for 1993 and 1994 reflect deductions for officer's compensation of $\$ 40,000$ and $\$ 10,000$, respectively; however, the CPA notes that compensation was funded from accumulated cash, not corporate income, because corporate income was insufficient to meet other operating expenses. Operating losses were generated each year from 1990 through 1994, resulting in a cumulative operating loss totaling $\$ 167,000$ at the end of 1994.

## The CPA's Conclusions

Wynne's compensation from his corporation should be adjusted to zero, because the evidence supports that this company was losing money and gross income was declining. Wynne had not had any salary from this business in the four years before the accident, but after the accident, he took accumulated cash in the form of salary. The CPA concluded the company became inactive after the accident because it was failing before the accident.

Wynne's efforts shifted in 1992 to the accumulation and management of rental properties. In 1992, his income-tax return reflected ownership of four properties. This grew to eight properties in 1993, and ten properties in 1994. The 1994 return reflects the sale of two properties that were acquired in 1992. Wynne financed these sales for the seller by taking 20 percent cash and 80 percent in a note receivable bearing 10 percent interest. All 1994 real estate activity was after the accident. Four additional properties were acquired in 1995 and six properties were acquired in both 1996 and 1997.

Wynne was receiving substantial amounts of money from an unidentified source, and these funds were being used to acquire assets and fund living expenses. Known sources of funds were rental income, cash withdrawn from the corporation, and interest income. Uses of funds significantly exceeded this amount, as evidenced by the acquisitions and expenditures. The net worth method established the amount of income from unknown sources to total $\$ 429,045$ for years 1994 through 1997 (see appendixes B and C). The plaintiff drops the lost-wage claim, and the attorney turns over the CPAs work product to the Internal Revenue Service and the U.S. Attorney.

## Summary

The net worth method of proof may be a useful tool to reconstruct income. This method was developed for tax fraud cases but is applicable to other types of litigation. Individuals involved in divorce proceedings may fail to disclose all income, and the net worth or expenditures method may identify the amount of hidden funds. Embezzlement and other whitecollar crimes may be proven by using the net worth method to support the value of the theft. Fraudulent wage loss claims may be established by showing that the plaintiff's income has not ceased. This method is a useful tool, and the CPA has the training and expertise to effectively present the evidence of unreported funds.

## Appendix A

## Calculating Net Worth

| January 1, 19XX | Assets at cost |
| :--- | :--- |
| Less | Liabilities outstanding as of January 1, 19XX |
| Equals | Beginning net worth |

December 31, 19XX Assets at cost

Less
Equals
Change in net worth Add
Less
Equals

Liabilities outstanding as of December 31, 19XX Ending net worth

Ending net worth less beginning net worth
Living expenses
Funds from known sources
Funds from unknown sources

## APPENDIX B

## Analysis of Net Worth of Will I. Wynne

|  | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net worth as of December 31 | \$550,000 | \$575,000 | \$600,000 | \$725,000 | \$818,000 | \$1,025,000 |
| Annual change |  | 25,000 | 25,000 | 125,000 | 93,000 | 207,000 |
| Add living expenses |  | 48,000 | 52,800 | 58,080 | 63,888 | 70,277 |
| Less funds from known sources |  | $(18,000)$ | $(75,000)$ | $(38,000)$ | $(65,000)$ | $(88,000)$ |
| Total funds from unknown sources |  | \$ 55,000 | \$ 2,800 | \$145,080 | \$ 91,888 | \$ 189,277 |

## ApPEndix C



## SECTION II

## CASE STUDIES

# Case Study A-FuEl Oil WHOLESALER/RETAILER 

Donald J. DeGrazia, CPA, ABV<br>Gold Meltzer Plasky \& Wise, PA<br>Moorestown, New Jersey

In many regions of the country, and in particular the Mid-Atlantic and Northeast, fuel oil remains a viable alternative for heating homes, businesses, schools, and factories. In many cases, heating oil is supplied by closely held or family-owned wholesalers and retailers. Within the industry, there are a few publicly traded fuel oil wholesalers and retailers, and there is some consolidation activity (the "merger mania" concept du jour) bundling smaller companies together in this fragmented industry. For the most part, however, the fuel oil industry continues to be served by independent wholesalers and retailers, which attempt to be nearly fullservice energy suppliers for their customers. Beyond the delivery of fuel oil, they may also be involved in the installation and service of heating, ventilation, and air conditioning (HVAC) systems. In addition, a company may supply gasoline and diesel fuel to service stations, truck stops, trucking companies, municipalities, and commercial and school bus companies. As a result of having three common lines of business (fuel oil, heating and cooling systems, and gasoline and diesel fuel), the companies' financial statements and general ledgers often report the results of operations in segments or easily separable departments. This type of financial structure allows for a relatively easy comparison of the companies' operations with prior years' results and with external industry information.

In analyzing individual companies and the industry, the analyst must understand the commodity-like nature of the products and the impact that this has on the cost and price structure of heating oil and diesel fuel.

In analyzing both the growth and profitability of a company, the analyst must concentrate on the volume of gallons of product sold rather than the dollar measurement of sales. For example, between 1996 and 1998, the cost of heating oil and diesel fuel declined by as much as 50 percent. In the latter part of 1998, the federal and state diesel fuel taxes charged per gallon of diesel fuel sold often exceeded the cost of the product. Thus, in measuring the growth, profitability, and health of a fuel oil wholesaler or retailer, the analyst must analyze market share and volume through analysis of gallons sold, rather than sales dollars. Unlike many industries and products, heating oil sales are at the mercy of a variable completely uncontrollable by management-specifically, the weather. In such warm winter years as 1998, the sales and profits of fuel oil companies typically plunge, and management can do little other than attempt to reduce variable costs.

The heating oil portion of the industry is generally declining. Technology and alternative types of fuel have significantly reduced the market share of heating oil within the energy industry. One example is natural gas, which has captured a relatively large and constantly growing share of the market. In fact, it is quite difficult to identify new housing projects that install heating systems using fuel oil. Other competitors capturing market share include electric and solar heat.

In spite of the complexities and difficulties faced by fuel oil wholesalers and retailers, it is important to recognize that these companies are often highly profitable and well managed by individuals extremely knowledgeable and experienced in their industry. As indicated previously, these companies are most frequently independent, closely held businesses that are often family owned. Management generally focuses on taxminimization, rather than ego-gratifying, procedures in reporting its bottom line in its financial statements.

Much like businesses in every other industry, fuel oil companies are often subject to the equitable distribution and support battles of spouses involved in a divorce. Management's focus on tax minimization, coupled with the often lax attention to internal controls frequently associated with family-owned or closely held businesses, provides ample opportunity for forensic accountants to exercise their skills. Other situations in which a forensic accountant's skills may be needed include stockholder litigation and the purchase or sale of a fuel oil business.

In most cases, an income reconstruction engagement requires the forensic accountant to consider the possibility that income has been diverted both through the underreporting of sales revenue and the payment of personal family expenses by the business. Generally, the payment of personal family expenses is the easiest type of underreporting of income for the forensic accountant to discover. Through both an interview of the nonowner spouse and a detailed review of cashdisbursement records, personal expenses are generally identified and quantified. A much more difficult aspect of the forensic accountant's engagement is identifying and quantifying unreported sales revenue. The balance of this chapter will be dedicated to that task.

## Fuel Tax Fraud

In recent years, two types of unreported income or fraud have become apparent in the fuel oil industry. One method, perhaps the most common, is the underreporting of sales revenue for income-tax purposes. This simply involves the diversion of cash sales from the business. The other, a more complex and arguably more egregious method, involves fuel tax fraud. Vast sums of federal and state fuel taxes have been diverted in recent years. Currently, several individuals are awaiting sentencing in federal criminal cases in New Jersey for the diversion of millions of dollars of federal and state fuel taxes from the respective government entities. Although this chapter does not concentrate on fuel tax fraud, a brief description of a typical methodology employed in fuel tax fraud is warranted.

Previously detected fuel tax fraud schemes have used a "daisy chain" or "burn company" scenario. Typically, the fraud perpetrators establish a fuel oil wholesaler company that purchases fuel oil from major oil companies (in the industry, large, well-known fuel oil refiners are also identified as "majors"). The newly established wholesaler supplies the major with tax forms establishing it as a reseller of diesel fuel. After receiving the false documentation (but with no intent to participate), the major oil companies sell diesel fuel to the fraudulent company without charging tax, because the wholesaler has indicated its intention to collect the tax from taxable users. Thereafter, the wholesaler provides other affiliated companies, which are its "customers," with sales invoices indicating that tax was paid by the wholesaler when, in fact, it was not. Having paid as much as forty cents a gallon less (by avoiding federal and state fuel tax), the affiliated retailers then sell the product to end users of the diesel fuel at a much lower price than legitimate competitors do. Thus, the fraudulent wholesaler and the retailer capture a larger part of the market and share in a portion of the illegal profits that would otherwise be the reimbursement for fuel taxes paid, had the transaction been handled legally.

When federal or state fuel tax auditors close in on the scheme, the burn company is simply abandoned, with no trace or trail of records to be audited. The perpetrators then establish a new company and begin the scheme again.

To combat this, the federal government has enacted new procedures for tax collection and payment. Specifically, diesel fuel must be bought by wholesalers on a tax-paid basis from the majors. If diesel fuel is sold legitimately to nontaxable users, such as off-road and municipal customers, the wholesaler simply applies for and receives, in a very timely manner, a refund from the Internal Revenue Service. Heating oil, which is a very close but untaxed substitute for diesel fuel, is now dyed red. Any nonmunicipal user of diesel fuel found to have red-dyed heating oil in the fuel tanks of its vehicles is subject to substantial fines and penalties. The implementation of these procedures in the past few years has sharply reduced, but not eliminated, fuel tax fraud. Again, the focus of this chapter is not on fuel tax fraud, but on the underreporting of income, which the forensic accountant may more commonly experience in divorce
and other litigation engagements. Fuel tax fraud, however, must be recognized if it is present in an engagement.

## The Case Study: Sludge Oil Company, Inc.

In one engagement, the management of a fuel oil company was found to be employing several methods to underreport income and siphon cash from the business. The business was involved in the wholesale and retail sale of home heating oil and the retail sale of kerosene, as well as the installation and service of HVAC equipment.

As is the case with many engagements, interviewing the nonowner spouse resulted in the identification of several methods employed by the owner spouse to underreport income. This example concerns the divorce litigation of Ewing $v$. Ewing, and for the purposes of discussion, Mr. Ewing is assumed to be the sole shareholder of Sludge Oil Company, Inc. In the interview with Mrs. Ewing, she identified three ways in which her husband was siphoning cash from the business. These methods were as follow.

## Wholesale Sales

Sludge Oil was involved in the wholesale sale of fuel oil to smaller fuel oil retailers. Many of its customers were fuel oil companies known in the industry as "one truck" companies-small retailers each owning but one truck. They each sold 3,000 to 4,000 gallons of fuel oil per day, with most sales paid cash on delivery. Because of their size and substantial financial risk, these one-truck companies could not establish credit with the majors. Consequently, to acquire fuel, they purchased it directly from larger wholesale and retail businesses, such as Sludge Oil.

Mr. Ewing and Sludge Oil recognized the credit risk inherent in supplying smaller, one-truck companies. To avoid this problem, and to appeal to this potentially lucrative segment of the business, Mr. Ewing sold oil to the one-truck operators at a discount, for cash. Mr. Ewing would simply pump oil from one of his trucks into the trucks of a few of his one-truck wholesale customers. He would then be paid, in cash, for the quantity of gallons sold to each operator. These cash sales would regularly not be reported in Sludge Oil's books.

## Retail Sales

Mr. Ewing had a few trusted delivery drivers who would collect cash from retail customers and give it, and the delivery tickets, to Mr. Ewing rather than to Sludge Oil's bookkeeping department. In return for the personal service and presumed silence, the drivers would share in the bounty by receiving cash from Mr. Ewing. Both the cash and all traces of the delivery disappeared forever.

## Unreported Heating, Ventilation, and Air Conditioning Sales

A small but measurable portion of the company's HVAC sales would not be reported in the company's books. The unreported sales related primarily to service and installation jobs for which Sludge Oil was paid in cash, and such cash was again delivered directly to Mr. Ewing by loyal servicemen. These unreported sales created managerial problems for Mr. Ewing, however. When equipment was installed, warranties were often purchased or provided to the customers. It was necessary to maintain some type of record of the installation, identification of the equipment, length of the warranty, and other details.

Incredibly, to ease the management of the unreported HVAC sales, Mr. Ewing created a rubber stamp that read NIB, which was then stamped in the upper-right corner on both a copy of the invoice and the warranty card. NIB quite literally meant "Not in Books." These documents were then maintained with the HVAC sales transactions that were recorded in the company's sales records.

Fortunately, Mrs. Ewing knew exactly where the NIB invoices were maintained and was able to provide a representative sample of the invoices. A simple tracing of the invoices to the sales and cash receipts journals substantiated that the sales were unreported. Clearly this was not the most imaginative or artful exhibition of cash siphoning (and for that matter, it did not require particularly insightful forensic accounting methods to discover it).

## Substantiating Unreported Income

Although the NIB invoices were easily calculated and documented, the substantiation of the unreported wholesale and retail sales of petroleum products was more difficult. In documenting the existence of the unreported sales of petroleum products, it quickly became apparent that external data would be the most reliable and likely easiest to obtain. After discussing this situation with counsel, it was agreed that subpoenas would be served on the major oil company suppliers of Sludge Oil. Invoices for the sale of product to Sludge Oil would be subpoenaed for a one-year period (because each of the suppliers maintained facilities within the state, counsel could easily and effectively serve the subpoenas). Based on experience in the industry, it was known that the invoice would provide the date of sale, quantities purchased (in gallons), and purchase price for each transaction between Sludge Oil and the major oil refiner.

As demonstrated in Schedule 1, after the subpoenaed invoices from each supplier were received, a relatively straightforward mathematical exercise was used to determine the total gallons purchased, the total cost of those gallons, and the average cost per gallon for the sample period (see appendix A). Although Schedule 1, for demonstration purposes, reflects a three-month sample period (January, February, and March), it is recommended that in an actual case, a full-year sample be used. Normally, a sample of several months would be sufficient for similar exercises in different industries. It is important that a full-year analysis be employed for the heating oil industry because it is a very seasonal
business. A sample totaling the gallons used in one quarter and multiplying the total by four would be both inaccurate and unrealistic. Naturally, much less heating oil is used in the third quarter of the yearJuly, August, and September-than in the first quarter of the year. On the other hand, if Sludge Oil were only a supplier of diesel fuel, a sample considering one month per quarter or one week per month for twelve months would be reliable. The same methodology employed for Sludge Oil could also be employed in analyzing the sales of a gas station or an oil company that sells both heating oil and motor fuels.

Schedule 2 is a computation that identifies total gallons sold for the sample period (see appendix B). Specifically, beginning inventory in gallons is determined through company records and added to gallons purchased for the sample period. This identifies the total gallons available for sale. Subtracting ending inventory from total gallons available for sale identifies total gallons sold. Consideration should be given to waste or spoilage of gallons. Any spillage or waste would require written notification to both the federal Environmental Protection Agency and the state Department of Environmental Protection. It was determined that no such incidents occurred and, therefore, we were able to rely on the computation as indicative of total gallons sold.

We also determined that Sludge Oil maintained its own diesel fuel storage tanks to supply its trucks. Although the diesel fuel was purchased from the same suppliers as was the heating oil, a review of the invoices easily identified diesel fuel purchases. Diesel fuel is sold on a tax-paid basis that requires a commercial purchaser to pay tax at the time of purchase. Diesel fuel invoices include a federal diesel fuel tax, which allows for elimination of those invoices from the heating oil purchase analysis. The elimination of these invoices from the analysis assured that we did not overstate the amount of unreported heating oil gallons by an amount equal to the diesel fuel gallons used by Sludge Oil to power its vehicles. If Sludge Oil also sold diesel fuel, gasoline, or kerosene, a similar analysis could be undertaken to determine unreported revenue by each product.

Schedule 3 draws on the information computed in Schedules 1 and 2, as well as information maintained in the company's sales journal (see appendix C). Reported monthly sales in the company's sales journal for the sample period were scheduled. A comparison with the computed gallons sold reflected in Schedule 2 allows for a determination of unreported sales in gallons. The average selling price for the sample period, multiplied by the computed unreported sales in gallons, equals the computed unreported sales in dollars for the period.

Using subpoenaed purchase invoices from major oil company suppliers and comparing these invoices with information contained within the company's sales journals permit the determination of unreported sales both in gallons and dollars for the sample period. When the computed unreported heating oil sales information is added to the unreported sales from the HVAC division, it is possible to reasonably estimate the total unreported sales for the business.

## Other Uses for the Information

Determining the additional gallons sold beyond those reported in the books is instrumental in determining the unreported income of the corporation. This, in turn, is helpful in determining the amount of disposable income available for alimony and child support.

The determination of actual gallons of product sold is also critical in determining the value of the business for purposes of equitable distribution. In the heating oil industry, businesses are routinely valued and sold, in part, on the basis of gallons of product sold in a year. This is also the case for companies involved in the sale of diesel fuel and gasoline service stations. The value of a heating oil company's customer list is generally determined by one of two methods, both based on the number of gallons sold. In the first method, the customer list is valued on a retainedgallonage basis, when the purchaser pays a specific price per gallon for sales occurring in a subsequent one-, two-, or three-year period to customers existing at the date of the transaction. In the second method, the customer list may be valued by the purchaser at an amount equal to a specified price per gallon multiplied by the number of gallons sold in the twelve- to twenty-four-month period before the valuation date.

Generally, the purchaser pays a higher price per gallon for a customer list based on retained gallons for a specified number of future years subsequent to the sale, and a lesser price per gallon based on historic sales for some period before the date of sale of a customer list. When a business is sold on the basis of retained gallons, the seller is assumed to incur the risk of lost sales, whereas the sale of a customer list based on prior historical sales is assumed to transfer the risk to the purchaser. For that reason, the purchaser generally pays more per gallon for retainedgallon sales of customer lists.

Thus, in a matrimonial engagement, the forensic accountant's analysis of the total gallons purchased and sold in a sample period is important for determining unreported income and the value of the company for purposes of equitable distribution between the spouses.

## Appendix A

## Schedule 1 <br> Ewing v. Ewing <br> Sludge Oil Company, Inc. <br> Schedule of Product Purchases by Month <br> (Heating Oil) <br> For the Three-Month Period Ended March 31, 19XX

| Month | Supplier | Gallons Purchased ${ }^{1}$ | Total Cost <br> (\$) | Average <br> Cost per Gallon (\$) |
| :---: | :---: | :---: | :---: | :---: |
| January |  |  |  |  |
|  | Amerada Hess Corp. | 145,000 | 53,950 |  |
|  | Koch Refining Co., Inc. | 240,000 | 87,360 |  |
|  | Coastal Oil Co., Inc. | 142,000 | 52,310 |  |
|  |  | 527,000 | 193,620 | $.3674^{2}$ |
| February |  |  |  |  |
|  | Amerada Hess Corp. | 162,000 | 64,541 |  |
|  | Koch Refining Co., Inc. | 221,000 | 85,859 |  |
|  | Coastal Oil Co., Inc. | 218,000 | 87,091 |  |
|  |  | 601,000 | 237,491 | $.3952^{2}$ |
| March |  |  |  |  |
|  | Amerada Hess Corp. | 190,000 | 78,375 |  |
|  | Koch Refining Co., Inc. | 202,000 | 82,719 |  |
|  | Coastal Oil Co., Inc. | 138,000 | 56,718 |  |
|  |  | 530,000 | 217,812 | $.4110^{2}$ |

[^2]
## Appendix B

> Schedule 2
> Ewing v. Ewing
> Sludge Oil Company, Inc.
> Schedule of Computation of Product Sold
> For the Three Months Ended March 31, 19XX

| Beginning inventory-January 1, 19XX (gallons) |  | $32,000^{1}$ |
| :--- | ---: | ---: |
| Purchases | 527,000 |  |
| $\quad$ January | 601,000 |  |
| February | $\underline{530,000}$ | $\underline{1,658,000}$ |
| March |  | $1,690,000$ |
| $\quad$ Total purchases |  |  |
| $\quad$ Total gallons available for sale |  |  |
| Less |  | $\underline{1,662,000}$ |

${ }^{1}$ Inventory based on company records at beginning and end of month for gallons in storage and on-board trucks.

## Appendix C

Schedule 3
Ewing vs. Ewing
Sludge Oil Company, Inc.
Schedule of Computation of Unreported Sales
Heating Oil-January 1 to March 31, 19XX

| Computed gallons sold | $1,662,000$ |
| :--- | ---: |
| Gallons sold per sales journal: |  |



# Case Study BMedical Supply Company 

Carl F. Jenkins, CPA, ABV, CFE

Brown \& Brown, LLP
Boston, Massachusetts

Those of us in the profession know that being a CPA means our days are made up of a few hours of boredom punctuated with a few minutes of terror. Many of us live in dread of those few moments and will do anything to avoid them. However, there are a select few who seek out adventure-an elite force of volunteers, made up of misfits and troublemakers who cannot be contained within the confines of the regular audit or tax departments. These select individuals are often the rogues who show up late for firm meetings, take the parking spot reserved for the audit partner, and perhaps worst of all, require the purchase of supplies that no one else in the firm seems to need. These courageous people, who fear no CFO, are called the Forensic Force (a.k.a., the Force).

I am one of those lucky few. My firm decided that providing forensic accounting services through the organization of the Forensic Force was the perfect use of aggressive, undisciplined, misfit auditors and tax specialists-but otherwise perfectly good accountants-and I was put in charge of it. Our team consisted of four rugged individuals we will call Snake, Buzz, Digit, and Larry.

This story is about those few minutes of terror, how I got there, and how I survived. The story begins with a phone call one day regarding a medical supply company, called the Bones Instrument Company (Binco), specializing in supplies for orthopedic physicians. Binco was started some thirty-five years ago by two surgeons and an investor. The investor was never actively involved, and his recent death required a valuation for estate tax purposes. Perhaps more important, the investor's heirs were
anxious to receive a fair price for the stock, which was required to be purchased by a loosely written shareholder agreement.

The phone call was made by an attorney for the investor's heirs looking for someone to analyze Binco's financial information. The investor's family recalled the investor himself grumbling over the poor results reported by Binco year after year, which resulted in a less-thanstellar return on his investment. The attorney explained that the heirs were convinced that there were irregularities in the financial reporting that understated the company's income. The investor never received what he believed he should have for a return, and now his heirs were afraid the stock would be required to be sold back at an unfairly low price.

In our line of work, we often hear stories that would make normal auditors cry on their working papers. However, experience tells me that many passive investors believe their returns are too low. Almost all heirs believe the buyback price for the stock that they have to sell to the company is determined through a criminal conspiracy backed by the Republicans and the Democrats. So before I called for the Forensic Force (using custom-designed pencil phones), I requested a meeting with the heirs and their counsel to obtain a better understanding of the basis for their claims. Another important reason to meet was to inform the heirs and their counsel of the level of effort and expense that would be required of them and Binco to see this thing through. There is nothing like a request for a $\$ 10,000$ retainer to separate family gossip and greed from legitimate beliefs.

## Meeting With the Heirs

The meeting was conducted at a coffee shop near Binco's headquarters. The heirs explained the basis of their position that the company had been underreporting income. As typical in these situations, much of the information was obtained second-hand from a "source" in the company. Many of the stories included accounts of excesses during business travel by the two active owners. Although these kinds of stories can be galling to minority passive shareholders, I have yet to call out the Force just because someone stayed at the Ritz rather than the Holiday Inn. The heirs also referred to possible issues, identified by their sources, regarding inventory and the existence of other unconsolidated businesses owned by the active shareholders with dealings at what might not be arm's length.

Naturally, the heirs were light on the details, but this does not mean their concerns were ungrounded. The information provided to me sounded legitimate, but I still did not have enough information to design an attack strategy. I still needed something that would provide me with a basis for going forward, something that was more than what could be perceived as a fishing expedition for disgruntled minority shareholders.

The active shareholders were taking the reasonable position that they would be helpful but that the business would not be disrupted without good reason. In fact, we insisted on being engaged by the board of directors on behalf of Binco, and they agreed. I needed to find an opening in the company's armor, and I had to do it quickly. Because the heirs were going to be of no additional help, it would be up to Binco itself to provide
me with the information necessary to create a beachhead. I put together a document request asking for detailed financial information for the last five years. This included the reviewed financial statements, tax returns, general ledgers, and trial balances. I also asked for aged receivable listings, aged payables, and a detailed inventory report. All this information was readily available, and the active owners were more than happy to provide it to me. A copy of the balance sheet is included in appendix A.

## Meeting With the Owners

My next step in the process was to schedule a meeting with the owners. I did not expect much from this meeting, but I believed it was important to establish a baseline for the owners' position regarding Binco's profitability and perceived value. It was also an opportunity for the owners to describe Binco's business history, which possibly included information even the heirs didn't know.

Anticipating that this meeting could be tense, I suggested that it be held in their attorney's office. I have found that this may facilitate getting answers that one might not receive if the shareholders become defensive. Probing questions about an owner's business practices can be perceived as personal. I brought along a nonthreatening-looking accountant from the audit department to act as a secretary. I believe it is less threatening and more efficient if the questioner is not taking notes.

The discussion focused on the history of the business and the problems any growing business would have in a competitive industry. No mention of any related businesses was made. I was informed of the importance of the two active owners to the relative success of the business to this point. I asked for and received a general description of the customers and vendors. I then asked for a verbal description of the offices and warehouse. No mention of an offsite storage location was made. The notes from the meeting were typed up and placed in the file for future reference. I thanked the auditor and sent him back to the staff room.

## CAlling IN THE Force

It was now time to begin relying on some members of the Force. I called Digit in from the field. Digit is a highly trained computer analyst who can prepare a spreadsheet quicker and better than anyone else on the Force. Digit compared the five years of information and made an initial pass at an analytical review. Industry data was obtained and compared with the actual data. All abnormal relationships or trends were identified and sent to a member of the Force who had specially trained in code breaking-me. They call me Snake.

The data Digit provided included a number of expense accounts that reflected dramatic increases over the last five years. Some of the increases appeared to be for obvious reasons, given that revenue had grown substantially. Some accounts had increased out of proportion to revenue, including some overhead accounts. I needed more!

A second request was placed with Binco for the actual invoices supporting the expense numbers reflected in the financial information. My request included the invoices for the long-distance phone expenses. Although phone charges are almost never themselves the source of substantial financial benefit to shareholders, the records of the calls can provide insight into corporate operations. The request was met with a slightly higher level of disdain from Binco. I was told that the information would be provided, but it would take some time. In addition, I was warned that I would find nothing significant and that I would not be allowed to disrupt operations as a result of whims.

I believed it was important at this point to inform my clients that a "smoking gun" had not yet been identified. In fact, I had not identified any gun at all as yet, and patience was required from all parties.

Within a week, I received a call that the information I requested was ready to be reviewed at Binco's offices. I had not yet visited the offices, so I planned to get a tour of the facilities at the same time I reviewed the invoices. My intelligence network (the heirs) had previously informed me of potential inventory problems, so I was operating under a heightened state of awareness. I took the time to call the heirs to obtain any additional information they might have on the layout of the inventory in the warehouse.

Although their knowledge regarding any specifics was marginal at best, they did inform me of a rumor about the existence of an off-site storage facility. They were unsure of its supposed location, but they believed it was in the same general geographic location as the main warehouse.

I was expected at 9 A.M. the next day to meet with Binco's bookkeeper to review the invoices. The night before the meeting, I paid a visit to our equipment room to obtain a few necessary items.

The Forensic Force has specially designed sunglasses for use during a job. They have a special nose piece and a realistic-looking but fake mustache that completely masks the identity of the wearer. I need to warn you that these devices should not be used by amateurs. I also signed out a pair of binoculars and a copy of an old newspaper that we save just for these situations.

## The Visit

I arrived at Binco's location an hour earlier than the scheduled time for the meeting. I drove around the office park in which the building was located, looking for any obvious off-site storage facilities. A number of other buildings were located within walking distance, though none of them had signs indicating what business, if any, was within. My standard-issue Volkswagen surveillance vehicle would have been easily noticed if I simply pulled into the parking lot, so I needed to identify a place that provided a view while letting me remain inconspicuous. I found a perfect location in the lot of a used-car dealer located across the street. I backed into an empty spot and placed the identity-masking equipment on my face. I pulled out the binoculars and pretended to read the newspaper I had signed out from the equipment room the night before.

I waited. I was unsure what I was waiting for, but I knew I would know it if I saw it, and saw it I did. After approximately one-half hour, the side door of the warehouse opened, and two people confidently strode across the road to one of the unmarked buildings and disappeared inside. I had never met any of Binco's employees before, so I was unable to identify the individuals, but I was reasonably confident that they worked for Binco. Was this the site of the fabled, but never seen, off-site warehouse? My heart raced as the potential for locating the smoking gun now grew exponentially.

I removed the masking device from my face and pulled out of the car lot. I drove into the parking lot and walked inside the building at exactly 9 A.M. Though I was excited by the possible discovery of a second inventory storage site, I had to keep things in perspective.

At this point I had no proof that the company's records were not accurate. Any evidence of malfeasance was hearsay from the heirs. Perhaps the two individuals I had seen were visiting the site where office supplies or obsolete inventory is stored. My tone with the Binco accounting people could not be accusatory while, at the same time, if this analysis was to continue much longer, I had to find something and take a position.

The bookkeeper met me and brought me to a conference room with stacks of the invoices I had requested. The bookkeeper asked me why I needed the long-distance phone records. I simply said it was how I learn about a business. The bookkeeper shrugged her shoulders, turned on her heels, and left the room.

The detail review of the invoices supporting the vast majority of the expenses turned up little. Sure, there was the unusual invoice here, a questionable expenditure there, but nothing one would not find in most any closely held business. I began reviewing the long-distance phone invoices when something jumped out at me. Month after month there were numerous phone calls to the same number in Taiwan. But what of it? After reviewing the customer list, I knew that Binco had customers in the Far East, but I was also told that no one customer was dominant. Because of the calls' consistency and duration, it would be hard to believe that they were being made to a normal customer.

## Paydirt

My previous review of the vendor files did not reveal any from Taiwan. Time was running out; if I were going to strike, I had to do it now. I called the bookkeeper back in the room and asked her about the calls to Taiwan. The look on her face and her strained response told it all.
"You will have to talk to the owners about that. I don't know anything about it," she said. I did not let her off the hook that easily.
"Well . . . perhaps you have a large customer or supplier there that requires constant communication," I volunteered. She went for the bait and I had her.
"Oh no, it isn't that at all, but I do prefer that you talk to one of the owners." I suggested that she locate one of the owners so I could do as she requested. Both of the owners arrived at the conference room and they
both looked slightly agitated. I asked about the phone calls and was told in an artificially nonchalant fashion that "the calls were to our Taiwanese company."

This was the opening I was waiting for! I now had the smoking gun that would give me the opportunity to call in the Force without giving the impression that we were on a witch-hunt. The owners provided a few more details about their desire to enter the Far East market. The excuse for doing it outside Binco was to avoid placing too much risk on the business and the minority shareholders. Binco sold goods to the Taiwanese company for overseas resale. It was impossible for me to know whether the sales were at arm's length at this time. In any event, my concern was not so much with the reasons but rather their effects on Binco's operations and profits. I explained that I needed to decide what additional steps would be necessary and that I would be in contact with additional requests. The owners were less vocal regarding objections to additional analysis at this point than they had been before the revelation regarding the Taiwanese company.

I returned to base and immediately put out the call to the Force to return from the field. We needed to review all relevant facts in our possession and determine a course of action. We met in the Force's ready room, which contained comfortable seats, a blackboard, and a computer that had solitaire permanently available on the screen (stress relief is important to the Force).

With the members of the Force comfortably seated, I began a review of the facts. Foremost among them were the sales to a related party and the possibility of off-site storage. The financial reports indicated that Binco was profitable and compared favorably with the margins of much larger companies. However, my visit to Binco left me with the impression that overhead appeared to be low, despite some exceptions, and therefore the margins should be significantly higher than those of their larger competitors. We also had reason to believe that sales to a related party, the Taiwanese company, may have been made at less than arm's-length prices. However, we were not yet convinced of the materiality of the related-party issues.

Binco did not have a sales force and used telemarketing to sell directly to physicians. Sales were made using credit cards and purchase orders, and as a result we did not believe there was much opportunity for unrecorded sales other than those possibly made to the related party. We determined that our focus would be on the inventory and proceeded to design a plan of attack.

## Proving the Existence of the Unrecorded Sales

It was decided that we would request a physical inventory at which we would be present to observe and test count. We requested and received permission in writing to perform whatever tasks we determined would be necessary to complete the inventory analysis. However, we were given a forty-eight-hour deadline and were informed that no employees would work overtime.

One member of the Force, who was still not broken of all of his financial statement auditing habits, complained that taking an inventory with these limitations would be fruitless because only reviewed financial statements were prepared and that the opening inventory number would not be accurate. He went on to mention that the four of us would be inadequate to observe and test an inventory with the more than 12,000 SKUs that Binco currently had listed on its inventory reports. Being the leader of the Force requires patience and the ability to communicate directly with trained auditors. I put these skills to the test when I explained that we do not need perfection but need only show that a substantial inventory adjustment may or may not be required as a result of our efforts.

The actual amount of the adjustment can be determined through a reasonable extrapolation of the facts. It would be up to the inside owners to determine how to account for any subsequent adjustments on their financial statements and tax returns. Any effects of penalties would be borne by the decision-maker shareholders and not affect the valuation. We only needed to arrive at a fair number for our clients to be paid for their stock.

We all decided that the most likely scenario is that the inventory was going to be understated. Binco never had its financial statements audited and it was a closely held business that would prefer lower taxes as opposed to higher reported earnings. We also suspected that the sales to the related Taiwanese company would impact inventory to some degree. We then began to formulate a plan.

We would request an inventory count be performed at the end of the current month. This gave Binco approximately two weeks, which was enough time to plan but not enough time to move an extensive amount of inventory to any unidentified sites. The two-week delay gave us additional time to plan for the inventory attack.

I knew that the warehouse covered two floors and included space that was not in the line of vision from either end of the building. This would allow movement of inventory if the space were not secured in some manner. The inventory included so many different individual kinds of items that it was difficult to plan for every contingency. For example, some types of instruments were sold individually and therefore counted individually while others were sold in bundles and were counted together. Some were stored on pallets and others stored on individually marked shelving. Only I had seen the warehouse, so it was important for the safety of the Force that I be able to describe it adequately. The tension was building, so at this point we turned to solitaire on the PC for an escape valve.

The day before the count was to occur, Binco's controller requested that we not bring more than two people to the inventory observation. I was told that more people would not be necessary, as the inventory count would be accurate, and that we would just be wasting our time. Naturally, I smelled a rat. I was more sure than ever that we would need all four Force members. We also would need some special equipment. I took the elevator from the ready room to the basement. In the far corner is a locked door with a security system requiring me to place my hand into a receptacle, where a laser read my fingerprints. Once my prints were
confirmed, the door opened automatically. Inside were shelves of hightech equipment that required special training to use. I selected a solar powered calculator and slipped it into the holster under my jacket. I selected a mini-calculator and slipped it into my sock. There is no such thing as being overprepared. I looked for and found the small locked case where the most valuable equipment is kept. I pulled out my special-issue key and opened the case. Inside was the device that would end up being a critical tool in identifying the evidence we would need to complete our job.

This device looked very much like a Polaroid instant camera. In fact, it was a Polaroid instant camera. I took it along with two packages of film and relocked the door. It was now time to assign specific tasks to the Force. I reentered the ready room and began to hand out assignments. I gave Buzz the camera and told him he would be responsible for taking the pictures. The idea was to take pictures of relatively high-value items on the first day of the count. The actual count was going to take two days, as Binco refused to pay overtime, so it was important to know if inventory was moved during the night. I knew that the owners would not approve of the camera, as they wanted only two of us there to begin with. Buzz was concerned that he would be covered during the inventory count and would not have the opportunity to take the pictures. I told Buzz that it was going to be my responsibility to free him up so he could take the pictures, unobserved by Binco personnel. The camera was going to have to be hidden in Buzz's backpack until it was needed.

We arrived at Binco's offices at the agreed-upon time. The controller met us and immediately voiced his displeasure over the number of people I had brought with me. I explained that the number of SKUs required a large team if we were going to complete the observation and test counts within our two-day limit. I assured him that this would be to the company's benefit. Digit was assigned to observe and test count with the controller. Larry was to count with the inventory manager, and I was going to float in and out of the various areas and do what I do best: supervise. With the company personnel kept busy, the owners attempted to keep an eye on me by periodically visiting me and inquiring about our progress. This freed up Buzz to visit areas where the counts were completed and the personnel had gone to other parts of the warehouse.

This was Buzz's opportunity to take the pictures.
The existence of the outside storage site had still not been confirmed or denied by the owners. I waited until I was sure this information was not going to be volunteered. I waited until I was told that all areas had been counted. I waited until we had been escorted to all areas of the warehouse for observation. It was at this point that I asked the controller about the site across the street where I had seen who I now knew to be the inventory manager and the controller enter. The controller stammered ever so slightly as he tried to explain that the site contained experimental and obsolete inventory.

I assembled the Force and explained that we needed to see the facility and confirm its contents were of no consequence to the value of the inventory. Reluctantly, the controller marched us across the street and unlocked the door to the site. Inside were shelves of what appeared to be perfectly good items that we were told were obsolete. These items were
identified and counted by the team. It was now time to convene a meeting with the members of the Force and plan the next step.

The Force met in Binco's conference room at the end of the first day. We were tired and yet had a sense of accomplishment with a job at least partially complete. The plan was to meet back at the warehouse early the next morning to complete the test counts and to decide on what to do with the inventory across the street.

We expected to need only a few more hours to complete the task. The next morning, I surveyed the areas we had counted the night before. Something was wrong, but I did not know if it was my memory or if pallets had been moved. Now I was pleased with the decision to bring the camera, as the pictures Buzz provided clearly showed that inventory had been moved during the night. I instructed Buzz to take another set of pictures from the same locations as the first set. We would compare the two in an attempt to identify the scope of the changes. Buzz courageously disappeared among the storage racks in an attempt to complete his assignment. I was not prepared for what happened next. I heard yelling about four aisles away, and immediately knew Buzz had been discovered with his camera. I headed in the direction of the yelling, where I found the owners berating Buzz for taking the pictures and demanding an immediate meeting with me in the conference room.

Once we were in the conference room, the owners went through a tirade on how they did not believe taking pictures was fair and that they never would have agreed to the inventory if they had been warned ahead of time. I explained that this was exactly the point, and that if there were nothing to hide, the pictures would be irrelevant. I reminded them that they both had given me permission to do what I believed was necessary to complete the inventory within the time limitations they placed on us. I explained that without proper security, which they were unwilling to provide, the camera became a necessity. When faced with this logic, both owners sat down, took deep breaths and told me the story.

## The Truth Comes Out

Sales had grown dramatically over the last five years, when both owner physicians left their practices and dedicated their complete attention to the business. The accounting systems were not up to the task of keeping track of so many individual SKUs and, as a result, the inventory was being understated in the system. There was no bank debt, so audited financial statements were not required. The physical inventories, when taken, were less than perfect without an accounting firm observing or taking test counts. The net result was five years of understated inventory and profits.

To the owners' credit, they had attempted to rectify the situation in the previous year by bringing on a piece of the undercounted inventory, which resulted in a significantly larger ending inventory than the previous year end's. The owners had become nervous as a result of the growth in sales, and the controller had warned them that some day the piper would have to be paid. Today's problem was how to get the rest of the inventory back into the system and prepare a valuation after
restating the past five years for the inventory adjustment. It was not going to be as simple as restating the ending inventory and picking up all the profit in the current year. The valuation was going to have to be based on a history of profits and relative growth of sales and income over the last five years. Accordingly, we designed the following procedure.

The result of our analytical review revealed that inventory increased $\$ 327,000$ during the current year and had increased $\$ 535,000$ in 1996 , the previous year. The large increase in 1996 was apparently a result of the partial correction made by the owners. As a result, we performed an additional analysis of changes in inventory as of December 31, 1992 through 1995 on appendix B. Our analysis concluded that inventory rose an average of 9.5 percent each year for those four years.

Because we believed both 1996 and 1997 inventory amounts were inaccurate, we applied the 9.5 percent to the beginning inventory amount for 1996 to determine a revised ending inventory for 1996. The percentage was then applied to this new ending inventory to calculate the revised ending inventory for 1997. We believed this amount more accurately reflected the level at which Binco's inventory should have been, had proper inventory counting been in place the past five years. These calculations are shown on appendix $C$.

The difference between the reported and revised ending inventories for 1997 was $\$ 624,000$. We divided this amount by five years and allocated this amount to the years ended 1992 through 1996, using the theory that the buildup of inventory was ratable over the years, which shadowed the growth in sales. The result is the revised ending inventory as of December 31, 1992 through 1996 and September 30, 1997.

The change in inventory naturally caused other line items in the financial statements to change. The consequence was to adjust net income, retained earnings, tax expense, and accrued income taxes.

We recalculated income-tax expense as a result of the change in net income before taxes. In addition, accrued income taxes needed to be revised. Any differences between the revisions for inventory and accrued income taxes would be reflected in retained earnings.

We also needed to revise the income statement as a result of revising the ending inventory. We were provided information for the years ended December 31, 1992 through 1996 and for the nine months ended September 30, 1997.

Appendix D calculates the revised cost of sales as a result of the revision to ending inventory for all years. We added back the reported ending inventory and subtracted the revised ending inventory.

The revised balance sheets and income statements for all years are shown on appendixes $E$ and $F$, respectively. As a result of the revisions made, income was more evenly spread throughout the six years included in the analysis.

We were now ready to proceed with the valuation using the revised financial statements. And the Force celebrated, with the knowledge of a job well done.

## Appendix A

## Bones Instrument Co. Comparative Balance Sheets Using Reported Amounts <br> <br> December 31, 1992 Through December 31, 1996 <br> <br> December 31, 1992 Through December 31, 1996 and September 30, 1997

 and September 30, 1997}| Description | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Current assets |  |  |  |  |  |  |
| Cash | \$ 60,000 | \$ 254,700 | \$ 8,500 | \$ 265,000 | \$ 90,000 | 293,700 |
| Accounts |  |  |  |  |  |  |
| receivable | 1,025,000 | 981,500 | 1,171,400 | 1,026,500 | 1,135,400 | 1,357,100 |
| Inventory | 860,000 | 884,600 | 1,227,900 | 1,194,300 | 1,728,900 | 2,055,800 |
| Total Current Assets | \$1,945,000 | \$2,120,800 | \$2,407,800 | \$2,485,800 | \$2,954,300 | \$3,706,600 |
| Fixed assets |  |  |  |  |  |  |
| Property, plant, and equipment | \$1,038,550 | \$1,049,150 | \$1,101,350 | \$1,113,050 | \$1,188,050 | \$1,251,550 |
| Accumulated depreciation | 739,500 | 813,200 | 882,900 | 934,500 | 1,006,500 | 1,042,100 |
| Total Fixed |  |  |  |  |  |  |
| Assets | \$ 299,050 | \$ 235,950 | \$ 218,450 | \$ 178,550 | \$ 181,550 | \$ 209,450 |
| Other assets | 196,800 | 241,600 | 284,000 | 354,000 | 805,300 | 878,200 |
| Total Assets | \$2,440,850 | \$2,598,350 | \$2,910,250 | \$3,018,350 | \$3,941,150 | \$4,794,250 |

Liabilities and
stockholders' equity
Current liabilities


## Appendix $\mathbf{A}$ (continued)

| 1992 |
| :---: |
| 1993 |


| Stockholders' equity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common stock | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 |
| Retained |  |  |  |  |  |  |
| earnings | 1,461,000 | 1,542,300 | 1,759,900 | 1,892,750 | 2,142,950 | 2,835,150 |
| Retained |  |  |  |  |  |  |
| earnings (Sub S) | $(8,250)$ | $(8,250)$ | $(8,250)$ | 0 | 0 | 0 |
| Total |  |  |  |  |  |  |
| Stockholders' |  |  |  |  |  |  |
| Equity | \$1,473,750 | \$1,555,050 | \$1,772,650 | \$1,913,750 | \$2,163,950 | \$2,856,150 |
| Total |  |  |  |  |  |  |
| Liabilities and |  |  |  |  |  |  |
| Stockholders' |  |  |  |  |  |  |
| Equity | \$2,440,850 | \$2,598,350 | \$2,910,250 | \$3,018,350 | \$3,941,150 | \$4,794,250 |

## Appendix B

Bones Instrument Co. Calculation of Average Inventory Change Percentage

| Description | 1992 | 1993 | 1994 | 1995 | Average |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ending inventory (A) | \$860,000 | \$884,600 | \$1,227,900 | \$1,194,300 | \$1,041,700 |
| Beginning inventory (A) | 832,700 | 860,000 | 884,600 | 1,227,900 | 951,300 |
| Change | \$ 27,300 | \$ 24,600 | \$ 343,300 | \$ (33,600) | \$ 90,400 |
| Change as a percentage of beginning inventory | 3.28\% | 2.86\% | 38.81\% | -2.74\% | 9.50\% |

(A) Refer to appendix A.

## Appendix C

## Bones Instrument Co.

 Calculation of Revised Ending Inventory| Description | 1996 | 1997 |
| :---: | :---: | :---: |
| Beginning inventory | \$1,194,300(A) | \$1,307,759 |
| Average percentage change | 9.50\% (B) | 9.50\%(B) |
| Ending inventory | \$1,307,759 | \$1,431,996 |

(A) Refer to appendix A.
(B) Refer to appendix B.

## APPENDIX D

## Bones Instrument Co.

## Calculation of Revised Cost of Sales

| Description | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reported cost of sales | \$ 9,390,000 | \$ 9,670,300 | \$ 10,195,500 | \$ 11,130,100 | \$ 11,526,700 | \$ 8,261,000 |
| Plus reported ending inventory | 860,000 | 884,600 | 1,227,900 | 1,194,300 | 1,728,900 | 2,055,800 |
| Less revised ending inventory | $(984,761)$ | $(1,009,361)$ | $(1,352,661)$ | $(1,319,061)$ | $(1,853,661)$ | (1,431,996) |
| Revised cost of sales | \$ 9,265,239 | \$ 9,545,539 | \$ 10,070,739 | \$ 11,005,339 | \$ 11,401,939 | \$8,884,804 |

(A) Refer to appendix $A$.
(B) Refer to appendix $\mathbf{E}$.

## Appendix E

Bones Instrument Co.
Comparative Balance Sheets
Using Revised Amounts
December 31, 1992 Through December 31, 1996, and September 30, 1997

| Description | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Current assets |  |  |  |  |  |  |
| Cash | \$ 60,000 | \$ 254,700 | \$ 8,500 | \$ 265,000 | \$ 90,000 | \$ 293,700 |
| Accounts |  |  |  |  |  |  |
| receivable | 1,025,000 | 981,500 | 1,171,400 | 1,026,500 | 1,135,400 | 1,357,100 |
| Inventory (A) | 984,761 | 1,009,361 | 1,352,661 | 1,319,061 | 1,853,661 | 1,431,996 |
| Total Current Assets | \$2,069,761 | \$2,245,561 | \$2,532,561 | \$2,610,561 | \$3,079,061 | \$3,082,796 |
| Fixed assets |  |  |  |  |  |  |
| Property, plant, and equipment | \$1,038,550 | \$1,049,150 | \$1,101,350 | \$1,113,050 | \$1,188,050 | \$1,251,550 |
| Accumulated depreciation | 739,500 | 813,200 | 882,900 | 934,500 | 1,006,500 | 1,042,100 |
| Total Fixed |  |  |  |  |  |  |
| Assets | \$ 299,050 | \$ 235,950 | \$ 218,450 | \$ 178,550 | \$ 181,550 | \$ 209,450 |
| Other assets | 196,800 | 241,600 | 284,000 | 354,000 | 805,300 | 878,200 |
| Total Assets | \$2,565,611 | \$2,723,111 | \$3,035,011 | \$3,143,111 | \$4,065,911 | \$4,170,446 |

Liabilities and
stockholders' equity
Current liabilities
$\left.\begin{array}{lrrrrrrrrr}\text { Current liabilities } & & & & & & & & \\ \begin{array}{l}\text { Notes due }\end{array} & \$ & 25,000 & \$ & 40,000 & \$ & 0 & \$ & 25,000 & 80,000\end{array}\right)$

Noncurrent
$\begin{array}{lllllll}\text { liabilities } & 339,500 & 404,400 & 339,500 & 391,900 & 851,700 & \mathbf{7 8 6}, 000\end{array}$
(A) The difference between 1997 reported inventory and revised inventory was averaged and used to revise inventory amounts for the years 1992 through 1996.

|  | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stockholders' equity |  |  |  |  |  |  |
| Common stock | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 |
| Retained earnings (B) | 1,585,761 | 1,667,061 | 1,884,661 | 2,017,511 | 2,267,711 | 2,371,959 |
| Retained earnings (Sub S) | $(8,250)$ | $(8,250)$ | $(8,250)$ | 0 | 0 | 0 |
| Total |  |  |  |  |  |  |
| Stockholders' |  |  |  |  |  |  |
| Equity | \$1,598,511 | \$1,679,811 | \$1,897,411 | \$2,038,511 | \$2,288,711 | \$2,392,959 |
| Total |  |  |  |  |  |  |
| Liabilities and |  |  |  |  |  |  |
| Stockholders' |  |  |  |  |  |  |
| Equity | \$2,565,611 | \$2,723,111 | \$3,035,011 | \$3,143,111 | \$4,065,911 | \$4,170,446 |

(B) Retained earnings for all years were revised to reflect the change in inventory.

## Appendix F

## Bones Instrument Co. Comparative Income Statements <br> Using Revised Amounts

Years Ending December 31, 1992 Through December 31, 1997

| Description | 1992 | 1993 | 1994 | 1995 | 1996 | Projected $1997 \text { (A) }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net sales | \$12,370,600 | \$12,608,300 | \$13,741,100 | \$14,696,500 | \$15,613,000 | \$16,012,272 |
| Cost of sales (B) | 9,265,239 | 9,545,539 | 10,070,739 | 11,005,339 | 11,401,939 | 11,846,400 |
| Gross profit | 3,105,361 | 3,062,761 | 3,670,361 | 3,691,161 | 4,211,061 | 4,165,872 |
| Operating expenses | 2,741,100 | 2,794,400 | 3,119,100 | 3,211,200 | 3,578,800 | 3,720,000 |
| Net income from operations | \$ 364,261 | \$ 268,361 | \$ 551,261 | \$ 479,961 | \$ 632,261 | \$ 445,872 |
| Net other income (expenses) | $(39,300)$ | $(47,200)$ | $(49,800)$ | $(40,700)$ | $(35,900)$ | 149,000 |
| Net income before income taxes | \$ 324,961 | \$ 221,161 | \$ 501,461 | \$ 439,261 | \$ 596,361 | \$ 594,872 |
| Income taxes |  |  |  |  |  |  |
| Federal | \$ 63,000 | \$ 15,100 | \$ 148,600 | \$ 135,400 | \$ 166,700 | \$ 151,233 |
| State | 0 | 0 | 10,500 | 38,000 | 54,700 | 58,839 |
| Total Income Taxes | \$ 63,000 | \$ 15,100 | \$ 159,100 | \$ 173,400 | \$ 221,400 | \$ 210,072 |
| Net income | \$ 261,961 | \$ 206,061 | \$ 342,361 | \$ 265,861 | \$ 374,961 | \$ 384,800 |

(A) 1997 amounts are annualized.
(B) Refer to appendix D.

# CASE STUDY C-ARCHITECT 

Nicholas L. Bourdeau, CPA/ABV<br>Nicholas L. Bourdeau, CPA/ABV<br>Great Falls, Montana

The only reason I have had any success in forensic accounting is because attorneys really hate numbers. It's not that attorneys are not intelligent, but the real reason they became attorneys was to deal with words, ideas, and shades of gray. Something as definitive and uncompromising as a number just makes them nervous.

As part of my regular continuing professional education seminars, I teach lawyers how to run software that computes child-support payments. This means I take a group of people who really hate numbers and explain the numbers in a way that is nonthreatening. It's like desensitizing someone to spiders.

One distinguished-looking attorney in the back of the room had obviously never sat at a computer keyboard. My office manager, Vickie, finally stationed herself over his left shoulder to help him keep up with the class. During the break he came up to me and said, "Thanks for letting Vickie help me. I really don't do many child support calculations."

I thought, I know, but said, "No problem."
He continued, "I usually have my secretary do them, but I wanted to see how you handled yourself, so I came to the class myself. You see, I've got this case. . .."

Two weeks later, I was sitting in his office discussing one of the community's more prominent individuals, Stan Tempton.

Stan's wife, Nancy, had filed for divorce, bringing her attorney Bart Chambers-and consequently me-into the picture. The questions before us were what Stan's architectural practice was worth and how much maintenance (alimony) should be awarded to Nancy.

## The Starting Point

I started with the usual tax returns and the financial statements being used to obtain operating loans from the bank. I didn't notice anything terribly unusual when I first started, except that the architectural firm was designed for individuals who were practicing in a highly litigious field and expected to be sued. The firm practiced as a partnership in which the partners were two Subchapter S corporations and the only stockholders of the Sub Ss were the two architects (see appendix A). My first question was whether they had ever been sued. They hadn't. So maybe the design was just healthy paranoia. It wasn't.

I did my standard information request, and the response was basically that we would have to go to court and have a hearing on each of the items I requested. I would have to explain to the court exactly what I needed, how it was relevant, and then reveal all the consequences of the firm providing the item I requested.

I would be accused of going on a fishing expedition, and I would explain that the process was a financial investigation. I wouldn't know what I was searching for until I found it. For example, when a policeman interviews a suspect, it doesn't work to write down the questions that he's going to ask. The questions that are going to be asked develop or arise during the course of the interview.

However, worthy judges are very aware of the need for financial disclosure and don't hesitate to make everyone reveal everything. Stan's denying me access to his financial records was really nothing more than a stall. What it really meant was that something was wrong.

## The Interviews

While Bart took on the arduous task of putting some sense into opposing counsel, I began interviewing the parties. I started with Nancy. All she really wanted in life was to get her kids raised, which she had done successfully, and live without pain. When Stan started dating publicly, her pain tolerance was exceeded.

I asked her the usual questions about standard of living, who handled the finances, what she knew about the architectural practice, and so on. You have to be careful when interviewing spouses. In the first place, they are angry. They want someone to listen to their side of the story and agree with them that their soon-to-be-ex is a jerk. So I usually set aside the first part of the interview to hear their side of the story. Although most of the time it is usually just venting and rending of garments, I listen dutifully. In the first place, I get a sense of the emotional status of the person, so I can either believe them or not. Their emotional status also is an indication of what kind of a witness they will be and how much time the attorney and I will have to spend in preparing them to testify. Spouses of business owners always know more than they think they do about the family finances and the business itself. And finally, there is often a black kind of humor in some of the things people will do to each other, and in this business you take your entertainment where you find it.

After Nancy had told her side of the story, I started pressing past the emotions involved and into the area of financial investigation. I had her describe the family's standard of living, vacations taken, college tuition paid, gifts purchased, vehicles driven, cost of the house in which they were living, and so forth. They were somewhere at the bottom end of upper class. I checked on the husband's absences, consumption of resources, and vices, and finally, I asked about girlfriends.

Nancy's response to the last question started off with, "Do you have any idea how long he has been fooling around?" I didn't but had a good idea I'd be told. And as far as I was concerned, it really didn't matter. It is important to know girlfriends exist. Girlfriends cost money. The guy is paying rent on the girlfriend's apartment, buying her gifts, having meals delivered to her place, or escaping to Vegas for a weekend. Therefore, the business owner has to have a source of funds to make the relationship function. This does not mean that he gets paid a salary by his Sub S corporation every two weeks, comes home, and gives his wife the checkand no other funds transfer to the owner until the end of the year. Instead, it means the Sub S corporation cuts a check to the owner's wife every week for an amount to cover the costs of the household, and the owner then takes a separate paycheck or a draw. The wife never sees the total earnings of the business owner.

After Nancy had calmed down, I asked her if she knew how much money her husband made. She thought for a minute and said, "Well, until last year I don't think the total earnings were much over $\$ 60,000$. Some years, a lot less."
"Nancy," I ventured, "Doesn't it seem unusual to you that you are living in an expensive house, have put three children through school, always paid cash for a new car every couple of years, and have taken some very expensive vacations-all on an income that has never averaged more than $\$ 50,000$ ?"

She stared at her hands clenched in her lap, "I never really knew anything about our finances. I should have paid attention, but everything was always okay, so I didn't want him to get angry by asking questions."

I asked, "Did he get angry when you asked questions about money or finances?"

She looked at me. "He'd just go nuts. I mean he was very defensive, shouting that it was none of my business and I should just keep my nose out of it."

I asked her if Stan had ever had his business pay for any personal expenses of the family. She replied that once in a while when they were going out to eat, he would stop by the office to get a business check to cover the cost.

After a bunch more questions, the scent was in the water, but without the financial records I wasn't anywhere close to being court ready. I asked Nancy if there were any ex-employees I could talk to about the office and how it was run. She said, "Margo, my best friend, worked there until last year. She was kind of the office manager and should be able to tell you just about everything that went on."

## The Office Manager

So I went to see Margo. Her smile when she shook my hand was the last smile I saw from her. I told her who I was and what I was doing. She was obviously uncomfortable and her fight-or-flight response was in high gear.

I asked, "What was your relationship to Stan Tempton?"
Her voice caught and her hand danced across her lips. "You have to understand. Nancy and I were good friends."

I thought, Were good friends?
She continued, "I just don't want her hurt anymore."
It's amazing the stuff you walk into. If Margo had been involved with Stan, I was looking at skewed answers to my questions. I had been prepared for skewed answers anyway, but this put a whole new spin on everything.

I responded, "I thought you were the office manager."
She looked surprised. "Yes, that's right."
"Well, let's talk about your job responsibilities." I fenced around the real issue I wanted to talk about, as Margo's voice steadied and her breathing returned to normal.
"Margo, who did the bookkeeping for the partnership?"
She replied, "I did."
"Did you also do the bookkeeping for the two Subchapter S corporations?"

She said, "For one of them I did. Stan always sent his checks and everything to a bookkeeper named Linda in Sheridan."
"Sheridan?" I asked, "Why Sheridan? That's a long way from here."
Margo replied, "Well, Stan and Linda go way back. She's been doing his books ever since before the original partnership was dissolved. After the new partnership and the Subchapter $S$ corporations were formed, she continued doing the books just for Stan's corporation, even when she moved to Sheridan."

I asked, "Why were the new partnership and corporations formed?"
"Stan and his partner were constantly fighting over what expenses the partnership would pay," she said. "Stan thought that the partnership should pay for all the partners' office furniture and their business trips, even if they were not all business. It caused a lot of problems, because Stan's partner is kind of a Spartan and Stan really likes nice stuff."

The interview provided me with a new level of confidence and direction. I knew with a virtual certainty that the tax returns of the partnership would be clean. That is, the likelihood of the returns containing any personal expenses that should be added back to income would be practically nil. I also knew from reviewing the tax returns that Stan's 1040 wouldn't be adjusted, because all it showed was the income from the Sub $S$ in the form of wages, and the difference between the wages and the actual earnings of the Sub $S$ coming in through Schedule E. In addition, the itemized deductions claimed by the couple on the 1040 were minimal. So the field of inquiry was dramatically reduced.

## An Expert in the Business

My next interview was with another architect. If possible, I always find someone else in the same occupation to talk to when determining business values or making adjustments in pursuit of a fair amount of economic income to be recognized. I asked about cash income, unusual transactions that could occur, how he was cheating on his tax returns-the usual. We agreed that with multiple entities, it would be possible to divert a check from the partnership to one of the Sub S corporations without too much trouble. It would require collusion between one of the partners and the bookkeeper, but perhaps, knowing Stan, this would not be a big problem. The architect also said that unreported cash transactions were not going to be a problem. He couldn't remember ever having been paid in cash.

I had to decide whether to pursue the concept of payment diversion. I believed that basically, we had two very different individuals involved in the firm. Stan's partner was looking like a straight arrow, and Stan was looking a little more fast and loose. I finally decided that the presence of Stan's partner as watchdog was probably enough internal control to protect me. After all, he had taken substantive steps to protect himself from Stan's activities years ago. I let it go.

The partnership's income and its division traced to the income of Stan's Subchapter $S$ corporation. This meant that he wasn't failing to report income from the partnership. In addition, the same CPA was handling the partnership and Sub S tax returns. He'd make sure they matched. If there was any adjustment to be found, it was in the expenses of Stan's Subchapter $S$ corporation. It was time to talk to the CPA.

## The Business' Accountant

Jessie Malcolm, CPA, instills confidence in his clients and does a respectable job. He also likes to take the position of his clients and will fight to the death for their cause. However, our profession has made a subtle, but very important, distinction between attorneys and CPAs: Attorneys are proponents for their clients; CPAs are proponents for a position-that is, an opinion, value, or an idea. This means that when the CPA's opinion varies from the client's best interests, the CPA really can't change that position to suit the client's needs. I've been doing this work for a long time and realize the distinction-and that's also why I get hired only half the time.

Jessie and I started talking about the clients in general terms. We discussed the nature of the firm structure, how it was working, if he had ever had any problems with personal expenses being claimed, and what kind of work he had done on the valuation of the firm. He replied that he'd never had a problem with personal expenses being claimed, and that he had not done any work on the valuation of the firm.

The recording of personal expenses usually occurs at the bookkeeper level. The boss tells the bookkeeper, "The costs for my trip to China go into supplies expense. Understand?" Either the bookkeeper understands or the new bookkeeper will.

## The Evidence

I left Jessie and returned to my office. I got a call about an hour later from the architect firm, letting me know that some additional records were available and that I had forgotten to take a copy of the most current partnership financial statements. In reality, it was something they had just decided to release, because they knew it didn't contain anything useful. I knew it too by this time, but decided to pick it up anyway.

When I arrived at the firm, I was ushered into a conference room. In the middle of the conference table were Jessie's files for the partnership and the two Subchapter $S$ corporations. I found the usual stuff and fifteen or twenty pages of work on the valuation of the firm, from worst case to best case. I took the business valuation sheets to the front desk and gave them to the secretary to copy. I received the copies and left.

I went back to my office, called Bart and told him to expect a firestorm. It came about fifteen minutes later, when Jessie stormed into my office. He was totally flushed and perspiring heavily, looking a lot like a grape Popsicle sitting in the sun. He fumed for a while, and when he started repeating himself, I assured him I hadn't found anything of use. His sails waffled a bit, and he left.

In fact, I had told Jessie the truth: There wasn't anything in his file I could use. However, I could use what wasn't in the file. Jessie hadn't done the adjustments to take the income of the Subchapter $S$ corporation from taxable income to economic income. Jessie had not made the adjustments to recognize the total benefits the corporation was providing to the owner. This meant that he didn't have the figure essential to value the corporation, set child support, or determine alimony.

I met with Bart and Nancy and told them that I had found the single most likely spot for adjustments to the income of her husband and needed the records to make the adjustment. I was told that Stan and his attorney had formalized their stonewalling by putting in a motion to deny discovery of the records of Stan's corporation. The hearings and assorted attorney posturing would delay the divorce by two to four months. Nancy was furious.

When we left Chambers office she grabbed my sleeve and asked, "If you could have one document from the corporation right now, what would it be?"

I said, "The check register. It would give us a list of expenditures and evidence that the costs were claimed as business expenses. If he hasn't doctored the record, it will tell us where he's been spending his money."

Two days later, I got a call from Nancy to meet with her. I don't trust or believe anybody in a divorce and always avoid meeting either party alone, but in this case I made an exception. When I got there, she met me with a canary-eating grin. Without a word she handed me the check register for the corporation for the last six months of the last fiscal year.

The evidence was stunning. There were expenditures for everything imaginable. There was a trip to Vegas that Nancy had known nothing about, and expenditures for a coin collection that hadn't been disclosed as a marital asset. The couple's daughter had been at Yale for the last three years and hadn't set foot in the firm since she left for school, yet she was treated as a corporation employee and was receiving a corporate
paycheck, complete with withholding, every two weeks. There were airline tickets to Florida to kill fish-big fish-and the cost for mounting and stuffing the big fish was in the supplies expense.

I spent a day summarizing the expenses and calling payees on the checks to determine the nature of the expenditures. Normally, businesses do not like to reveal personal information concerning their customers. So I restricted my questions to the general nature of the business: what they sold or the service they provided. All businesses will gladly share that information. Then I compared the nature of the business being paid to the nature of the architectural firm. If it wasn't likely that the business being paid would be supplying something the architectural firm needed, I tossed out the cost. For example, I couldn't explain what an expenditure of $\$ 650$ to a local woman's clothing store had to do with running an architectural firm. Neither could Nancy, but she was a lot more vocal about it. The work was somewhat tedious, but rewarding.

I talked with Bart and told him about the unusual discovery process. He indicated that bits and pieces of records were finally being delivered to his office. They appeared to be almost random in nature, were not numbered serially, and Bart indicated that Stan and his attorney had probably lost control of their response to discovery. That turned out to be the case. The source of the check register, or its validity, was never challenged.

Stan loved his checkbook, but not all his expenditures were by check. He had two credit cards that he used on a regular basis. His corporation paid the monthly statements on the cards. Some of the supporting documentation on the credit cards had leaked in through discovery, but for the most part, the nature of the expenditures remained undisclosed. This caused a problem. We did not have perfect evidence.

As an expert witness I was asked for an opinion. I was asked if it would be fair for the court to use my representations of Stan's economic income in the determination of the value of his architectural practice, and for the determination of child support and maintenance. This means that I didn't have to have perfect information. It did mean that my opinion had to be fair. I had done enough work to form a fair opinion.

My final analysis stated that virtually 100 percent of the expenses of Stan's Subchapter $S$ corporation were not associated with the generation of the income of the corporation. In my statement, I adjusted all the expenses of the corporation for all years to zero. I relented a little-I allowed a nominal cost, $\$ 300$, for automobile operation in each year. The small risk I accepted in adjusting all the expenses to zero as part of my opinion was ultimately justified. See the analysis in appendix B.

Jessie challenged the adjustments to the expenses of the corporation repeatedly in court. About the fourth time that Jessie said, "The expenses of the corporation are valid and legitimate and have been allowed by the IRS," the judge leaned over the bench, looked down at Jessie, and asked, "Did you review the expenditures of the corporation?" His answer was a succinct "No."

Then it was my turn on the witness stand. I read through about twothirds of the list of expenditures before the judge got tired of listening to me. In part, the judge's opinion read, "I really don't have a clue about what the IRS would think about the expenditures that are claimed on

Stan Tempton's corporate tax return; however, it is the opinion of this court that the economic income of the subject is obviously much greater than that which has been reported on the couples' tax return. Therefore..."

That was all I ever really wanted.

## Appendix A

## Partnership Structure



Subchapter S corporation

Stockholder—Stan Tempton
$\downarrow$
Form 1040

Taxpayer-Stan Tempton

Subchapter S corporation

Stockholder-Architect B


Taxpayer-Architect B

## Appendix B

Tax Return Analysis
Stan Tempton, P.C.
Fiscal Year End

|  | 1992 | 1993 | 1994 | 1995 | 1996 | Average | Weighted Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Partnership income | \$114,812 | \$90,138 | \$75,295 | \$107,916 | \$191,034 | \$115,839 | \$127,187 |
| Returns and allowances | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | \$114,812 | \$90,138 | \$75,295 | \$107,916 | \$191,034 | \$115,839 | \$127,187 |
| Cost of goods sold | 0 | 8,803 | 22,272 | 0 | 0 | 6,215 | 5,628 |
| Gross profit | \$114,812 | \$81,335 | \$53,023 | \$107,916 | \$191,034 | \$109,624 | \$121,559 |
| Interest | 85 | 15 | 0 | 0 | 0 | 20 | 8 |
| Other income (loss) | (108) | (406) | $(11,838)$ |  |  | $(2,470)$ | $(2,429)$ |
| Gross income | \$114,789 | \$80,944 | \$41,185 | \$107,916 | \$191,034 | \$107,174 | \$119,138 |
| Compensation -officers | \$ 32,300 | \$25,094 | \$ 0 | \$ 20,000 | \$ 25,675 | \$ 20,614 | \$ 19,391 |
| Salaries | 18,200 | 8,206 | 0 | 8,000 | 8,000 | 8,481 | 7,107 |
| Repairs and maintenance | 0 | 0 | 1,440 | 695 | 175 | 462 | 532 |
| Bad debts | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rents | 166 | 5,724 | 5,842 | 5,216 | 460 | 3,482 | 3,487 |
| Taxes and |  |  |  |  |  |  |  |
| licenses | 9,556 | 989 | 2,337 | 3,364 | 4,245 | 4,098 | 3,548 |
| Interest | 744 | 839 | 643 | 793 | 2,292 | 1,062 | 1,266 |
| Contributions | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net depreciation | 2,092 | 988 | 1,211 | 2,139 | 9,033 | 3,093 | 4,095 |
| Amortization | 650 | 1,468 | 1,468 | 978 | 978 | 1,108 | 1,119 |
| Advertising | 2,229 | 26 | 1,831 | 1,400 | 212 | 1,140 | 962 |
| Pension profit sharing | 0 | 0 | 0 | 4,200 | 0 | 840 | 1,120 |
| Employee benefits | 0 | 0 | 56 | 0 | 0 | 11 | 11 |
| Permits and licenses | 791 | 0 | 738 | 483 | 0 | 402 | 329 |
| Meals and entertainment | 0 | 0 | 0 | 0 | 644 | 129 | 215 |
| Vehicle expense | 4,647 | 3,640 | 4,438 | 2,672 | 4,152 | 3,910 | 3,779 |
| Consulting fees | 0 | 0 | 0 | 2,843 | 2,347 | 1,038 | 1,540 |
| Professional fees | 2,463 | 1,264 | 100 | 1,850 | 1,553 | 1,446 | 1,364 |
| Supplies | 356 | 478 | 1,784 | 2,357 | 2,607 | 1,516 | 1,942 |
| Auto lease | 6,062 | 0 | 0 | 0 | 0 | 1,212 | 404 |
| Postage and freight | 29 | 0 | 99 | 0 | 0 | 26 | 22 |
| Travel | 638 | 2,294 | 2,504 | 3,571 | 3,784 | 2,558 | 3,063 |
| Marketing | 0 | 0 | 0 | 0 | 1,345 | 269 | 448 |


|  | 1992 | 1993 | 1994 | 1995 | 1996 | Average | Weighted Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dues and publications | 0 | 402 | 152 | 312 | 53 | 184 | 185 |
| Insurance | 1,650 | 3,321 | 2,081 | 3,743 | 2,285 | 2,616 | 2,729 |
| Bank charges | 82 | 130 | 81 | 217 | 162 | 134 | 151 |
| Total Expenses | \$82,655 | \$54,863 | \$26,805 | \$ 64,833 | \$70,002 | \$ 59,832 | \$ 58,809 |
| Net income (loss) | $\underline{\text { \$ 32,134 }}$ | \$26,081 | \$14,380 | \$ 43,083 | \$121,032 | \$ 47,342 | \$60,328 |
| Adjustments | 82,463 | 63,772 | 60,615 | 64,533 | 69,702 | 68,217 | 66,566 |
| Economic income | \$114,597 | \$89,853 | \$74,995 | $\xlongequal{\text { \$107,616 }}$ | \$190,734 | $\underline{\text { \$115,559 }}$ | \$126,895 |

## Case Study D-LAUNDERETTE

John T. Lally, CPA, ABV<br>Rosenfield, Holland \& Raymon, PC New Bedford, Massachusetts

Rosenfield, Holland \& Raymon was retained to provide business valuation and litigation-support services by attorney Susan Webb. Her client, Mary Clay, had filed for a divorce from Steve Clay, claiming that Steve had been unfaithful to her for many years. Mary and Steve were married for twenty years and had three children. Mary stayed home to raise their children while Steve operated his business and managed residential rental properties that they owned.

Steve was the sole stockholder of Whaling City Liquors, Inc. (Whaling City), a C corporation. He bought the corporation shortly after his marriage to Mary. In addition to a retail liquor store, the corporation also operated a bottle- and can-redemption center and a coin-operated launderette. The business was located on a busy street in a densely populated section of New Bedford, Massachusetts. The business had excellent name recognition, especially in the surrounding neighborhood. Although the building and equipment were not modern, they were fully functional.

An initial interview with Mary revealed that there were many risk factors that indicated Steve may have been hiding income. (See appendix A, which is a quick checklist to help determine the likelihood of unreported income.) Mary suspected that Steve had provided financial support to Donna Perry, his long-time girlfriend, and bought her lavish gifts. Steve was very secretive about business and personal finances and controlled how much money Mary could spend for family necessities. Steve had access to cash through the business and rental properties.

## The Assignment

Our assignment was to search for Whaling City unreported income from January 1, 1990, to December 31, 1994, and to perform a business valuation of the company as of December 31, 1994. The team assigned to this litigation-support engagement consisted of Jeffrey L. Raymon, John T. Lally, and Nina S. Lafferty. Jeff was the partner-in-charge of the engagement. We discussed the case, prepared an outline of a work program (see appendix B), and assigned responsibility for each step in the work program. I was assigned responsibility for the search for unreported income in the launderette and preparation of the business valuation.

We prepared a detailed document request (see appendix C), scheduled a tour of the premises, and arranged interviews with Steve; Lisa Baker, bookkeeper for the launderette; and Dennis Reed, accountant for Whaling City.

I toured the launderette facility with Steve and documented the number of washers and dryers, make and model numbers, cost per washer load, cost per drying cycle, length of drying cycles, and types and number of vending machines. I noted the store hours were 7:30 A.M. to 8:30 P.M., Monday through Saturday, and 7:30 A.M. to 5:30 P.M. on Sunday.

## Documenting the Proceddures

I interviewed Steve and Lisa to document the accounting procedures in place for the launderette. Steve said that Lisa collected cash twice a week, usually on Mondays and Fridays. Lisa would bring the coin bags next door to the liquor store and give them to one of the sales clerks. The clerk would count the coins using a coin machine, wrap the coins, and put them in a cigar box on the floor behind the checkout counter.

If the liquor store needed change, a clerk would take it from the launderette cigar box. The liquor store was supposed to reimburse the launderette for any change taken, but this procedure was not always followed. Dennis would deposit all business funds in the bank once a week. Dennis also recorded the weekly receipts less cash paid out in a manual cash receipts journal summarized by month. The cash receipts journal had columns for liquor sales, cigarètte sales, lottery income, redemption center income, and launderette sales. Steve said that the monthly cash receipts journal had no longer been maintained after 1993 because "it was too much work."

Dennis wrote all checks to pay bills, signed the checks, and reconciled the monthly bank statements. Expenses were not recorded by liquor store, launderette, or redemption center, so there was no record of departmental profit or loss.

After documenting Whaling City's accounting system, I realized that the controls over cash were worse than the average small business. This was either an oversight by Steve or, more likely, a deliberate attempt to leave a poor audit trail for the Internal Revenue Service and Mary.

## Analyzing the Company Data

Now that I had an understanding of the business and its accounting system, I analyzed the company data received as a result of our document request. I was looking for trends in sales, gross margin, and expensesthat is, looking at the "big picture." I noticed that sales decreased almost every year between December 1990 and December 1994, and dropped by approximately 10 percent over the five-year period. The gross margin percentage and total operating expenses remained fairly steady. The company went from reporting a small profit in 1990 to increasing losses during the period 1991 to 1994 (see appendix D).

After analyzing the trends in the business, I interviewed Steve again to discuss the results of my findings. Steve's explanation was that a poor local economy and fierce competition in the liquor industry were responsible for the decrease in sales. An interview with another local liquor store owner confirmed that competition in the industry was fierce, but because there was no new competition, he was able to realize a small increase in sales from 1990 to 1994, through proper promotion and advertising. Research of the local economy indicated a decrease in unemployment, according to New England Economic Indicators, ${ }^{1}$ and increases in population and buying power, according to Sales \& Marketing Management, Survey of Buying Power. ${ }^{2}$

Now we had to determine whether the decrease in sales was due to poor management or underreporting of income. Jeff and Nina performed forensic procedures on the liquor store and redemption center. I applied forensic procedures to the launderette.

## Forensic Procedures

I prepared a work program to document projected launderette sales versus actual sales and prove any unreported income. Actual sales for 1991 to 1993 for the entire company were obtained from the monthly cash receipts journal and were summarized on a spreadsheet. In 1991 and 1992, reported launderette sales were about $\$ 20,000$ each year, and according to the cash receipts journal, a bank deposit was made almost every week. In 1993, reported launderette sales were $\$ 7,000$, and bank deposits were made sporadically.

## Washing Machine Revenues

To project the launderette washing machine revenue, I looked for records outside of the company's accounting system that could help me document its true sales. I had to look no further than the meter readings on the company's water bills. The launderette had its own separate water meter. I selected the water bills from December 1993 to November 1994 and

[^3]recorded the water usage for the twelve-month period. Using information from repairs and parts invoices and the telephone book yellow pages, I called washing machine manufacturers and repair businesses to obtain water usage on each different model. I documented the source and results of each inquiry by recording the date, individual's name, company name, telephone number, and information given.

Now I knew the total water usage, number of washing machines, gallons of water per wash cycle, and revenue per wash cycle for each machine. I summarized all this information on a spreadsheet (see appendix E). I calculated a weighted-average gallons-per-wash cycle and a weighted-average revenue-per-wash cycle. Dividing the total gallons used by the weighted-average gallons per wash gave me the estimated number of washes. The estimated number of washes times the weighted-average revenue-per-wash gave me the projected washing machine revenue, $\$ 24,854$. I also calculated the revenue per gallon of water used for each machine to determine how much variation there was among the different washers. The range of 2.9 cents to 3.3 cents per gallon seemed reasonable, so that the usage of different machines would not significantly affect the weighted averages.

## Dryer Revenues

The next procedure was to project income from the clothes dryers. The launderette used sixteen dryers of the same model. Each drying cycle lasted seven minutes, at a cost to the customer of 25 cents per cycle.

I called two of my clients who operated launderettes and asked them what percentage of washer loads are dried on site and what was the average drying cycle. From my discussions with them, I estimated that two-thirds of all washer loads are dried at the launderette's site for an average of thirty minutes. I used twenty-eight minutes (four, sevenminute drying cycles) in my projections. Using 17,753 estimated washing cycles, two-thirds of which are dried on site, and $\$ 1.00$ for twenty-eight minutes of drying, I calculated a projected dryer revenue of $\$ 11,836$.

I contacted American Coin-Op magazine and spoke to the editor. He said an accepted industry average of dryer revenue is 40 percent of washing machine revenue; 40 percent of Whaling City's $\$ 24,854$ washing machine revenue would be $\$ 9,942$. The estimated dryer revenue of $\$ 11,836$ was approximately 20 percent higher than the industry average, so I decided to use the more conservative industry average of $\$ 9,942$.

## Vending Machine Revenues

The launderette had four vending machines from which I wanted to estimate revenue. There were one video game and three machines for snacks, soda, and hot beverages. Only one of my launderette clients had vending machines in his place of business. He told me that he grossed an average of $\$ 10$ a day for each machine. I knew that my client's launderette was larger than Whaling City's and generated about 50 percent more washing machine revenue. I conservatively estimated that

Whaling City's vending machines should produce revenue of $\$ 5$ a day for each machine. At $\$ 5$ a day for four machines, times fifty-two weeks, vending machine revenue was projected at $\$ 7,300$ annually.

The total washer revenue, dryer revenue, and vending machine revenue amounted to $\$ 42,096$. This was significantly higher than the \$20,000 reported in 1991 and 1992 and the \$7,000 reported in 1993.

## Final Reporting

We prepared a detailed report for Susan describing the forensic procedures performed and the results of our procedures. We also prepared a business valuation report for Whaling City, which began with the company's financial statements as reported and then adjusted for the unreported income we had documented.

Susan used our forensic procedures report and our business valuation report in negotiating a settlement for Mary. Steve's attorney reviewed our reports and advised him to settle out of court. We had enough documentation of unreported income that Steve's attorney did not want this information to come out in a court proceeding. The judge assigned to the case was known for referring similar matters to the Internal Revenue Service for investigation. Both attorneys negotiated a property settlement.

The team was confident that the forensic procedures we employed to reveal hidden income, along with our well-documented forensic procedures report and business valuation report, were instrumental in achieving a fair settlement for Mary.

## Appendix A

## Unreported Income Risk Factors

- Does the opposing spouse have a motive to hide income or assets?
-Is the spouse suspected of having a lover to support?
-Does the spouse have a gambling, drug, or other habit to support?
-Is it a messy divorce? Would the opposing spouse have a reason to hide income or assets to defraud your client?
- Does the opposing spouse have the opportunity to hide income or assets?
-Is the spouse secretive about the couple's financial affairs?
-Does the opposing spouse maintain tight control of bank statements, investment statements, and other financial records?
-Does the spouse control all the family's spending?
-Does the other spouse maintain a lifestyle in excess of income reported on tax returns?
-Does the other spouse own a cash business?
-If the spouse owns a business, could the business be paying for personal expenses?


## Appendix B

## Work Program

1. Meet with attorney and client to discuss the case and define the engagement.
2. Plan the engagement.
3. Obtain an engagement letter.
4. Prepare a document request.
5. Tour the premises.
6. Document the accounting system.
7. Obtain relevant economic and industry data.
8. Analyze company data.
9. Interview management.
10. Plan forensic procedures.
11. Perform forensic procedures.
12. Prepare a forensic procedures report.
13. Obtain any additional information needed for the business valuation.
14. Perform the business valuation.
15. Prepare the business valuation report.
16. Complete any applicable checklists.
17. Perform a supervisory review of working papers and report.

## Appendix C

## Document Request

The following is a form we used when requesting documents from Whaling City Liquors, Inc.

1. All financial statements prepared for the last five years
2. Federal and state income tax returns for the last five years
3. Copies of any annual filings with licensing boards or other regulatory agencies
4. Copies of any budgets or projections prepared for past, present, or future years
5. General ledgers, cash receipts journals, cash disbursements journals, cash register tapes, and bank statements for the last five years
6. A list of bank accounts
7. A list of items in inventory (description, quantity, and cost)
8. A fixed-asset list and depreciation schedule
9. A list of notes payable and other significant liabilities
10. A list of insurance policies and coverage
11. Copies of any business plans or loan request documents
12. A schedule of officers' compensation (and any family members and Donna Perry) for the last five years, including all benefits, reimbursed expenses, and other perks (for example, auto, meals, travel, and clubs)
13. W-2 Forms
14. Reports prepared by other professionals, including the accountant's management letters, real estate or equipment appraisals, and reports of other consultants
15. Brochures, catalogs, price lists, or other product information
16. Personal financial statements for Steve Clay for the last five years
17. A schedule of stockholders' or other related party loan accounts for the last five years
18. A list of the five largest customers and suppliers and the total amount of sales and purchases, respectively, for each of the last five years
19. Details of transactions with related parties for the last five years
20. Copies of leases and loans, including notes receivable and notes payable
21. Copies of articles of incorporation, bylaws agreement, and any amendments
22. Minutes of board of directors meetings
23. Copies of any written offers to purchase or sell company stock
24. Details of any litigation, including pending or threatened lawsuits
25. Reports of examination issued by the Environmental Protection Agency, the Occupational Safety and Health Administration, the Internal Revenue Service, or the Equal Employment Opportunity Commission
26. Copies of all legal and other professional invoices or billing statements for the last five years
27. Details of transactions in the company's stock for the last five years
28. Résumés or a summary of the background and experience of all key personnel; a listing of duties of all key personnel
29. Copies of industry surveys, financial data, and market data from all trade groups the business is affiliated with or whose magazines it subscribes to

As we review the requested data, we may identify other information that may also need to be reviewed. Additionally, we may need to interview key employees of the entities providing the preceding data and tour the company premises.

Please return the requested data in an organized manner and indicate if any items are not applicable.

## Appendix D

Whaling City Liquors, Inc.
Statements of Income as Originally Reported Years Ended December 31, -

|  | 1990 | 1991 | 1992 | 1993 | 1994 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | \$668,340 | \$646,369 | \$639,267 | \$632,973 | \$603,075 |
| Cost of goods sold |  |  |  |  |  |
| Beginning inventory | 90,267 | 79,225 | 76,866 | 90,232 | 88,190 |
| Purchases | 482,347 | 477,920 | 481,489 | 452,286 | 443,704 |
| Less: Ending inventory | $(79,225)$ | $(76,866)$ | $(90,232)$ | $(88,190)$ | $(100,671)$ |
| Cost of goods sold | \$493,389 | \$480,279 | \$468,123 | \$454,328 | \$431,223 |
| Gross profit | 174,951 | 166,090 | 171,144 | 178,645 | 171,852 |
| Gross profit \% | 26.2\% | 25.7\% | 26.8\% | 28.2\% | 28.5\% |
| Operating expenses |  |  |  |  |  |
| Salaries and wages | 75,017 | 77,955 | 81,401 | 88,711 | 92,984 |
| Repairs | 6,544 | 5,881 | 5,675 | 11,326 | 4,442 |
| Rent | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 |
| Taxes | 6,152 | 6,090 | 9,259 | 8,810 | 2,001 |
| Depreciation | 10,624 | 11,165 | 4,468 | 4,984 | 5,280 |
| Advertising | 7,798 | 5,110 | 5,238 | 4,401 | 3,471 |
| Professional fees | 2,373 | 2,511 | 1,404 | 1,127 | 2,034 |
| Utilities | 18,853 | 19,900 | 20,740 | 20,386 | 21,003 |
| Insurance | 7,323 | 7,796 | 10,191 | 9,815 | 9,882 |
| Licenses and dues | 2,121 | 2,129 | 2,438 | 2,670 | 2,712 |
| Office expense | 1,587 | 1,373 | 5,877 | 651 | 982 |
| Telephone | 645 | 684 | 716 | 692 | 2,387 |
| Supplies | 4,973 | 4,385 | 4,172 | 6,948 | 7,664 |
| Auto expense | 523 | 384 | 348 | 698 | 728 |
| Miscellaneous | 411 | 495 | 97 | - | 1,415 |
| Total | \$168,944 | \$169,858 | \$176,024 | \$185,219 | \$180,985 |
| Net profit (loss) | \$ 6,007 | \$ (3,768) | \$ (4,880) | \$ (6,574) | \$ $(9,133)$ |

## Appendix E

## Whaling City Liquors, Inc. Projection of Income



Total gallons of water use divided by the weighted average gallons per wash equals the estimated number of washes times the weighted average revenue per wash, which equals the projected washing machine revenue:
$801,725=17,753 \times \$ 1.40=\$ 24,854$

## Dryers

Hoyt Windsor dryers (16)
Assumed 25 cents per 7-minute drying cycle
A. Estimated that $2 / 3$ of all washer loads are dried at the launderette for 28 minutes ( $\$ .25 \mathrm{X}$ 4 cycles $=\$ 1.00$ )
Estimated number of washes times $66.67 \%$ times $\$ 1.00$ per dryer load equals the projected dryer revenue:
$17,753 \times 66.67 \% \times \$ 1.00=\$ 11,836$
B. Dryer revenue estimated at $40 \%$ of washing machine revenue:
$\$ 24,854 \times 40 \%=\$ 9,942$

## Vending Machines

Machines: 1 snack, 1 soda, 1 hot beverage, 1 video
Estimated that each machine grosses $\$ 5.00$ per day:
4 machines $\times \$ 5.00 \times 365$ days $=\$ 7,300$

# Case Study EAuto Body Repair 

Theresa M. Simonds, CPA, ABV<br>Amper, Politziner \& Mattia, PA<br>Flemington, New Jersey

We became involved in the forensic accounting investigation of an auto body repair shop, Jones Auto Body, when we were hired by the shop owner's wife, Mrs. Jones, to value Mr. Jones' business and determine his true income for a matrimonial action. This was Mr. Jones' second marriage. He had one child from his first marriage and two children with the second Mrs. Jones. The parties had been married for five years.

Our first step was to interview Mrs. Jones and to get whatever information she could provide us on the business and on the parties' standard of living. During our interview with Mrs. Jones and her attorney, one of the first things she wanted us to know was that she suspected a substantial amount of income from the body shop went unreported. (Actually, this was the third thing she wanted us to know. The first and second things were what a louse her husband was and that he had been cheating on her.)

Asking some of the following questions can help you obtain additional information during the meeting with your client: ${ }^{1}$

- What do you know about the bookkeeping and accounting of the company?
- Is there a "second set" of books?
- Are there large amounts of cash around?

[^4]- Are any of the business records available to you?
- How does your spouse get money out of the company?
- Who handles paying the personal bills? Could you assemble a record of personal expenditures if asked to, and would it be complete?
- Have any employees knowledgeable about the business left in the last few years under less-than-ideal circumstances? Would they be willing to talk to me?
- Do you know of anyone who is familiar with the business who would be willing to talk to me about it?
- Are there any safe deposit boxes? Do you know what their contents are?
- Do you believe there are unreported cash receipts at the company? Why?
- Have there been any recent large personal expenditures? Did you pay cash for them?
- Do you go out with your spouse? How much do you spend, and do you pay by cash or charge?
- What are your spouse's hobbies? How does he or she spend money?
- Is there anything else I should look for at the company?

The likelihood that a spouse will take unreported income out of a closely held business is often related to two factors. One is the amount and type of cash transactions. An auto body shop is one of a number of types of businesses that typically ring up high volumes of cash sales. The second factor is the strength of the company's internal controls.

In addition, the list of questions is likely to turn up information that, itself, contains indications that there is unreported income. In our case study, several indications were present. The following sections highlight the signs to look for, discussing them in context of Mr. Jones and his auto body repair shop.

## Indication Number 1

## A spouse is the sole owner of a closely held business with a high volume of cash transactions.

We went through the Jones' personal tax returns for the past five years and noted that the business, which operated as a C corporation, provided Mr. Jones minimal wages-anywhere from $\$ 30,000$ to $\$ 40,000$ per year. Despite prior support obligations that Mr. Jones was required to pay, the couple maintained a fairly adequate standard of living. According to Mrs. Jones, they went out frequently, were able to pay the mortgage on their home, took vacations annually, and were raising two small children on what appeared to be a very modest salary.

## Indication Number 2

## The parties' standard of living is in excess of reported income.

When there are accusations of unreported income, it is important to decipher fact from fiction and to obtain as much information as possible about why the other spouse feels that this is so. Some of the reasons I have heard are-

- The spouse has discussed or bragged about unreported income.
- The spouse carries around a lot of cash in his or her pocket.
- He or she has a safe in the house and stuffs it full of cash every night.
- There is cash in between the floorboards of the bedroom. (Yes, I have actually been told, "We keep cash under the floorboards.")
- The nonmanaging spouse has worked at the business and has actually been involved in how the cash is received by the business and how it makes its way to the parties' individual use without being reported. This last admission by the husband or wife is usually the best.

In the matter of Jones $v$. Jones, the couple appeared to be living well beyond their means. Mrs. Jones had strong suspicion that there was unreported cash because there was always money available for the family to do the things they wanted to do and because the husband always had a fair amount of money in his wallet.

It is often difficult to find unreported income received from a closely held company. A lot of times, the managing spouse tries to hide the income not only from the Internal Revenue Service (IRS), but from the other spouse as well. The income is often taken out of the business in cash, leaving little evidence that the business ever even received the cash. As long as there is a little evidence of the cash, there is a way for a forensic accountant to find it.

## Indication Number 3

## The records are not in very good shape.

A forensic examination of a company's records should be performed at the offices of the company being examined. A CPA can learn a great deal about a company by visiting its offices and other facilities and observing its operations firsthand. Because most of the investigative procedures normally involve examining support for transactions, it is also more efficient and effective for the CPA to work with the documents in the company's office and to have the owner available to answer questions and explain how the system works.

After interviewing Mrs. Jones and her attorney, our next step was to send a document request to Mr. Jones and his attorney, asking for a look at all the business records and tax returns and, of course, a site visit with him present so he could answer any questions that might arise. Mr. Jones informed us that his records were "not in very good shape."

## Indication Number 4

## The company's accountant wants nothing to do with your review of the records.

It took several weeks and several letters from our attorney before we were allowed a site visit to see the business records with Mr. Jones present. Mr. Jones' accountant did not want to be there.

Auto body shops can generally be broken down into three major categories. The first group consists of low-end shops with a minimum of body-working equipment, inexpensive frame-straightening equipment or none at all, and an inexpensive paint booth. These shops often contract out frame-straightening and major body work.

In the second category of auto body shops, prices are midlevel, and the shops usually repair all makes and models of automobiles. Their body and frame-straightening equipment can be adapted to most makes of vehicles, and they probably have one or more spray booths. Their personnel should be experienced in most areas of body work.

At the top of the line are specialty shops, which specialize in certain makes or models of automobiles. The specialty may be a general category of automobile, such as sports cars, German cars, European cars, or Japanese cars, or a specific brand, such as Honda, Volvo, or Mercedes. These shops have specialized equipment for the makes and models they handle, they charge top dollar, and they cultivate their appearance to draw the type of customer and product they service. Specialization should be considered with regard to its potentially significant impact on the fee structure, percent of repeat business, and client base. ${ }^{2}$

The business we were investigating fell into the second category. The shop provides auto body repair and paint services for almost all makes and models of vehicles. The shop has three bays and one paint booth. In addition to Mr. Jones, who is the sole owner and is actively involved in running the day-to-day operations of the business, two experienced auto body repair technicians were on the books. Mrs. Jones worked for the business for a short time as treasurer but was no longer involved with the business at the time she filed the divorce complaint, and she hadn't been involved for some time. Reported monthly net sales were approximately $\$ 35,000$. The building housing the shop is leased for $\$ 2,500$ per month from an unrelated party.

My associate, Mike, and I went to Jones Auto Body to review the records. Mr. Jones met us and gave us his desk to work at as well as an adjoining desk where his "bookkeeper" sat. I interviewed Mr. Jones and specifically asked him in the course of our discussion whether there was cash or unreported income. Mr. Jones vehemently denied any such thing during our discussion. This was about 10:00 A.M. the day of our site visit. We asked Mr. Jones how he kept track of the vehicles that are to be brought into his shop for auto body work. His reply was that he kept a calendar of all the bookings. He proceeded to show us the current calendar for that year. In reviewing the calendar, we saw notations that included

[^5]an individual's name and the make and year of the vehicle to be brought in for auto body work on a particular date. We also saw a lot of names, makes, and years had been Xed through-which Mr. Jones indicated to us meant that they had canceled their appointment.

In many cases, owners who take cash from a business need to document the transactions for one reason or another. An example would be a company that bills all or most of its sales through accounts receivable. When customers pay their bills in cash, the business owner may take the cash before it is deposited. However, the owner must reflect a credit against that customer's accounts receivable. In situations like these, the CPA may find notations on credit memos or a different form of credit memo being used to reduce the accounts receivable balance.

In other cases, the business owner may take cash resulting from cash sales. To maintain a historical record of sales, the business owner may note on the daily sales records a coding to reflect the amount of cash sales not recorded or deposited on that day. In other cases, a separate record of cash sales not deposited may be maintained. The CPA should inquire of the client spouse whether he or she has any knowledge of such records. The CPA must be creative in each forensic examination to determine whether some form of coding or separate records exist that support the true operations of the business. A business owner is always interested in knowing how his or her business is actually doing, regardless of what the tax returns show.

In the office where we were doing our field work, there were two file cabinets that were marked by year. Mr. Jones indicated that each of these cabinets held the invoices for that particular year. We went through the invoices and noted that they were for overhead expenses, such as utility bills, payroll records, supplies, and paint-but not for the large purchases that one would expect an auto body shop to have. When questioned on this, Mr. Jones indicated that the large purchases-the frames, the doors, the windshields-were all kept in a separate box and those were not kept by year, but rather by vendor.

The next thing Mr. Jones did was a crucial mistake on his part. He had to leave to go to a doctor's appointment. Rather than leaving somebody present with us while we were in his office, sitting at his desk, with access to all his books and records, he left nobody there. One of the first things we did was look at calendars from prior years.

These were sitting in one of Mr. Jones' desk drawers that he had indicated also held records to which he had granted us access (I would never snoop around in somebody's desk). There was also a photocopier in the room, and so, not having been specifically told I could not make copies, I proceeded to photocopy as many of the calendar pages as possible, in particular ones that had many Xs or "cancellations" on them.

Mike started by going through the bank statements to see if they agreed with the reported revenue. In cases where you have allegations of unreported income, this is a good place to start. It is possible that a business owner that is not too smart about unreported cash may have deposits greater than the revenues he or she reports. In this case, Mr. Jones' deposits into the corporate account agreed or were fairly close to the reported income.

## Indication Number 5

## The business owner's W-2 shows less income than some of his employees'.

One of the next steps was to review the payroll and to note key employees, what they were making, and how long they have been with the business and whether their payroll had fluctuated substantially between years. A substantial fluctuation in the payroll could be an indication that certain employees are being paid in cash. A similar indication would be records indicating that a key employee (such as a head mechanic) has not received any increases in salary for a long period of time or is paid rates that are below the local market level. What we found was that the head auto body mechanic was being paid $\$ 55,000$ annually. Remember that Mr. Jones' W2 from the business was between $\$ 30,000$ and $\$ 40,000$.

The next step, while Mr. Jones was out of the office, was to go through the box of vendor invoices on the large purchases. In doing so, we noted that invoices from a vendor, such as Pontiac, would provide information on the type of part being purchased (for example, a front-door assembly). The invoice would tell the make and year of the vehicle the part was for, and it would also provide the customer name. Mike and I decided that we would start matching up some of the large purchase invoices with the calendar of scheduled appointments. Specifically, we started with the period right before the parties filed the complaint. Lo and behold, what we started to find was that there were purchase invoices for car parts that were for the same type of vehicle, make, year, and customer name as some of the "cancelled appointments."

We made copies of these invoices and matched them up with the calendar of appointments. We also copied the deposit tickets of the business around the time that the appointment book was made, to show that a deposit had not been made for that particular customer. We also verified through the cash disbursement journal that the purchase order for the part was in fact paid in a reasonable time around the time of the appointment.

It is very important to document the entire transaction in your file. In this case, we had the calendar showing that a Mr. Bill had an appointment on October 1, 1990. He was bringing in a 1984 Ford Mustang. The appointment was crossed out, or "cancelled." Within a few days of his appointment, there was an invoice from Ford for a 1984 Ford Mustang part for Mr. Bill. The cash disbursement journal showed payment of the Ford invoice. The deposit tickets showed no payment from Mr. Bill.

Mr. Jones appeared back in the office once or twice as we were reviewing his files. He asked how we were doing and was wondering if we had found anything yet. He seemed to be perspiring. It also appeared to us that his cigarette consumption had notably increased since that morning.

While Mr. Jones was in the shop, we pulled the estimates of damage from the customer files. These were for repairs reported on the books. Included in the customer file was an estimate of the damage, an invoice
detailing the parts that were purchased, and the labor that was used. The labor was recorded as an hourly rate and the number of hours charged. To verify that we had complete records, including payrolls, we added the total labor hours charged from the customer invoices for a variety of weeks. What we found was that for several of the weeks that we had selected, the labor charged was well in excess of the number of employees that were on the books. From previous discussions, we had already determined that the shop used only actual hours-not set standard hours. What this led us to believe was that certain employees were being paid off the books or that Mr. Jones was overcharging his customers for labor hours that could not possibly have been completed.

By midafternoon of our field work date, we had compiled a number of interesting questions to pose to Mr. Jones. We started showing Mr. Jones the invoices for parts that we had pulled and copied for a variety of vehicles and customers, which had then been matched up to his appointment book, which showed that these same customers supposedly had cancelled. Furthermore, there was no corresponding deposit, yet the parts were paid for.

We asked Mr. Jones for an explanation. As we showed him the first one or two, he vehemently denied that there were any unreported receipts in this business. With a little gentle prodding on our part, he finally admitted to "around $\$ 10,000$." After being shown the fourth or fifth example of parts purchased with no corresponding sale to a customer, Mr. Jones started chain-smoking and sweating excessively. No kidding, this man lit a cigarette while he had one still going in the ashtray. At this point, he told us that he saw no point in wasting any more of our time and was willing to admit that there was actually about $\$ 20,000$ in unreported receipts annually. We then presented to Mr. Jones our findings that the hourly charge for a variety of weeks selected were well in excess of payroll records he had supplied for the number of men he had working in his shop. We asked him how this could be. Mr. Jones left the room. Mike thought maybe we had pushed him too hard and was concerned that he might go "postal."

At about 4:00 P.M., Mr. Jones came back in the office, pulled up a chair, and said that there was between $\$ 75,000$ and $\$ 100,000$ of unreported income per year. He said he took around $\$ 1,000$ per week out as cash and that the balance went to pay the part-time employees.

Based on this information, we arrived at a valuation for Jones Auto Body and Mr. Jones' true earnings. We concluded that there were $\$ 90,000$ of unreported sales per year.

After one five-way settlement conference, Mr. Jones' attorney put a reasonable offer on the table. The case settled.

The key is, always document the proof of unreported cash. One or two provable instances of unreported cash are much better than ten allegations or "probablys."
P.S. Can you believe we still had trouble collecting our fee?

# Case Study $F$ Gasoline Retailer 

## William Ackerman, CPA

Putnam, Hayes \& Bartlett, Inc.
Los Angeles, California

Gasoline retail station operations possess numerous unique characteristics. Each of these characteristics poses opportunities and challenges for the CPA undertaking an effort to recreate or investigate the financial profile of a given retail operation. To properly investigate or reconstruct the income of a gasoline retail station, the CPA must understand the fundamental differences between the types of operations in the retail gasoline sector.

## Gasoline Retail Operations

Gasoline stations operate under a number of business arrangements. The most prevalent are franchisee dealers that market gasoline for one of the more common major oil companies (majors). Listed here are some of the more common majors' brands throughout the United States:

| Amoco | Citgo | Getty | Sinclair |
| :--- | :--- | :--- | :--- |
| Arco | Conoco | Gulf | Stop \& Go |
| Atlantic | Diamond Shamrock | Mobil | Sunoco |
| BP America | Esso | Phillips | Texaco |
| Chevron | Exxon | Shell | Unocal |

Dealers that market gasoline (franchisees) for one of these majors usually lease the land and facilities from the oil company (the franchisor)
under a leasing arrangement and distribute only the major's brand of gasoline under a marketing arrangement. A dealer may own its own land and facilities and still have a marketing agreement with one of the majors. This latter franchising arrangement, however, is usually the exception, not the norm.

Another major group of retailers is the independents, or unbranded marketers of gasoline. These dealers often own their land and facilities and also may purchase their gasoline from any one of a number of sources. They usually make their gasoline purchases through independent distributors, or jobbers, which supply branded or unbranded gasoline. The general difference between the franchisee and independent dealer is that the franchisee's gasoline is supplied from the major's marketing and trucking network and the independent's gasoline is supplied from some nonmajor source.

Knowing the type of retail gasoline operation is very important. Type affects the alternative sources of data that may be available to the CPA investigating a station's operations, and it affects the manner in which the dealer receives its product for sale. The source of product is very important to understanding the gasoline retail business.

## Product Flow

To audit or examine a gasoline retail business effectively, the CPA needs to have a rudimentary understanding of the product flow in the oil industry. Crude oil is pumped out of the ground and transported to a refinery. The refinery then processes the crude oil into a number of marketable products, including gasoline (regular, unleaded, and premium), diesel, naphtha, transmix, and others.

The major refiners then distribute their refined products through two major networks. The first is the refiner-owned fleet of trucks, which distribute gasoline to its franchisee network located in major metropolitan areas. Gasoline sold through this distribution network is sold at prices referred to as the dealer tank truck or dealer tank wagon (DTW) price.

Lessee dealers pay DTW prices for branded gasoline delivered at the dealers' outlets. DTW prices, which are set by suppliers and include the cost of transporting the gasoline to outlets as well as other premiums, are generally less volatile and are higher than the price at the refinery location, known as rack price. The relationship between the dealer and supplier provides for a minimum purchase, allowing the dealer little flexibility to shop around for lower prices; but the relationship affords greater price stability and security of supply, even during periods of constrained supplies and volatile prices.

The second major distribution network is represented by the jobbers. Distributors pay branded rack prices for gasoline supplies from major refiners selling under their trademark. Unbranded rack prices are paid for gasoline supplies largely from independent refiners. Branded rack prices tend to be higher than unbranded rack prices. The former supplies a price premium for the recognized brand name, whereas the latter is cheaper, generic gasoline. Rack price excludes the price of delivery. The
independent jobbers make their profit on the transportation charges between the rack and the dealer.

## The Financial Investigation

The cooperation of a knowledgeable business owner or other knowledgeable parties facilitates any financial investigation. For example, the CPA may have access to a business partner who was not necessarily the day-to-day manager/operator. Similarly, the CPA could be dealing with a branded franchisee operator, in which case, the franchisor will have significant information to assist in the reconstruction of the dealer's financial profile.

The more difficult circumstance is when the business owner is antagonistic toward or unavailable to assist with the investigation. Further exacerbating the situation is the investigation of an independent owner/operator. Two critical factors, access to knowledgeable parties and the autonomy of the dealer from distributors and suppliers, will quickly shed light on the difficulty of any investigation.

## MANAGEMENT AND Operations

Critical to the investigation of a gasoline dealer is the owner's involvement. Most gasoline retailers are hands-on owners. The owner, his or her spouse, or both are usually heavily involved in the day-to-day operations of the business. It is not until the individual becomes an owner/operator of multiple stations (which is not uncommon) that he or she has to usually hire others to manage the daily operations. This significantly affects the profitability of a gasoline retail operation. Hired management typically requires compensation and benefits ranging from $\$ 30,000$ to $\$ 50,000$ per year, depending on the mix of station operations.

The hours and mix of operations are very important. Following are two extreme examples. The first is the "minimalist" station. This station usually consists of six gas pumps (all self-serve) and a small kiosk (the tiny building in the middle of the station where someone takes the customers' money and maybe sells gum and cigarettes). This gas station operates on a twelve-hour day, six days a week. To further save costs, the owner and his or her spouse work the kiosk and do all the bookkeeping.

In contrast is the "behemoth" station. This station is open twenty-four hours a day, seven days a week. It has a car wash, minimart, backroom with three service bays, and twelve pumps-three of which are fullservice. Dozens of employees are on the payroll, from managers and mechanics to a bookkeeper and clerks. The owner is too busy with other interests to focus on operations, except for occasional checkups. Understanding this big picture clarifies the complexity of an investigation.

## Competition, Geographics, and Demographics

Before investigating any dealer, the CPA must take a close look at the competition, which can be brutal in this industry. What services are offered by the competition? Would this affect the profit margins of the dealer being investigated? The prices the competitor across the street charges for gasoline, oil changes, smog checks, or milk and cigarettes is usually very competitive with its neighbors'. Is the competition selling comparable product? Majors typically compete against other majors (for example, with gasoline prices). If the competition across the street is an independent selling unbranded gasoline at $\$ 1.10$ a gallon, the CPA should not expect the Mobil, Unocal, and Exxon competitors on the other three corners to price accordingly. In fact, they may be priced ten cents higher than the independent, typically within a cent or two of each other.

When buying and selling real estate, the credo is, "Location, location, location." The same definitely can be said for gasoline retailers. The CPA should observe the flow of traffic around a station. Is the station in a desirable location, so that a steady stream of business can be expected? Is the station on a major business thoroughfare? Is the station on a major interstate, with little or no alternative gas sources for miles? Are there any large malls or significant numbers of restaurants around? What grocery markets exist to compete with a minimart? The CPA should watch the flow of customers and traffic. Are they solely interested in gas, or are they quick to jump into the minimart to pick up a bag of chips and a quart of milk?

The affluence of an area also dictates the grade of gasoline that customers buy. Self-serve, regular unleaded gasoline usually accounts for 70 percent to 80 percent of gasoline revenues. However, in affluent areas, this mix can quickly change to full-serve and upgraded gasoline sales. To understand the key revenue sources and the sales potential of each source, the CPA should observe the daily operations-it's invaluable.

## Retailer Operations

Gasoline retailers are primarily marketers of gasoline. However, in a competitive world and an era of one-stop shopping, gasoline retailers now offer much more than just gasoline. A gasoline retailer usually has any combination of the following:

- Gasoline
- Diesel
- Repair service; smog checks
- Groceries, cigarettes, alcohol
- Lottery tickets
- Car wash
- Vending machines
- Towing service
- Propane
- Vehicles for sale or rent
- Check-cashing services

The CPA should never underestimate the revenue and profit potential for some of these sources. In analyzing the operations of one small dealer, I noticed gasoline sales and profit were marginal. Conversely, lottery ticket and cigarette sales approximated $\$ 20,000$ per month. By analyzing the profit that trickled to the bottom line, I realized this dealer ran a cigarette and lottery ticket business and sold gasoline on the side. The point is, sundry revenue sources are usually just that-sundry-but in some instances, they can be the financial profit center of a gasoline retail operation.

## Recordkeeping

Gasoline retail stations have original books of entry that are usually maintained on a daily basis, sometimes by shift (for example, in eight- or twelve-hour shifts). These books consequently are referred to as "dailies." Dailies are preprinted, standardized forms, and rarely will there be a dealer that does not use this form in one capacity or another. If the dealer does not use actual hard-copy dailies, he or she typically uses computer software with inputs and outputs that consistently duplicate the preprinted dailies.

Dailies reflect practically every nuance of a gasoline station's operations. Gasoline gallons and dollars, oil, service, and miscellaneous sales are a good start. The daily is formatted so the dealer may reconcile the day's sales to the cash and receipts in the drawer. Appendix A is an example of a typical two-page daily sales sheet. Rarely does a dealer fill out every component of a daily. It is very time-consuming and also leaves a too-clear audit trail.

## Gasoline Income

The first issue to assess regarding the accuracy of reported gasoline sales is the mix of self-serve and full-serve sales. Fortunately, this problem is diminishing with time, as more stations become self-serve only. The mix in Southern California over the last decade, for example, has generally been as follows:

Self-serve
80 percent to 90 percent
Full-serve

$$
20 \text { percent to } 10 \text { percent }
$$

This mix is important because the difference in gross margins between self- and full-serve gasoline can be tremendous. Just look at your local station-the difference between self- and full-serve can be as much as 50 cents a gallon.

The advent of pay-at-the-pump technology has greatly diminished the cash aspect of the gasoline retail business. This has reduced the dealer's ability to play financial games. However, where older equipment is in use or a station's clientele is still driven to use cash, there is room to play.

The daily enables the dealer to record the opening and closing readings for each pump both in units (gallons) and in dollars. The change in the gallons sold in a day multiplied by the listed street price should reconcile with the change in the dollar meter readings for gasoline sales. Each pump has both a gallon and dollar meter. This is a wonderful reconciliation control that is rarely used. Why? Sales can easily be underreported by inserting a sales price lower than the actual street price charged. If the dollar meter readings are not recorded, there is no reconciliation control for the calculated gasoline sales (that is, gallons multiplied by street price).

During reviews of more than fifty gasoline station operators, I have seen only a handful of operators who reconciled their calculated sales to the gasoline dollar meter readings. This does not mean all operators are hiding income; it just means they have left an incomplete accounting trail that could perpetrate the underreporting of gasoline sales.

Gasoline sales are a function of quantity and price. It would be difficult after the fact to catch the price scheme noted here, unless someone were out periodically taking pictures of the listed street prices. Trying to account for the quantity of gasoline sold can be somewhat easier. A dealer's franchisor should have records of every purchase made. Gasoline gallons sold should closely match gallons purchased. Some difference exists between purchases and sales, but inventory and shrinkage can account for this. When cumulative gallons sold continue to exceed cumulative gallons purchased, the CPA should be on notice that this dealer is most likely buying gasoline from nonfranchisor sources.

Reconciling purchases and sales of gasoline for independent dealers can be much more difficult, because their inventory can be bought from any number of jobbers. The CPA needs to find out what jobbers supply a given area and then see if their sales records can be produced or subpoenaed.

## Complete Reconstruction of Gasoline Revenues

## Gasoline

Trying to recreate gasoline sales revenue is an unenviable task. Unlike most retailers, which sell products with infrequent price changes, the constantly (almost daily) changing price of gasoline makes this task more difficult. An excellent data source for jumping this hurdle is the Lundberg survey, a database of biweekly retail gasoline prices listed by oil company, type of service (full versus self), and geographic regions. Alternative sources for similar information are the Bureau of Labor Statistics, the American Automobile Association, and the Department of Energy.

If the dealer is in a geographic region where retail pricing data is not available, Lundberg also maintains a database of wholesale gasoline prices. The wholesale database discloses the price charged by the major refiners for both DTW and rack price, daily. Lundberg does not contain a freight cost component. Freight costs can be ascertained from historical invoices. If dealing with a franchisee dealer, the CPA can contact its
franchisor. Freight charges can also be determined by anonymously inquiring with local jobbers.

The street price can be deciphered by knowing the retailer's pricing methodology. For example, most retailers price their gas to the consumer in one of three fashions: (1) a set cents-per-gallon amount above cost, (2) a set percentage of the wholesale cost, or (3) based on what the nearest competitors are charging. Most retailers do not have the luxury of being able to ignore the last alternative. Therefore, dealers are consistently priced a few cents above or below their nearest competitors. Interviews with these competitors (or even random consumers) will give the CPA a very clear idea of how a dealer prices gasoline. With the dealer's pricing methodology, an estimate of the freight charges, the wholesale cost from Lundberg, and an add-on of sales tax, the street price on any given day can be reasonably estimated.

With price addressed, the CPA then needs to turn to volume. The first place to look for volume data is either the purchase invoices or the daily sales records. If the daily sales records were available, this exercise would probably not be necessary in the first place. The volume of gasoline sold during a period of time closely approximates the volume purchased. This assumption becomes more reasonable the longer the period of time under investigation.

The first source for purchase data is the purchase invoice. Assuming the purchase invoices are not available, the CPA should look to the supplier's records. Franchisee dealers have to buy their gasoline from the franchisor. If the franchisor's sales invoice data can be obtained voluntarily or involuntarily (that is, subpoenaed), the reconstruction is in the bag. Franchisor sales invoices will include the wholesale price and the freight charges. Not only will quantities be known, but also two of the four legs of the price equation will be known.

If the dealer is an independent, obtaining purchase information becomes much more difficult. Purchase data needs to be obtained from multiple sources. If those sources can be identified, the exercise becomes the same as above. Usually, an independent uses only a few suppliers. The total population of suppliers is limited in a region. Specialists trained in performing excise tax audits usually know the population of suppliers in a market. After identifying the total population of suppliers, the CPA should begin to voluntarily, through inquiries, or involuntarily, through subpoenas, pinpoint a specific dealer's suppliers.

## Backrooms

Backrooms are usually a significant source of profits for a gasoline retail operation. Of the stations I have investigated, those with consistently strong earnings usually have successful backrooms. Therefore, this could be the most important part of a retail gasoline investigation.

The vast majority of profit from the backroom comes from labor, but parts and materials should not be ignored. Trying to account for all materials sold can be a difficult undertaking. As when investigating gasoline sales, the CPA should turn to purchases. A backroom operation has numerous parts and materials suppliers. The CPA should assess who
the suppliers are and try to obtain data on purchases made. The sales of parts and materials can be expected to be twice the cost of sales. Cost of sales is calculated by adding purchases to beginning inventory and subtracting ending inventory.

The real profit in the backroom comes from labor. First, the CPA should perform a reasonableness test on the gross profit from labor. Then, a profit per service bay is calculated. Most backrooms contain at least two, if not three, service bays. The income per service bay is equal to the mechanic's hourly billing rate (typically, $\$ 30$ to $\$ 45$ per hour) multiplied by the average number of service hours worked in a given day (six hours is a good starting point). Then, the cost of the mechanic is calculated by multiplying the mechanic's hourly wage (typically, $\$ 10$ to $\$ 20$ per hour) by the number of hours in a pay shift (eight hours). This results in a profit per day. Assuming the high range, the profit per day for an individual service bay may equal $\$ 110$ ( $[\$ 45 \times 6]-[\$ 20 \times 8])$. This figure, multiplied by the days the backroom is in operation- 52 weeks times 6 days, or 312 days-results in an expected annual gross profit per service bay of $\$ 34,320$ ( $312 \times \$ 110$ ). This figure, multiplied by the number of service bays equals an estimate of the total gross profit from the backroom.

Very important to this analysis is an assessment of the utilization of the backroom operations. The above scenario assumes 75 percent utilization (six hours in an eight-hour day). By physical observation, or discussions with employees, the CPA should be able to derive a reasonable utilization rate.

One easy check to see if there is any underreporting going on in the backroom is to verify smog check activity with the state bureau of automotive repairs. The bureau can provide not only the number of smog checks but also the repairs made to get a car certified. Smog checks are typically charged to the consumer at a fixed price. This price times the number of checks processed through the state bureau of automotive repairs should approximate the reported smog-check revenues. Though this may not be a significant area for underreporting income, it may be an effective tool for assessing the dealer's integrity. This approach is, of course, sensitive to the particular state in which the station being investigated is located.

The dailies also contain a section for service ticket or work order control. This is where sequential service ticket amounts can be recorded. Service ticket sequencing is extremely important to controlling reported service sales. Carbon copies should be maintained of each service job. Voided service tickets should be noted as voided, not destroyed or discarded. Gaps in service ticket numbers can act as a red flag for underreported or unrecorded sales. Missing carbon copies can indicate the same. Incomplete bookkeeping for service operations can act as an effective cover for the underreporting of revenues.

## Fun With Expenses

## Rent

Franchisee dealers often receive rebates. These rebates are usually tied to incentive sales programs developed to maximize sales of certain gasoline grades. Rebates may also be based on hours of operations or other benchmarks and are usually in the form of a reduction from the dealer's rent, not gas purchases. Rebates can easily range in the tens of thousands of dollars. How the dealer records these rebates is important. Rebates are most frequently netted against rent expense. More sophisticated dealers offset rebates to cost of gasoline sold. The deceptive dealer does not record them at all. The CPA should inquire about these types of incentive programs and determine that they are recorded in their entirety.

## Over or Short

One purpose of the daily is to assess the over or short of the cash and receipts drawer. The contents of the register are compared with the aggregate sales for the day. Any excess is recorded as an "over" and any shortfall is recorded as a "short." Rarely are there many overs. In fact, I have never seen an aggregate over position by year end.

My favorite "short" story is the dealer with consistent shorts in the range of $\$ 10$ to $\$ 20$ a day. By year end, this amounted to almost $\$ 5,500$ in shorts. Overs and shorts should net out to only a couple hundred dollars per year. Although difficult to prove, it was obvious that this dealer pulled a ten- or twenty-dollar bill at the end of each business day and chalked the difference up to short. If an owner saw this type of trend from drawers managed by an employee, that employee would not be around for long. In situations where the owner or owner's spouse manages the drawer, they can experience the best of both worlds, tax-free cash and a deductible expense on the tax return.

## Theft Expense

Beware of theft expense. Even though it is not uncommon for a gasoline station to be robbed, multiple robberies or thefts may be a red flag for fraud. After a robbery, the owner takes certain predictable actions. One, a police report should be filed, whether the issue is robbery or employee theft. Two, some security measures may be taken to protect employees with security cameras, bulletproof glass, and other measures. Security measures would result in some equipment being capitalized in the balance sheet or would be evident by an on-site inspection. I reviewed a station that recorded three robberies in one year. No corrective action was taken and no reports were filed with the local authorities. Either this owner couldn't care less about his bottom line and his employees' wellbeing, or he was the perpetrator. Once again-tax-free cash income and a deductible expense for the tax return.

## Benchmark Profitability Based on Revenue

Appendix B contains some reasonable gross profit ranges for different revenue components associated with gasoline retail operations. These are general benchmarks to help determine whether additional investigation is necessary. Any station's margins could vary dramatically.

If a reasonable picture of revenues can be created, the costs associated with those revenues can be easily benchmarked. A number of publications accumulate annual operating data for businesses. Three such sources are the IRS Corporate Financial Ratios (IRS), published by Schonfeld \& Associates; the Almanac of Business and Industrial Financial Ratios (Almanac), published by Prentice Hall; and Robert Morris and Associates' Annual Statement Studies (RMA), published by Robert Morris and Associates. Appendix C shows some of the ratios outlined in the 1997 release of each publication.

These sources also indicate a percentage range for officer's and owner's compensation. RMA indicates a range from 0.8 percent to 3.0 percent of net sales. For profitable entities, $\operatorname{IRS}$ data indicates 49.61 percent of profit before income taxes. The Almanac indicates officer's compensation as 1.4 percent of net sales. Based on a combination of officer's compensation and ending operating margins, there is not a lot of breathing space between making or losing money in the gasoline retail industry.

These published reporting statistics are telltale in their own right. If these types of margins are a true reflection of the expected profitability in this industry, there is significant risk in assuming the ownership of a gasoline station. Based on a million dollars in revenues, expected owner's compensation would approximate $\$ 15,000$ to $\$ 30,000$. Yet, when gasoline stations are put up for bid by franchisors to their franchisee network or independent operators offer stations in the open market, there is rarely a shortage of interested buyers. These interested buyers usually already own one or more gasoline stations. Does this mean that there could be a substantial difference between the reported and actual financial benefits associated with gasoline retail operations-possibly?
APPENDIX A
Daily Sales Sheet

(continued)


## Appendix B

## Gasoline Retail Operations Gross Profit Ranges

Revenue Source
Gross Profit Range

Gasoline
Mini-mart
Oil
Tires, batteries, and assessories
Backroom labor

10 percent to 20 percent
20 percent to 30 percent
40 percent to 50 percent
30 percent to 50 percent
$\$ 30$ to $\$ 45$ per hour

## Appendix C

## Annual Operating Data

|  | RMA | Business Almanac | IRS |
| :---: | :---: | :---: | :---: |
| Net sales | 100 percent | 100 percent | 100 percent |
| Cost of sales | 81 percent | 83 percent | 82 percent |
| Gross profit | 19 percent | 17 percent | 18 percent |
| Other expenses | 17 percent | 16 percent | 16 percent |
| Profit | 2 percent | 1 percent | 2 percent |

## Case Study G-Car Dealership

Donald H. Minyard, Ph.D., CPA/ABV, CFE

Minyard \& Associates, PC
Birmingham, Alabama

Bennett Oldsmobile, Inc. has been in business selling cars and trucks of some form or another in Atlanta, Georgia, almost since the invention of the automobile. Tom Bennett, Sr., opened his dealership in 1921 selling Ford products but quickly switched to General Motors. Tom reasoned that mass-produced Fords were for the masses, but that the discriminating driver preferred the luxury of a GM car. At one time or another Bennett has carried each of the GM lines-Chevrolets, Pontiacs, Buicks, Cadillacs, Oldsmobiles, and GMC trucks. Currently the dealership sells only GM's Oldsmobile line, as well as Isuzus.

At the time of his death in 1970, Tom Bennett, Sr., owned 55 percent ( 55 shares out of 100 issued and outstanding) of the stock in Bennett Buick-Oldsmobile, Inc. The remaining stock was owned by his son, Tom, Jr. (the apple of his father's eye, who owned 10 shares, or 10 percent), and seven other family members (Tom, Sr.'s second wife, his brother, his sister, and his four daughters), who owned 5 percent each.

Tom, Jr., had grown up working in the dealership and was thus Tom, Sr.'s choice to take over the business. In his will, Tom, Sr., left his entire 55 percent stake to his son. Since 1970, at all times Tom, Jr., has held at least 65 percent of the stock in Bennett Buick-Olds, Inc. In 1979, he purchased the 5 percent share owned by one of his sisters, and in 1987 he purchased his uncle's 5 percent share. So since 1987, Tom, Jr., has owned 75 percent of the stock in what is now Bennett Oldsmobile, Inc. Bennett changed its name in 1990 to reflect the dealership's dropping the Buick line.

## Suspicions Arise

Bennett dropped its Buick line in 1990 in response to declining Buick market share. According to Tom, Jr., it did not make business sense to continue to carry both Buick and Olds lines when most customers did not see much difference between the two brands. At least that's the story he told in the 1990 shareholders meeting (the one when the corporate name was changed to Bennett Oldsmobile, Inc.). Just before attending that meeting, his aunt noticed that much of the sales lot space previously devoted to Buicks and Oldsmobiles was now occupied by Isuzus.

In 1983, Tom, Jr., obtained a franchise from Isuzu and began selling its line. These sales were made through Bennett Isuzu, Inc. Tom, Jr., was the sole shareholder in the Isuzu dealership. He set this corporation up to stand apart from the Buick-Olds dealership because he said he had to act quickly to obtain the franchise. Some of the family members who were shareholders in Bennett Buick-Oldsmobile lived out of state, so getting them together for a shareholder meeting would have been difficult. Isuzu required unanimous agreement among the dealership's shareholders when granting franchises.

Actually, Tom, Jr., never even consulted the other shareholders about taking on the Isuzu franchise. He entered into that opportunity on his own, in a way similar to how he purchased land for a new dealership facility in 1979. At that time, Tom, Jr., purchased five acres of land in Marietta, a suburb of Atlanta, on which he planned to build a replacement for the downtown facility his father had built in 1923, and which was owned by the dealership. The Marietta land was owned 100 percent by Tom, Jr., who built a building on the land and rented the facility to the dealership. The land purchase and lease transaction were questioned in the 1980 meeting. The dealership's CPA (who was also Tom, Jr.'s personal CPA and golf and fishing buddy) told those in attendance that the land purchase and lease transaction were beneficial to the dealership because they would reduce the debt reported in the balance sheet (I guess that the CPA had never heard about FASB Statement $13^{1}$ ). He noted that the dealership might someday have to apply for an increase in its floor plan credit line.

The secrecy surrounding such transactions as the land purchase, lease, and the Isuzu franchise led to resentment among the minority shareholders in Bennett Oldsmobile, Inc. Basically, the family fell apart. They no longer had family gatherings because of the resentment, even at Christmastime. Tom, Jr., always had the "dealership's" CPA and attorney present at every shareholder meeting, because the questions from minority shareholders reflected the resentment. If they even bothered to attend, several of the shareholders brought their own attorneys to the meetings.

In addition, Bennett Oldsmobile reduced the dividends paid to shareholders even though Tom, Jr., had become quite prosperous. His salary had been increased over the years, and he and his wife built a showcase home and traveled extensively. Shareholders knew, however,

[^6]that the salary paid to Tom, Jr., was not sufficient to fund such high living. They became more and more suspicious of Tom, Jr.

## Some Financial Data

Appendix A contains comparative income statement data for Bennett Oldsmobile, Inc. (or the predecessor, Bennett Buick-Olds, depending on the year) for the years 1986-1995. This data was drawn from the income statements provided at the shareholder meetings. Because Bennett Isuzu was owned solely by Tom, Jr., none of its income statements were provided to Bennett Oldsmobile shareholders. The information contained in Bennett Oldsmobile income statements led to doubts among the minority shareholders and their attorneys about how Bennett Oldsmobile funds were being spent.

Minutes of shareholder meetings show that on several occasions questions were raised about the amounts of rent and salary paid to Tom, Jr., and about the way the Isuzu dealership was operated. Over the years, income statements showed increases in general and administrative expenses for Bennett Oldsmobile, Inc., even though the number of units sold declined substantially. Appendix B shows the number of units sold by each Bennett dealership. Under "Other income," the corporation reported "Recapture of Isuzu dealership costs." Tom, Jr., with the help of his attorney and CPA, explained that because both dealerships operated under one roof, it was best to have one dealership (in this case, Bennett Oldsmobile) pay expenses and to be reimbursed by the other (Bennett Isuzu).

The recapture of Isuzu operating costs began in 1988. Each time an Isuzu was sold, $\$ 50$ was contributed to the Buick-Oldsmobile dealership to defray costs of common operations, such as bookkeeping, telecommunications, and cleaning. Each dealership was to pay its own direct selling costs. The amount of the recapture was determined by Tom, Jr., and his CPA. When questioned about common costs in the 1987 shareholders meeting, the CPA stated he felt that some allocation should occur. The amount of the recapture was increased to $\$ 100$ in 1991 and \$125 in 1994.

Shareholders had also questioned the amount of the rent over the years. When the facility was constructed in 1979, the annual rent for the land and building was set at $\$ 200,000$. This increased to $\$ 250,000$ in 1982, to $\$ 300,000$ in 1984 (concurrent with the construction of a separate Isuzu service department), $\$ 400,000$ in $1988, \$ 460,000$ in 1991, and $\$ 500,000$ in 1995 . The amount of the rent was set by Tom, Jr., and "ratified" by the dealership's shareholders. Tom, Jr., always had his CPA justify the amount of the rent just before the ratification vote. Supposedly the rent was based on the market value of the property. The rent was allocated between the Buick-Oldsmobile and Isuzu dealerships, as discussed later in this chapter.

Tom, Jr.'s salary for running the Oldsmobile dealership was set by the dealership's shareholders, as well. His salary was increased to $\$ 60,000$ in 1980, $\$ 75,000$ in 1985, $\$ 90,000$ in 1990 , and $\$ 105,000$ in 1995.

Justification for the amount of his salary was provided from statistics General Motors supplied its dealers.

Tom, Jr., his attorney, and his CPA could never quite answer questions about cost allocations, rent, or salary to the satisfaction of the minority shareholders in Bennett Oldsmobile, Inc. As noted before, mistrust developed and relationships between Tom, Jr., and his family members deteriorated. Things finally got so hostile that after the 1995 increases in rent and salary, Tom, Jr.'s stepmother and two of his sisters decided to file suit against him. In their shareholder-derivative action, they alleged fraud, deprival of corporate opportunity (due to Tom, Jr.'s self-dealing in terms of dealership facilities and obtaining the Isuzu franchise), and diversion of funds. When their attorney saw the need for investigative accounting, we were called in.

## The Forensic Investigation Begins

We reviewed minutes of Oldsmobile dealership shareholder meetings and monthly reports to and from Oldsmobile and Isuzu headquarters to assess the propriety of cost amounts and allocations. (These reports were produced under threat of subpoena.) We also interviewed Tom, Jr., the plaintiff shareholders, and key dealership employees. Our early investigation centered on the new car sales departments of each dealership. We decided to center on these departments because of the Isuzu cost recapture. Rent was common to all departments (sales and service) of both dealerships. Tom, Jr.'s salary was common to both departments in the Oldsmobile dealership. All trade-in vehicles were sold to vehicle wholesalers. As Tom, Jr., told us during his interview and as communicated during shareholder meetings, trade-in sales were all run through the Oldsmobile dealership.

Both Oldsmobile and Isuzu provide statistical information to dealers showing them how their dealership compares with other similar dealerships. According to these statistics, Bennett Oldsmobile was a very poor performer, but Bennett Isuzu outperformed the vast majority of its peers. Analysis of the common costs "recaptured" by the charges to the Isuzu dealership showed that the $\$ 125$ recapture (and lower earlier amounts) was too small. In addition, the dealerships shared a common sales manager and finance manager, whose salaries (totaling $\$ 100,000$ per year in 1995) were allocated 60 percent to Bennett Oldsmobile and 40 percent to Bennett Isuzu. Tom, Jr., in consultation with his CPA, justified the recapture amounts and salary allocations by saying that in the earlier years, Bennett Isuzu's operations were merely incidental to the combined dealership. In later years, however, as Isuzu popularity increased, that dealership generated traffic for the Oldsmobile dealership. Besides, as Tom, Jr., told us, all profits on sales of trade-in vehicles were funneled to the Oldsmobile dealership.

Regarding the rent that Tom, Jr., charged to the dealership, he said that the original $\$ 200,000$ rent was 10 percent of the $\$ 2,000,000$ original cost of the land and building for the Buick-Oldsmobile dealership. The addition of the Isuzu service department had cost $\$ 400,000$. Whereas increases in market value were listed as the reasons for rent increases, a

1996 real estate appraisal revealed that the value of the land and building for both dealerships was approximately $\$ 3,500,000$ (when annual rent was $\$ 500,000$ ). The $10: 1$ ratio between market value and rent in 1980 seemed quite reasonable, but we questioned the $7: 1$ ratio in 1996. Rent was allocated $\$ 50,000$ to each dealership's service department (these allocations have never changed), with the remainder originally 25:75 to Isuzu and Oldsmobile; this ratio was changed to 50:50 in 1995.

Tom, Jr.'s salary was borne entirely by the Oldsmobile dealership. Even though it is true that his salary was reasonable when compared with those of other GM dealership executives, it is also true that he spent only about half of his time managing the Oldsmobile dealership-the other half was spent managing the Isuzu dealership. He confided in us that in the earlier years of the Isuzu dealership, he spent considerably more time dealing with that line. This could help explain the reduction in Buick and Oldsmobile sales suffered by the Bennett dealership over the years. Its reduction was considerably greater than the reduction in sales suffered by other dealers.

## The Source of Trouble: Trade-In Vehicles

We investigated the service departments and determined that in fact these departments seemed to be operated separately, each responsible for its own costs. Our investigation then continued with a consideration of sales of trade-in vehicles to automobile wholesalers. An employee of the Isuzu dealership told us that the values of vehicles traded in when purchasing Isuzus were inflated at the time the vehicles were transferred to the Oldsmobile dealership. We knew that this situation required additional investigation.

We recommended to the attorney representing the plaintiffs that to determine damages-

1. Common costs be allocated equally between the dealerships because their total gross profits were approximately the same for the five-year period after 1990, reversing the per-car charge for the Isuzu dealership.
2. Rent be adjusted to no more than $\$ 350,000$ annually, also to be shared equally between the Isuzu and Oldsmobile dealerships after 1990. Not only were gross profits similar, but floor and sales lot assigned to the two dealerships were approximately the same.
3. The salary paid to Tom, Jr., be adjusted to reflect that only half of his time was spent managing the Oldsmobile dealership. Research indicated, however, that an annual salary of approximately $\$ 120,000$ would be appropriate for an executive in a dealership the size of the Oldsmobile and Isuzu dealerships combined.
4. There should be further analysis of other costs and the proceeds from sales of trade-in vehicles.

We computed damages occurring in 1991 and later years because of Bennett's increased emphasis on Isuzu sales, and because of potential statute of limitations problems. These damages would have resulted in
the Oldsmobile dealership's income statement being adjusted as illustrated in appendix C. The proposed changes would have resulted in equal reductions in the Isuzu dealership's income. Damages to the minority shareholder plaintiffs would have been 25 percent of the adjustment in Bennett Oldsmobile's pretax income, or $\$ 379,750$, reduced by taxes and increased by interest (see appendix D). The further analysis of costs and proceeds of sales from trade-in vehicles would likely have resulted in an increase in this amount.

## A SettLement?

Suddenly, Tom, Jr., decided to settle the case. According to his attorney, Tom, Jr. was not sleeping very well. He really wanted to get this matter behind him and attempt to rebuild his family relationships. He offered our clients $\$ 800,000$ to settle, and offered to reimburse their legal costs (including our fees). Based on our limited but thorough analysis, we did not understand why the offer was so high. The plaintiffs, of course, accepted his offer, resulting in our income reconstruction being incomplete. The settlement was finalized before a more thorough investigation could be done. We never got to consider the other costs or the used-car issue, but the attorney who employed us and the minority shareholder plaintiffs were happy with the outcome of the litigation.

## Appendix A

## Bennett Oldsmobile, Inc. (or Predecessor, Bennett Buick-Oldsmobile, Inc.) Comparative Income Statement Information 1986-1995

1986-1990:

|  | 1986 | 1987 | 1988 | 1989 | 1990 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gross profit* | \$630,000 | \$605,000 | \$575,000 | \$570,000 | \$500,000 |
| Tom Bennett, Jr.'s salary | $(75,000)$ | $(75,000)$ | $(75,000)$ | $(75,000)$ | $(90,000)$ |
| Rent | $(200,000)$ | $(200,000)$ | $(275,000)$ | $(275,000)$ | $(275,000)$ |
| Other expenses | $(250,000)$ | $(270,000)$ | $(290,000)$ | $(310,000)$ | $(320,000)$ |
| Isuzu recapture | 0 | 0 | 7,000 | 8,000 | 12,000 |
| Pretax income (loss) | \$105,000 | \$60,000 | \$(58,000) | \$(82,000) | \$(173,000) |

1991-1995:

|  | 1991 | 1992 | 1993 | 1994 | 1995 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gross profit* | \$446,250 | \$422,500 | \$430,625 | \$405,000 | \$412,500 |
| Tom Bennett, Jr.'s salary | $(90,000)$ | $(90,000)$ | $(90,000)$ | $(90,000)$ | $(105,000)$ |
| Rent | $(320,000)$ | $(320,000)$ | $(320,000)$ | $(320,000)$ | $(250,000)$ |
| Other expenses | $(330,000)$ | $(350,000)$ | $(360,000)$ | $(370,000)$ | $(375,000)$ |
| Isuzu recapture | 28,000 | 32,000 | 36,000 | 47,500 | 50,000 |
| Pretax income (loss) | \$(265,750) | \$(305,500) | \$(303,375) | \$(327,500) | \$(267,500) |

[^7]
## Appendix B

Bennett Oldsmobile, Inc.
(or Predecessor, Bennett Buick-Oldsmobile, Inc.) and
Bennett Isuzu, Inc.
Number of Vehicles Sold
1986-1995
1986-1990:

|  | 1986 | 1987 | 1988 | 1989 | 1990 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Buick | 200 | 170 | 125 | 100 | 40 |
| Olds | 400 | 380 | 375 | 375 | 360 |
| Isuzu | 100 | 120 | 140 | 160 | 240 |
| 1991-1995: |  |  |  |  |  |
|  | 1991 | 1992 | 1993 | 1994 | 1995 |
| Buick | 0 | 0 | 0 | 0 | 0 |
| Olds | 350 | 325 | 325 | 300 | 300 |
| Isuzu | 280 | 320 | 360 | 380 | 400 |

## Appendix C

## Bennett Oldsmobile, Inc. Adjusted Income Data-Preliminary Computations 1991-1995

|  | 1991 | 1992 | 1993 | 1994 | 1995 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gross profit* | \$446,250 | \$422,500 | \$430,625 | \$405,000 | \$412,500 |
| Tom Bennett, Jr.'s salary | $(60,000)$ | $(60,000)$ | $(60,000)$ | $(60,000)$ | $(60,000)$ |
| Rent | $(175,000)$ | $(175,000)$ | $(175,000)$ | $(175,000)$ | $(175,000)$ |
| Other expenses | $(165,000)$ | $(175,000)$ | $(180,000)$ | $(185,000)$ | $(187,500)$ |
| Pretax income | \$46,250 | \$12,500 | \$15,625 | \$(15,000) | \$(10,000) |

[^8]
## Appendix D

## Bennett Oldsmobile, Inc. <br> Differences Between Reported and Adjusted Pretax Income 1991-1995

| Year | Reported Income (Loss) | Adjusted Income (Loss) | Difference |
| :---: | :---: | :---: | :---: |
| 1991 | \$(265,750) | \$46,250 | \$ 312,000 |
| 1992 | $(305,500)$ | 12,500 | 318,000 |
| 1993 | $(303,375)$ | 15,625 | 319,000 |
| 1994 | $(327,500)$ | $(15,000)$ | 312,500 |
| 1995 | $(267,500)$ | $(10,000)$ | 257,500 |
| Total |  |  | \$1,519,000 |
| Minority interest @ 25\% |  |  | \$ 379,750 |

# Case Study H- <br> Fish Wholesaler 

Linda J. Schaeffer, CPA, CFE

Schaeffer, Lamont \& Associates, PC
Princeton, New Jersey

After twenty years of marriage, raising a family, and successfully maintaining a 20 percent interest in a fish wholesaling operation, "Rosie's Fishes," Mr. and Mrs. Rose were divorced. Ms. Rose was awarded permanent support. Mr. Rose paid the support diligently for twelve years. However, Mr. Rose's fish operation was growing more successful, and Ms. Rose's support award was never modified, in spite of the fact that she had no other significant income.

Twelve years into paying the support award regularly, Mr. Rose started to fall further and further in arrears. Ms. Rose, who received her marital home as part of equitable distribution, was forced to sell her home in a depressed market. Mr. Rose made an application to the court to reduce or terminate support, claiming that his income decreased significantly.

A preliminary review of the tax returns supported Mr. Rose's claim that his circumstances had, indeed, changed for the worse. However, Ms. Rose had heard rumors that the business was, in fact, doing very well and that Mr. Rose now owned 100 percent of the business. After a consultation with an attorney, she decided it was worth the cost to challenge Mr. Rose and to pay for a forensic examination.

Mr. Rose initially submitted corporate tax returns for four years. The income was summarized in appendix A, and the balance sheets are shown in appendix $B$.

## Mr. Rose contended that-

- Sales had decreased over the past four years.
- Compensation to officers had decreased.
- Other expenses were increasing.
- That the fish industry was in flux and his former partners' buyout allowed him insufficient cash flow to continue his support.

He filed an application with the courts to terminate alimony, to fix arrears, and for counsel and expert fees. Ms. Rose cross-moved for increased alimony, to fix all arrears, and for counsel and expert fees. Ms. Rose retained an attorney, as well as our firm, by using some of the proceeds from the sale of her residence.

## DISCOVERY

Before beginning the investigation, we interviewed Mr. Rose to get his "story." He originally purchased his 20 percent interest in the 1970s, for approximately $\$ 60,000$. Some of the money used to purchase the business was lent to him by Ms. Rose, which he subsequently repaid to her.

Several years later, he and the existing partners entered into a shareholders agreement allowing the redemption of stock upon death, withdrawal, or retirement of a partner. To protect against death, they purchased life insurance and paid for it through the corporation.

One partner retired in the late 1980s. The second partner retired three years later. Both partners were bought out, paid through a noncompete agreement. Payments of approximately $\$ 8,000$ per month were used to pay out the partners. In 1995, the third partner died after a year-long illness. The money paid to the ailing partner, including benefits, was considered a current expense, but later offset the buyout contract. To assist the family, the deceased's son was also paid by the corporation. The son's payment was also used to offset a buyout number.

During the interview, Mr. Rose tried to emphasize that he was "so broke" because he had all the obligations to pay off the shareholders. He did not seem to understand that although he had this debt, he was no longer a 20 percent shareholder of a $\$ 10$ million corporation, but a 100 percent shareholder. Also, the need to replace the shareholders that were performing services was minimal. What was equally startling was that although the corporation had purchased life insurance on its shareholders to fund a buyout on their deaths, Mr. Rose answered truthfully that he personally took the $\$ 250,000$ of life insurance proceeds and "lent back" $\$ 100,000$ to the company in 1995 . He did not believe the $\$ 250,000$ had anything to do with the business, and it most certainly was not income to himself. Once again, he claimed his income had decreased over the past few years and he could not pay his former wife alimony because he had the obligation to pay his former partners first.

In reviewing the tax returns, we made the following observations:

1. There were no significant fluctuations in sales in four years.
2. The gross profit percentage was fairly consistent over four years, increasing by . 5 percent in 1996.
3. Officers' compensation decreased in the last two years; however, in 1995, one partner was out sick for most of the year and subsequently died in 1995.
4. The pension plan continued to be funded.
5. "Other costs" increased by 1 percent of sales over the last two years.
6. Consulting fees increased by more than $\$ 50,000$ in the last two years.
7. Accounts payable increased over the period of four years, while receivables and inventories decreased.
8. There were no additions to depreciable assets.
9. The cash-surrender value of the life insurance decreased in 1995.
10. Money was lent to the corporation by the stockholder in 1995 and partially repaid in 1996.
Before a site visit, there were some obvious adjustments to income as they related to the buyout of the former shareholders and the treatment of the life insurance proceeds. After meeting with the attorney and client, we decided that it was worth investigating Mr. Rose's claim that the fish industry suffered declining profits. We investigated both his business records and personal records.

## Business Investigation

On site visits, we usually "walk" the premises. This is what we found on our site visit to the fish wholesaler. Although there were no new depreciable assets on the books in four years, it was evident that there was a newly constructed dock. In reviewing the general ledger, an expenditure of $\$ 35,000$ was listed under repairs and maintenance. However, this was the entire cost for the dock replacement and should have been capitalized.

We also observed the sales activity on the site visit. It was apparent that there were some negotiations in prices and a tremendous amount of cash trading hands at 4:00 A.M. Invoices were in six sets of prenumbered tablets, and there were six individuals issuing hand-written invoices. It would be virtually impossible to determine whether all sales were recorded.

Voluminous daily records of purchases and sales were kept. Because there was limited cooler space, most fish were purchased and sold within a few days. Weekly profit-and-loss statements were maintained.

In 1996, inventories decreased by approximately 40 percent from historical levels. We decided to analyze sales and purchases for the last week in December 1996.

Sales for the four business days (one day was a holiday) totaled $\$ 133,470$. Purchases for the same period totaled $\$ 130,731$. We then compared the prices of seafood bought and sold in the same week.

Appendix C is the sample we randomly selected of seafood purchased and sold in the same week.

The cost of purchases for 1996 was 77 percent of sales. Using the same percentage in the last week of 1996, purchases applicable to those sales should be $\$ 102,772$ (Sales $\$ 133,470 \times 77$ percent). The difference between the purchases of $\$ 130,731$ and $\$ 102,772$ was added back to inventory and reduced the cost of sale. In making this adjustment, inventory was now consistent with the three previous years. We reconstructed 1996 income as shown in appendix $D$.

In addition, the corporation continued to make substantial contributions to a profit-sharing account, most of the benefit accruing to Mr. Rose. No adjustment was made for this item.

## Investigation of Personal Records

We also analyzed the personal expenditures of Mr. Rose and his family. Although we requested canceled checks, we were supplied with only check stubs and bank statements.

From 1993 to 1996, Mr. Rose was the sole support of his household. His current wife was unemployed and had few investments to assist in supporting the household. We were able to determine from Mr. Rose's interview that during the years 1993 to 1996, there were no other known sources of income aside from a small $\$ 5,000$ inheritance in 1993. Interest and dividend income reported on the personal returns was minimal. On the case information statement he filed with the courts, he listed no other assets, aside from the remaining monies from the life insurance policy, his marital residence, vacation residence, some personal property, and his ownership in the fish wholesaling business.

We analyzed the net available wages Mr. Rose brought home for each year, after paying all payroll taxes, medical insurance, and miscellaneous other deductions. We then compared that with what was deposited into his checking account. In 1993, his deposits (exclusive of the $\$ 5,000$ that he allegedly received from inheritance) exceeded his net available income by $\$ 19,000$. In 1994, 1995, and 1996, his deposits exceeded his net payroll by similar amounts.

We then received Mr. Rose's disbursements from his checking account. It became very clear that not only did he have more deposits into his checking accounts than could be supported by his paychecks, certain living costs could not be accounted for. For example, in every year, there was not one check to a grocery store, and checks made out to cash averaged only $\$ 75$ per month.

There were also no expenditures for the following items:

1. Medical insurance, doctors visits, and prescriptions
2. Household supplies, hair care, dental bills, sports, vacations, babysitting, clothing, or restaurants
3. Phone
4. Repairs for either the vacation home or marital residence
5. Private school costs for his daughter from the second marriage

In fact, total charges and expenses for the four years analyzed averaged $\$ 172$ per month. After analyzing the personal expenditures, we returned to the operations to examine expenditures in the business. We discovered that-

1. All medical bills, including dental expenses, were being paid out of the business. This averaged, excluding medical insurance, $\$ 4,100$ per year.
2. The average credit card bill being paid for by the business that appeared personal in nature was $\$ 580$ per month, or $\$ 6,960$ per year.
3. The home phone and vacation phone bills average $\$ 140$ per month ( $\$ 1,680$ per year) and were being paid by the business.
4. The private school cost of $\$ 7,200$ per year was being deducted as advertising on the corporate return.
We were unable to specifically identify the repair and maintenance bills for the personal residences. However, we knew that with the information we had, Mr. Rose was not going to be able to support his contention that income decreased.

## The Trial

Our report was issued approximately one month before the beginning of the trial. No rebuttal report was offered by Mr. Rose's side. Instead, they decided that the company's accountant and Mr. Rose would testify.

Mr. Rose testified that the seafood industry was declining, he now lacked the management depth in his organization, and he was overworked. He testified that cash was short because of his buyout payments to the former shareholders. He believed that if he continued to make support payments to his ex-wife, he would be forced to go out of business. He testified that had he capitalized the dock, he would only have had to pay more in tax. He argued that he could not finance any of the operations, and the life insurance proceeds had nothing to do with either his income or the corporation's income.

The corporation's accountant argued that it was "impossible to determine a number to reflect the true inventory," and that the sales and purchases of fish "were not representative of the prices paid by the company's regular customers." He also testified that Mr. Rose did not live extravagantly. Little else was offered to the courts.

## The Trial Decision

The court concluded that Mr. Rose's total income from 1993 to 1996 had not been reduced significantly. The real problem was the decision to buy out the deceased and retired shareholders through current income. That choice is what stagnated the corporation's liquidity. Mr. Rose could not explain the difference between his checking account and his reported income. Further, personal expenses paid through the business gave Mr. Rose more available income than he claimed. The court also found that

Mr. Rose did have available funds from the life insurance payments. Considering the above, the court ordered that-

1. Mr. Rose's request to terminate alimony was denied.
2. Alimony arrears were fixed at the full amount, and Mr. Rose must pay by June 1997, or a bench warrant would be issued for his arrest.
3. Mr. Rose would continue to pay alimony at the current level. However, it would automatically increase over the next two years.
4. Mr. Rose would pay a substantial portion of Ms. Rose's attorney fees and all her expert fees.

In this particular case, Ms. Rose won soundly. Mr. Rose was forced to produce documents, and a careful analysis was made comparing what he did personally with what he did through the corporation. Payments for buyouts were disguised as current expenses. It was not our job to criticize the tax treatment of certain items. It was, however, clearly our job to determine what income Mr. Rose had available. To spend his current income buying out former shareholders through current income was his choice. What the court decided was that Mr. Rose clearly did not have a choice about paying alimony. Not only did he have to pay arrears, but his support obligation was increased. Obviously, the court found his tale of the declining fish industry a bit "fishy" when they ordered him to pay counsel and expert fees.

This is a good example of not taking numbers at face value from either financial statements or tax returns, but to look behind them to determine what is really taking place in a business.

## Appendix A

## Fish Wholesaler Corporate Tax Returns

|  | 1996 | 1995 | 1994 | 1993 |
| :---: | :---: | :---: | :---: | :---: |
| Sales | \$ 9,770,909 | \$ 10,153,166 | \$ 9,513,200 | \$ 9,909,571 |
| Cost of goods sold | $(8,296,385)$ | $(8,659,743)$ | $(8,091,478)$ | $(8,429,660)$ |
| Other income | 66,000 | 60,000 | 55,950 | 59,600 |
| Gross profit | 1,540,524 | 1,553,423 | 1,477,672 | 1,539,511 |
| Compensation of officers | 108,000 | 122,900 | 216,000 | 235,626 |
| Pension plan | 27,032 | 27,228 | 30,330 | 34,813 |
| Consulting fees | 56,400 | 51,700 | - | - |
| Other costs | 1,338,811 | 1,343,799 | 1,226,682 | 1,216,485 |
| Interest expense | 11,042 | 23,328 | 17,293 | 11,342 |
| Total Expenses | 1,541,285 | 1,568,955 | 1,490,305 | 1,498,266 |
| Net profit (loss) | \$ (761) | \$ (15,532) | \$ (12,633) | \$ 41,245 |

## Appendix B

## Fish Wholesaler Balance Sheets

|  | 1996 | 1995 | 1994 | 1993 |
| :---: | :---: | :---: | :---: | :---: |
| Cash | \$ 32,243 | \$ 22,088 | \$ 42,242 | \$ 12,080 |
| Receivables | 406,864 | 456,709 | 542,499 | 481,938 |
| Inventories | 46,479 | 75,183 | 68,395 | 78,815 |
| Prepaid expenses | 16,835 | 15,495 | 15,161 | 14,439 |
| Other investment | 3,750 | 3,750 | 3,750 | 3,750 |
| Buildings and depreciable assets | 36,682 | 39,872 | 42,404 | 45,905 |
| Covenant not to compete | 61,100 | - | - | - |
| CSV life insurance | 39,059 | 51,582 | 67,835 | 44,403 |
| Loans and exchanges | 10,934 | - | - | - |
| Total Assets | \$ 653,946 | \$ 664,679 | \$ 782,286 | \$ 681,330 |
| Accounts payable | \$ 103,780 | \$ 111,301 | \$ 81,486 | \$ 58,830 |
| Notes payable | 157,213 | 86,801 | 89,608 | 33,354 |
| Other current payables | 42,233 | 47,660 | 128,100 | 105,000 |
| Loans from stockholders | 46,550 | 93,100 | - | - |
| Capital stock | 53,484 | 35,656 | 53,484 | 53,484 |
| Retained earnings | 380,546 | 290,161 | 429,608 | 430,662 |
| Treasury stock | $(129,860)$ | - | - | - |
| Total Liabilities | \$ 653,946 | \$ 664,679 | \$ 782,286 | \$ 681,330 |

## Appendix C

## Seafood Bought and Sold

 Last Week of December 1996| Description | Ticket Number | Bought $(\$)$ | Sold <br> (\$) | $\begin{gathered} \text { Cost / Sales } \\ (\%) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Shrimp | 57 | 1.25 | 1.75 | 71 |
| Mac | 57 | . 60 | 1.00 | 65 |
|  |  | . 70 |  |  |
| Tile | 16 | 2.10 | 3.00 | 68 |
|  | 53 | 2.00 |  |  |
| Whiting | 6 | . 50 | . 90 | 56 |
| Blue | 41 | . 75 | 1.45 | 52 |
| Sword | 39 | 4.50 | 6.00 | 66 |
|  |  |  | 7.00 |  |
|  |  |  | 7.50 |  |
| Bay scallops |  | 17.00 | 19.00 | 89 |
| Spanish | 14 | . 90 | 1.50 | 60 |

## Appendix D

## Recalculated Corporate Income

Loss per 1,120 ..... \$ (760)
Buyout payments to two former partners, categorized as current expense ..... 92,299
Adjustment to year-end inventory ..... 27,959
Improvements to dock, less depreciation ..... 35,000
Life insurance proceeds ..... 250,000
Recalculated corporate income ..... \$404,498

# Case Study I-Restaurant 

Robert N. Pulliam, CPA, ABV Vance Horner, CPA, ABV

Pulliam Financial Group, PLLC
Winston-Salem, North Carolina

The puzzle is well hidden in the numbers. Who will be the Sherlock who unravels the mystery? Will it be a salesman? Will it be a CPA trained in business valuations? Or will it be a combination of the experienced CPA working with the attorney as a team?

An understanding of financial statements, an inquisitive approach, and thorough research of the industry are required to decipher income statements. The CPA best suited to straightening a crooked income statement is one who looks not only at the numbers but the foundation upon which these numbers build. CPAs often have the basic technical skills, but they must also have an inquisitive mindset geared to leave no stone unturned. Effective CPAs insist on thoroughness in seeking the answer. The following fish tail (sic) is illustrative of these traits. This particular fishing expedition involved the valuation of seafood restaurants, which, among other things, required the CPA to navigate murky waters to arrive at the proper answer. In the end, it became apparent that the financial statements were all wet, and the restaurant owner was like a fish out of water when faced with a capable attorneyCPA team.

## BACKGROUND

A restaurant owner and his wife found their way into divorce court. The husband owned several seafood restaurants that he declared were "worthless." The wife sought a fair and equitable distribution for her
marital interest in the restaurants but faced the challenge that the restaurants had seldom shown any substantial profits, at least according to the books.

The husband hired an expert, Otto Sorts, who was a local chief financial officer (CFO). Otto valued businesses only on a part-time basis. His value of the restaurants was a mere $\$ 100,000$, compared with the $\$ 1$ million the wife's expert declared.

## The CPA's Fishing Expedition

The wife's attorney, Frito Morrow, instinctively knew the answer was in the numbers. He sought out Chuck D. Numbers, a CPA experienced in valuing companies and reading between the lines of a financial statement. Numbers knew his mission in valuing the restaurants was more than throwing a line into the water and pulling in a fish. Numbers could not initially determine if the fish to be reeled in was a minnow, easily seen at the top of the water, or a giant catfish resting on the bottom. Numbers approached his mission with skepticism, perseverance, and trust in his intuitive sixth sense-the smell test. The steps to be addressed were:

1. Assessing the cover-up and testing the murky waters.
2. Looking through the smoke and mirrors.
3. Clearing out the muck.
4. Pulling in the fish.
5. Demonstrating to the fact-finder the real fish.

## The Cover-Up

The husband offered his tax returns as proof that his restaurants were worthless. His income statements showed only minimal income over the six years reviewed. Sales were growing reasonably well, but they never flowed to the bottom line. The husband cited high food costs, low menu prices, and large food portions as part of the reason that his restaurants never made very much money. He summarized by saying, "I just don't know what to do to make money."

Numbers assisted Morrow by first developing questions for the husband's deposition. Morrow asked the husband to estimate the cost of each item included on a shrimp plate. He then asked the restaurant owner to estimate the quantity of shrimp on each platter. The response was, "Two pounds." This quantity did not pass the smell test for Numbers or Morrow. The husband defended his response by adding that the restaurants' policy was to give very generous portions to its customers. "You know, you give them a lot and they'll come back," he said, emphatically.

Numbers later discovered that the husband told Sorts, the defense expert, that he did not pay attention to food portions; he expressed his own frustration when he said, "I have a real problem with food walking out the back door with employees." Sorts took these statements at face
value. He later testified at trial that he accepted the husband's explanations and did not consider it necessary to investigate any further-that was not his assignment.

Morrow's examination of Sorts at trial revealed Sort's "unique" and personalized standards of professional valuation techniques:

Attorney: Who is Shannon Pratt?
Sorts: I believe he is a business valuation expert who writes books.
Morrow: Do you have any of his books?
Sorts: No.
Morrow: Do you consider him to be an expert?
Sorts: He may be.
Morrow: Who do you consider to be an expert?
Sorts: I am.
Morrow: Do you follow the Uniform Standards of Professional Appraisal Practice?

Sorts: No.
Morrow: Do you know what USPAP is?
Sorts: No.
Morrow: Do you follow the standards of any appraisal organization?
Sorts: I follow my own standards.

## Getting Through the Smoke and Mirrors

Morrow astutely noted the husband's lifestyle, his incredible ability to live lavishly out of the humble restaurant profits and meager salary of $\$ 500$ per week. The husband's other investments did not account for his style of living, either.

Once Numbers received the tax returns, he quickly noted that food costs were averaging 55 percent of sales. This figure was in line with what the husband was professing all along; however; it seemed extremely high for Numbers' comfort. Numbers decided to dig deeper into the numbers.

According to Numbers' own experience and several industry sources, restaurant food costs typically fall between 28 percent and 40 percent of sales, depending on the style of restaurant. Seafood restaurants are most often in the 30 percent to 36 percent range. Given this knowledge, Numbers questioned why the costs were so far out of line with industry norms. There were four scenarios likely to cause such a significant discrepancy:

1. Low prices. If prices were too low, revenues would be lower, causing food costs to be a higher expense as a percentage of sales.
2. Large or excessive food portions. If food portions were very large, or portioning were not carefully controlled, food costs would be high when compared to revenues.
3. Employee theft. If employees were stealing food, food costs would be high as a percentage of sales.
4. Unreported sales. If the owner were pocketing receipts, sales and profits would be understated, thereby causing expenses to be higher as a percentage of sales than would be expected.

Numbers set out to understand the reasons for the high food costs and determine whether the income statements needed to be reconstructed. Which scenarios could be eliminated as the culprit in such an unlikely relationship of food costs to sales?

## Were Prices Too Low?

Numbers decided to get some hands-on experience. He and his wife ate at one of the restaurants, ordering a shrimp meal, a flounder plate, and a shrimp takeout. He determined the prices were comparable with the prices of similar seafood restaurants. Based on this experience, and research within the community, Numbers concluded low menu prices were not the culprit.

## Were the Food Portions Excessive?

During his meal, Numbers counted and recorded the amount of shrimp, fish, hush puppies, and french fries on each plate. A duplicate takeout meal was brought back to the office and later weighed. The shrimp count of the takeout was almost identical to the one at the restaurant. The shrimp weighed only nine ounces, which was in line with portions weighed from other restaurants. Numbers attempted to fit two pounds of shrimp, as per the husband's deposition, onto a plate with all of the "fixings." This quantity of food simply would not fit on the plate. In this manner, Numbers was able to eliminate this scenario and conclude that food portioning was not the culprit.

## Were Employees Stealing Food?

Certainly employee theft is a common problem in the restaurant industry. However, the discrepancy equaled an average of 200 meals per day walking out the back door. This was not probable. Numbers therefore concluded that employee theft was not the culprit.

## Were There Unreported Sales?

Numbers noted that in one year, sales taxes paid were higher than the rate set by the state. Based on this piece of information, he knew to request all prior income and sales tax audits of the restaurant. Alas, the State Department of Revenue had conducted a sales tax audit and levied sales tax on more than $\$ 2$ million of unreported sales. Numbers further noted that restaurant food costs increased dramatically after completion of the audit. This outcome was highly improbable and indicated the potential for a significant amount of unreported sales after the auditors completed their assignments.

Finally, Numbers compared his food cost calculations with a seafood distributor's price on shrimp of like size and quantity. He then calculated the cost of food on the sample plates. The result: Food costs per plate were
substantially higher per the financial statements. This discovery was indeed an indication of unreported sales.

As the discovery progressed, the parties agreed to settle the matter in binding arbitration. The wife's attorney had the owner produce the restaurants' ledger books of original entry. The produced book contained daily cash receipts for multiple years. The book was unstained, had no seafood grease on the pages, and appeared to be written with the same pen. Numbers contacted the publisher of the ledger book to determine the year the book was first published. The 1993 sales figures recorded in a book with a product code ( $96-000$ ) prefix (issued in 1996) provided a clue. When the evidence was presented to the owner at the arbitration hearing, he acknowledged to the arbitrator and to his own attorney that he had copied the numbers from another book and could not now locate the "original" book.

## Trend Analysis

An income statement is intended to capture the most important financial information related to a company's operations. If this information is not a true representation of the operations, any analysis based on the income statement will be inherently faulty (garbage in-garbage out). The financial analysis part of a business valuation is one of the most crucial steps in deciphering and understanding the value of a company. Financial analysis involves trend and comparative analysis.

An analysis of the trends in the financial statements can reveal a lot about what is right or wrong with an income statement. This analysis is necessary if the analyst is to make any meaningful reconstruction of the income statement. The income statements for one of Captain High Waters Seafood restaurants is shown in appendix A.

Six years of financial statements may be a little overwhelming to look at all at once. However, this type of analysis allows meaningful conclusions regarding what is going on with a particular company.

To eliminate the overwhelming "number of numbers," a process known as "common sizing" is necessary. Common sizing means that all the expenses are displayed as a percent of sales. In this way, the financial statements of small companies can be compared with those of large companies, with industry composite ratios and, most important, with trends within the company itself. This helped Numbers determine whether the costs associated with the company at issue were in line with the company's industry norms. A portion of the common sizing is presented in appendix B.

As noted here, there is something fishy with the sales tax paid. The "common size" income statement reveals that sales tax paid in 1993 was 11 percent of net sales, as opposed to the normal 5 percent to 6 percent. Numbers also observed that the cost of food ranged between 44 percent and 64 percent. This is an extremely wide range of fluctuation for one of the most important (and most carefully watched) expenses in a restaurant. Numbers had expected a variance from year to year not to exceed 2 percent, with an overall food-costs-to-sales maximum of 40 percent.

The food costs were particularly worrisome to Numbers because if these costs continued to grow faster than revenue and profits, it would eventually become too expensive to operate the restaurant. Yet the husband was continuing to build new restaurants. Numbers noted the obvious inconsistency.

Numbers supported his "hunches" by examining publicly traded companies. These companies had food costs in the 30 percent to 36 percent range, and variances from year to year were almost nil. All of these abnormalities emphasized to Numbers that the smell test had not been passed.

Numbers discovered that the sales-tax auditors had inquired with local seafood vendors regarding purchases made by the restaurants during the period under audit. The auditors found that sales to the restaurants exceeded the amounts reported on the company's income tax returns. From this, the auditors confirmed that a substantial portion of purchases were paid in cash from the cash drawer and that those sales were not reported for sales tax purposes. The Department of Revenue charged the restaurant with sales tax avoidance but apparently did not uncover additional cash being removed from the drawer. With the adjustments the Department of Revenue made, the cost of food actually increased dramatically as a percentage of sales, as shown in appendix $C$.

This methodology had the effect of increasing the cost of food from the unreasonable 53 percent to an even more unlikely 74 percent. Something was still very wrong on the high seas.

## How to Fix the Income Statement?

Based on the information revealed, it was obvious to Numbers that the financial statements did not represent reality. The Department of Revenue had proved this fact, but had not gone far enough. The Department of Revenue and the restaurant owner had reached a compromise, agreeable to both parties. Numbers reasoned that the Department of Revenue's goal had been to collect sales tax, not to attempt to reconstruct or adjust the income statements properly. Numbers had Morrow seek some sort of admission from the husband about the amounts actually not reported.

Morrow: Isn't it typical for the state to compromise with a taxpayer to get a settlement?

Husband: I don't know.
Morrow: Well, how much did you take from the drawer?
Husband: I don't understand.
Morrow: You took a lot more than $\$ 2$ million, didn't you?
Husband: No, $\$ 2$ million is all that was taken. The state found it all.
The admission of guilt had been obtained for 1989 through 1991, but 1992 to 1994 was a different story. As stated earlier in this chapter, industry research indicated food cost for most restaurants ranged from 28 percent to 40 percent. The cost of food for a seafood restaurant was approximately 30 percent to 36 percent. Given that the restaurant owner claimed his food portions were excessive, and that employee theft was a concern, Numbers gave the owner the benefit of the doubt and concluded
the maximum possible cost of food to be 45 percent. This percentage was used as Numbers' basis for recasting the income statement.

Numbers adjusted sales for 1989 through 1991 based on food costs at 45 percent of sales. Sales for later years had to be adjusted by a different approach because the sales tax audit period ended in 1991.

Based on his revised estimate of actual sales for 1992, Numbers estimated that sales would grow at approximately 5 percent for the next two years, and calculated food cost based on 45 percent of those sales. The resulting income statements are presented in appendix D. Appendix E contains the adjusted common size income statements, showing food costs of 45 percent.

The significant operating profit could easily be explained for this restaurant (an S corporation) by the fact that virtually no amounts were included for management salaries and nothing for income taxes.

## How Big Is the Fish?

Numbers had now adjusted the income statements and reached his revised operating income estimates. The revisions revealed a startling contrast when compared with reported income, as shown in appendix $F$.

Using the revised amounts and applying the appropriate rate of risk, premiums, and discounts, Numbers concluded the value to be $\$ 750,000$. Numbers documented the opinion in a report fully complying with standards and guidelines of all known appraisal organizations, including his own CPA organization. Performing the same type of adjustments for all the restaurants yielded a value far in excess of $\$ 1$ million. This was a far cry from Otto Sort's valuation of $\$ 100,000$, using his own personal valuation standards.

## Who Will Pay to Buy a Catfish When It Is Sold as a Minnow?

Morrow asked Numbers, "Who would pay such a price for the menial reported profits of a business such as this?" Numbers knew that the husband would retain his "minnow" of a restaurant to retain the "big fish" returns not shown on the books. He would not dare sell it.

Even so, what would happen should the restaurants be purchased? Who would buy them? Morrow asked Numbers to determine whether indeed there was a market for purchase of these restaurants. Numbers' research began. Through intensive research, Numbers determined "the underground economy" is estimated to be one of the largest industries in the country, believed to represent approximately 20 percent of the gross domestic product. The most likely universe of purchasers of this restaurant would be a party within this underground economy, if indeed the restaurants were sold.

At the trial, the husband's attorney objected vigorously to Numbers' opinion, which he claimed lacked adequate foundation. Morrow countered by having Numbers review, with the arbitrator, literally dozens of articles supporting the size of the underground economy, written by recognized individuals and government agencies. Numbers pointed out that adequate
room existed within his conservative estimate of gross profit, at least according to industry statistics, for a sizable profit to the underground purchaser. Within hours, the attorneys settled the case.

## Lessons from the Fish Story

Every fish story gets stretched, and this one is no different. The theme, however, is real. The apparent minnow as portrayed in the original financial statements did turn into a healthy catfish; the fishy smell of the original data was indeed authentic; and both of the parties ended up satisfied. In conclusion, let's review lessons from the fish story.

1. Don't go deep-sea fishing without a complete team. In this case, the attorney, the CPA, and most important, the wife worked together to identify the real fish, a healthy group of restaurants.
2. Don't accept the floating minnows as indicative of the real fish in the pond. Anyone can type a financial statement with any amount he or she wishes to show as profit. As big as the "underground economy" appears to be, this type of thing happens more often than we all think.
3. Look under the rocks on the bottom of the pond. There may be a catfish under the rock. Properly deciphering and understanding a financial statement requires thorough and detailed analysis and investigation. Only in this way will you be in the best position to provide the most value to your clients.
4. Don't go on the high seas with a rookie guide. The husband's expert placed his attorney in a real bind as a result of the valuator's lack of experience. This was complicated by the lack of apparent truthfulness by his client.
5. Don't tell a fish story with intricate discourse when mere talk will do. Numbers had spent many hours with the case but had only a few hours to bring the arbitrator up to date. Keep it simple.
Today we are accustomed to looking for high returns on our investments. The wife's return on her investment in her CPA-attorney team turned out to be phenomenal. Yet this all would not have been possible without her faith, perseverance, and constant encouragement to her team. This author thanks his client for her demonstration of confidence and perseverance and thanks Morrow for his case leadership. Through effective teamwork, justice did in fact prevail in this instance.

## Appendix A

## Captain High Waters Seafood Income Statements

|  | $\begin{gathered} 1994 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1993 \\ (\text { In } \\ \text { thousands) } \\ \hline \end{gathered}$ | $\begin{gathered} 1992 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1991 \\ (\text { In } \\ \text { thousands) } \\ \hline \end{gathered}$ | $\begin{gathered} 1990 \\ \text { (In } \\ \text { thousands) } \\ \hline \end{gathered}$ | 1989 <br> (In <br> thousands) | $\begin{gathered} \text { Growth } \\ \text { 1989-1994 } \\ \text { (\%) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross sales | \$795 | \$759 | \$636 | \$482 | \$550 | \$537 | 8 |
| Sales tax | (45) | (73) | (36) | (25) | (29) | (25) | 12 |
| Net sales | \$750 | \$686 | \$600 | \$457 | \$521 | \$512 | 8 |
| Food cost | 478 | 384 | 317 | 199 | 260 | 267 | 12 |
| Direct labor | 119 | 123 | 117 | 97 | 96 | 96 | 4 |
| Cost of goods sold | \$597 | \$507 | \$434 | \$296 | \$356 | \$363 | 10 |
| Gross profit | \$153 | \$179 | \$166 | \$161 | \$165 | \$149 | 1 |
| Operating expenses | \$145 | \$147 | \$156 | \$135 | \$131 | \$132 | 2 |
| Operating profit |  | \$ 32 | \$ 10 | \$ 26 | \$ 34 | \$ 17 | -14 |

## APPENDIX B

## Captain High Waters Seafood

 Common Size Income Statements|  | $\begin{gathered} 1994 \\ (\%) \end{gathered}$ | $\begin{gathered} 1993 \\ (\%) \end{gathered}$ | $\begin{gathered} 1992 \\ (\%) \end{gathered}$ | $\begin{gathered} 1991 \\ (\%) \end{gathered}$ | $\begin{gathered} 1990 \\ (\%) \end{gathered}$ | $\begin{gathered} 1989 \\ (\%) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross sales | 106 | 111 | 106 | 105 | 106 | 105 |
| Sales tax | -6 | -11 | -6 | -5 | -6 | -5 |
| Net sales | 100 | 100 | 100 | 100 | 100 | 100 |
| Food cost | 64 | 56 | 53 | 44 | 50 | 52 |
| Direct labor | 16 | 18 | 20 | 21 | 18 | 19 |
| Cost of goods sold | 80 | 74 | 72 | 65 | 68 | 71 |
| Gross profit | 20 | 26 | 28 | 35 | 32 | 29 |
| Operating profit | 1.0 | 4.2 | 1.5 | 5.3 | 6.1 | 3.1 |

## Appendix C

## Food Costs

|  | As Reported (\%) | Department of Revenue Adjustments (\%) | Adjusted Sales (\%) |
| :---: | :---: | :---: | :---: |
| Sales | 100 | 80 | 180 |
| Cost of goods (food) | 53 | 80 | 133 |
| Food cost as percentage of sales | 53\% |  | 74\% |

## Appendix D

## Captain High Waters Seafood Adjusted Income Statements

|  | $\begin{gathered} 1994 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1993 \\ \text { (In } \\ \text { thousands) } \\ \hline \end{gathered}$ | $\begin{gathered} 1992 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1991 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1990 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ | $\begin{gathered} 1989 \\ \text { (In } \\ \text { thousands) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net sales | \$ 750 | \$ 686 | \$ 600 | \$457 | \$521 | \$512 |
| Additional sales | 386 | 398 | 433 | 332 | 332 | 388 |
| Total Sales | \$1,136 | \$1,084 | \$1,033 | \$789 | \$853 | \$900 |
| Food cost | 478 | 384 | 317 | 199 | 260 | 267 |
| Additional purchases | 33 | 104 | 148 | 156 | 124 | 138 |
| Total Food Cost | \$ 511 | \$ 488 | \$ 465 | \$355 | \$384 | \$405 |
| Direct labor | 119 | 123 | 117 | 97 | 96 | 96 |
| Cost of goods sold | \$ 630 | \$ 611 | \$ 582 | \$452 | \$480 | \$501 |
| Gross profit | \$ 506 | \$ 473 | \$ 451 | \$337 | \$373 | \$399 |
| Operating |  |  |  |  |  |  |
| Expenses | \$ 145 | \$ 147 | \$ 156 | \$135 | \$131 | \$132 |
| Operating profit | \$ 361 | \$ 326 | \$ 295 | \$202 | \$242 | \$267 |

## Appendix E

## Captain High Waters Seafood Adjusted Common Size Income Statements

|  | $\begin{gathered} 1994 \\ (\%) \\ \hline \end{gathered}$ | $\begin{gathered} 1993 \\ (\%) \\ \hline \end{gathered}$ | $\begin{gathered} 1992 \\ (\%) \\ \hline \end{gathered}$ | $\begin{gathered} 1991 \\ (\%) \\ \hline \end{gathered}$ | $\begin{array}{r} 1990 \\ (\%) \\ \hline \end{array}$ | $\begin{gathered} 1989 \\ (\%) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net sales | 66 | 63 | 58 | 58 | 61 | 57 |
| Additional sales | 34 | 37 | 42 | 42 | 39 | 43 |
| Total Sales | 100 | 100 | 100 | 100 | 100 | 100 |
| Food cost | 42 | 35 | 31 | 25 | 30 | 30 |
| Additional purchases | 3 | 10 | 14 | 20 | 15 | 15 |
| Total Food Cost | 45 | 45 | 45 | 45 | 45 | 45 |
| Direct labor | 10 | 11 | 11 | 12 | 11 | 11 |
| Cost of goods sold | 55 | 56 | 56 | 57 | 56 | 56 |
| Gross profit | 45 | 44 | 44 | 43 | 44 | 44 |
| Operating expenses | 13 | 14 | 15 | 17 | 15 | 15 |
| Operating profit | 32 | 30 | 29 | 26 | 28 | 30 |

Note: Totals may not add due to rounding.

## Appendix F

## Captain High Waters Seafood

 Comparison of Reported and Adjusted Profit| 1994 | 1993 | 1992 | 1991 | 1990 | 1989 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $(\$$ in | $(\$$ in | $(\$$ in | (\$ in | $(\$$ in | $(\$$ in |

Thousands) Thousands) Thousands) Thousands) Thousands) Thousands)

| Operating profit | 8 | 32 | 10 | 26 | 34 | 17 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Revised profit | 361 | 326 | 295 | 202 | 242 | 267 |

# Case Study J—Law Practice 

Ron J. Anfuso, CPA/ABV

Ron J. Anfuso, CPAABV
Lomita, California

It is important to understand how law practices account for income and expenses, to gain insight into how an attorney can possibly underreport his or her income. Most law practices' books are maintained on the cash receipts and cash disbursements basis of accounting for income-tax reporting purposes. Occasionally, a second set of internal books is created using the accrual method or modified cash basis method of accounting. This separate set of books provides reliable assessment of the firm's financial position and results of operations during any given interim period, and can provide a better evaluation of internal controls.

For cash deposits, law firms generally use one general bank account, oftentimes together with one or more client trust accounts. They may also open separate payroll, savings, or money market accounts, or any combination of such accounts. Total deposits into accounts held in banks or in other quasi-banking institutions, when compared with gross receipts, pinpoint probable diversion of income away from company coffers.

Size and makeup of firm play a significant role in assessing whether the firm reports all its income. In addition, the number of individuals in control can influence whether the practice reports only necessary business-related expenses or whether discretionary or personal expenses are paid through the practice. As with most other businesses and professional practices, larger organizations usually have more stringent internal controls than smaller firms and are less likely to understate income. An indicator of an attorney's degree of control over the books is the nature of his or her involvement with the company. Some attorneys are employees. Others are self-employed, partners, or shareholders in
large law firms or closely held law practices. Attorneys who are employees have less power than others to manipulate the books and less control to self-allocate discretionary funds for personal expenses than do owners of law firms.

One other factor that defines the method with which law firms collect and report income is the type of law they practice. The type of legal practice usually determines the arrangement for client payments. A general law firm, practicing as many types of law as its members' expertise will allow, oftentimes charges an agreed-upon fee for a particular legal engagement, which usually involves a prepaid retainer. Commonly, this retainer is put into a client trust account and the attorney pays himself or herself from the trust account as the case progresses. This is when the income is reported. Law firms specializing in personal injury cases may base their fees on a percentage of the settlement. This is referred to as a contingent fee. Most attorneys practicing in such areas as family law, civil law, bankruptcy, estate planning, corporate law, taxation, criminal law, environmental law, and maritime law, base their fees on the number of hours worked at their respective hourly rates, plus fees and costs incurred on the particular case.

## BACKGROUND

The basis for this chapter is an engagement related to a dissolution-ofmarriage action. This case involved a seventeen-year marriage, from which there were three children. The wife, Mrs. Smith, was a homemaker. The husband, Mr. Smith, was one of three senior partners in a law firm that practices admiralty and general maritime law. In addition, the firm practices civil, real property, environmental, probate, insurance, and estate law.

Our accounting firm was engaged to (1) value Mr. Smith's interest in the law practice and (2) determine his gross cash flow available for spousal and child support. The proper and complete reporting of income affects both of these assignments.

The Los Angeles-based law firm in which Mr. Smith is a 33 percent owner employs more than forty attorneys and boasts such clients as large oil companies and nationally known insurance firms. The law firm grosses more than $\$ 10$ million per year and, after adding back unreported income and perquisites, has a profitability factor of approximately 49 percent. This is about 6 percent lower than the average profitability by area of specialty, region, firm size, and city population, as reported in the 1994 Survey of Law Firm Economics (the most current survey available at the time of the engagement, which was based on 1993 data). ${ }^{1}$

Many of the methods we employed for the valuation process are based on the standards and procedures used by the Internal Revenue Service (IRS). Our standards of due diligence for divorce cases are close to those used by the IRS: We perform a thorough forensic investigation in many

[^9]cases when a suspicion of unreported income has been expressed by one of the litigants.

## The Initial Interview

The engagement began with the formulation of a case plan. The main objective of any plan is to draw out, in an initial interview, the specific attributes of Mr. Smith's law firm. Many useful planning procedures found in the IRS audit training guide for attorneys, 3149-102 (Rev. 6-94), have been incorporated in our guidelines, as follows:

Attorneys tend to answer questions literally and offer little additional information. As such, prepare direct, specific questions that will elicit quantitative or qualitative responses.

Questions on how the practice started and areas of specialization will give insights into probable systems of accounting. Just the same, specifically ask for the system of accounting in place, the size and scope of the taxpayer's practice, and what sorts of income and operating costs to expect.

An effective income probe is crucial since unreported income is often an issue. All possible sources of income need to be identified and explained so that they cannot be introduced as explanations later. Questions to ask which are particularly relevant when dealing with attorneys are:

- How much cash was on hand at the beginning and end of the year?
- Were any loan proceeds received?
- Were referral fees received from other attorneys?
- Was compensation received other than in cash?
- Are there any foreign accounts or offshore interests?
- Are there any interests in other entities?

A thorough understanding of the taxpayer's bookkeeping system and internal controls is necessary. Have the attorney or the bookkeeper step through the recordation process from the point where the attorney is retained by a client up to the settlement of the account. Is there another set of books apart from the one used for income tax purposes?

Ask for the bank records for all accounts including any investment accounts. Question the taxpayer about the use of each account. Depending on the size of the practice and the level of sophistication of the books, a number of different accounts may be used to pay expenses and deposit receipts. It is easier to ask up front and verify the information given than to try to decipher the numerous accounts later.

At the conclusion of the initial interview, you should have an understanding of the taxpayer's system of accounting, his or her level of involvement in that system, and who to go to with questions during the audit. In addition, the taxpayer's level of
credibility can be established through comparison of the pre-audit analysis and information supplied during the interview.
By modifying the IRS-suggested planning procedures, and using our own predetermined planning procedures and interview questions, we determined which procedures and questions to ask Mr. Smith at the initial interview. In addition, our policy is to perform financial statement analysis of the companies in question. One of the preengagement planning tools is the preparation of historical comparative financial statement spreadsheets. Typically, five or more years of balance-sheet and income-statement data, if available, are input into a spreadsheet with percentages for total assets and gross receipts. This information is one of the factors to consider when valuing a company pursuant to IRS Revenue Ruling 59-60.

This is only the beginning of what the financial statement "spreads," as we call them, can tell us. The percentage of net income to gross receipts can be compared with industry standards by year as a preliminary tool to determine whether the practice is possibly understating income. Not reporting cash receipts by depositing them into a personal or other hidden account or just cashing the check is the first of the two most common methods of not reporting income. Drastic changes in expense accounts may indicate personal expenses or perquisites exist. Perquisites are the second of the two most common ways income is not reported. By concealing personal expenses as business expenses, an individual actually has avoided income taxes and disguised his or her income as legitimate business expenses.

The questions we asked of Mr. Smith to determine whether he was properly reporting his income and if he had perquisites were as follows:

- What is your standard of living (for example, monthly recurring living expenses after taxes, including such expenses as mortgage payments, car payments, laundry bills, grocery costs, clothing purchases, furniture expenses, children's expenses, house maintenance, domestic help, and entertainment costs)?
- Is your reported income sufficient to support your standard of living (that is, is the reported income after taxes greater than the monthly expenses)?
- What is your accumulated net worth?
- When and how was this net worth accumulated?
- Has your reported income been sufficient to fund this accumulation? (We consider net worth to be accumulation of wealth from all sources, not just taxable income. These include loan repayments, sales of investments, refinancings of assets, gifts and inheritances, and gambling winnings.)
- What is your method of accounting?
- Are any of your cases handled on a contingency basis?
- When and how are contingency cases billed? What is their approximate value in billing?
- How long do you estimate it takes for contingency cases to get to trial?
- What personal expenses of yours are paid for by the law practice?
- What personal expenses for the other shareholders are paid for by the law practice?

At this interview, Mr. Smith informed us that the practice had discrete general ledger accounts. Each of the shareholders had individual general ledger accounts for such expenses as life insurance, entertainment, business promotion, travel, and auto expenses. We received copies of the relevant documents and concluded our interview.

## Calculation of Unreported Income

Many attorneys calculate their gross fees based on the money transferred from the client trust account(s) into the general account(s). At times, we have encountered attorneys who deposit fees into personal accounts, thereby bypassing the general accounts altogether. In this particular case, we examined client ledger cards and discovered that cash receipts posted to the ledger cards were not accounted for in the cash receipts journal or the general ledger. Upon analyzing the bank reconciliations, we determined that these receipts were not deposited into the firm's bank accounts and therefore not included in the gross fees reported by the law practice. Apparently, Mr. Smith and his partners were cashing client checks and, in some instances, depositing them into personal bank accounts. These checks represented approximately 13 percent of the gross income of the corporation, or $\$ 1.3$ million.

Additionally, after inspection, we found checks from the trust account representing expense reimbursements that were endorsed directly to the attorneys. These reimbursements, for the most part, were for personal expenses. We determine which expenses are business and which are personal on an expense-by-expense basis. For example, some expenses, such as psychiatric fees, are inherently personal. Others we need to ask the client about.

For life insurance, for example, we ask about the beneficiary. If the beneficiary is the firm (which is sometimes the case, when the policyholder is a key member of the firm), it may be a legitimate business expense. If the beneficiary is the spouse or children, however, it becomes a personal expense. For automobile expenses claimed, we ask such questions as what the distance is between home and business, because those commuting miles are not considered business miles. We also inquire about business use of the automobiles. Our goal is to determine the actual business mileage incurred and deduct that from the total miles claimed, to determine the personal automobile mileage and therefore personal expenses.

We inspect credit card receipts used for travel and ask about the purpose of the travel. If the client doesn't provide us with information, we make estimates regarding how much of the expenses are personal, based on our professional experience. Depending on the financial information used (that is, tax returns versus financial statements), we estimate the amount of personal expenses deducted for net income purposes.

Appendix A shows the personal expenses for Mr. Smith that we culled out of the business expense ledger, with our determination supported by
actual analysis, discussions with both Mr. and Mrs. Smith, discovery of contradictory information, and estimates based on personal experience.

Based on our conversations with Mr. Smith, the other two shareholders enjoyed similar personal benefits paid for by the corporation.

## Finding OTHER UNREPORTED INCOME

Identifying personal expenses is one of the steps in our forensic investigation. Another step is examining the client's and spouse's bank accounts for money not accounted for in the tax returns. In cases that include business or personally guaranteed loans, personal financial statements of the parties may be on file with the bank. Banks normally maintain customers' records for at least two years and often for as long as seven years. Attorneys can subpoena deposit slips, canceled checks, signature cards, bank statements, and other relevant information that can assist in the forensic investigation.

We look for patterns in checks deposited or issued. Red flags are large deposits to the personal account that do not constitute either regular salary checks or expense reimbursement checks. For example, we found four large checks totaling more than $\$ 425,000$ deposited into Mr. Smith's personal bank account during a two-month period. We verified that those checks were not regular salary checks or expense reimbursements. A closer examination of the accounts receivable aging report for the same period revealed that approximately $\$ 1.3$ million of accounts receivable had been written off with no explanation. This amount represents just over three times the amount deposited into Mr. Smith's personal account. We requested that the attorney subpoena the records from the various clients, and when the documentation was produced, we had clear and convincing evidence that the three shareholders had colluded with one another to not report this income. Is this evasion of income taxes? You bet.

We got further clues about the nature of unreported income by taking photocopies of the front and back of other checks produced pursuant to subpoena from the law firm's clients and examining both who endorsed them and where they were cashed. This information may establish a money trail leading to the attorney or other parties and entities directly related to the lawyer. If the link is established, it is possible to determine other amounts of income that have been diverted from the books and records of the practice.

Debit and credit memos can be another source of information. In our experience, we have discovered other bank accounts by examining these documents, which can point to international or domestic wire transfers, payments or repayments of loans, transfers between accounts (thereby leading to discovery of accounts previously unreported), and purchases of cashiers checks.

## CONCLUSION

Mr. Smith reported his income to be $\$ 400,000$. After employing the methods discussed in this chapter, we discovered $\$ 762,971$ of unreported income. His adjusted income for purposes of our engagement, therefore, was $\$ 1,162,971$. This is illustrated in appendix B.

The results of these procedures in effect increased the value of Mr . Smith's interest in the law firm by approximately $\$ 575,000$ and increased his gross cash flow available for support from $\$ 400,000$ to $\$ 1,162,971$. More than 50 percent of his income was not reported or taxed.

Mr. Smith's case settled at the settlement conference without having to go to trial. Did our analysis of unreported income facilitate the settlement? I think so. Are these typical numbers? Probably not. This involved a wealthy individual (and a high cost of living), and as such, the numbers may seem inflated. However, the procedures outlined here are just as effective whether the client is worth $\$ 10,000$ or $\$ 10$ million. Only the number of zeros changes.

Keep in mind, however, that the above procedures are only guidelines. Every case has its own unique facts and circumstances and must be evaluated accordingly. The procedures outlined in this chapter were successful tools for this forensic investigation. Modifications are necessary for a proper evaluation of other law practices to determine the amounts, if any, of unreported income.

## Appendix A

## Personal Expenses From Smith's Expense Ledger

Mr. and Mrs. Smith's automobiles ..... \$ 87,045Mrs. Smith's psychiatric bills\$ 38,700
Ski trips for the family ..... \$ 12,525
Mrs. Smith's cellular phone ..... \$ 17,826
Uninsured medical expenses ..... \$119,529
Life insurance ..... \$ 12,060
Entertainment and business promotion ..... \$ 41,709
Disability insurance ..... \$ 8,577Total\$337,971
Case Study J—Law Practice ..... 139

## Appendix B

## Smith's Adjusted Income

| Reported income |  | $\$ 400,000$ |
| :--- | ---: | ---: |
| Unreported income | $\$ 425,000$ |  |
| Perquisites | 337,971 |  |
| $\quad$ Total unreported income |  | $\mathbf{7 6 2 , 9 7 1}$ |
| $\quad$ Total cash flow |  | $\$ 1,162,971$ |

# Case Study KGARMENT INDUSTRY 

David E. Politziner, CPA, ABV<br>Philip K. Kleckner, CPA, CFE<br>Amper, Politziner \& Mattia, PA<br>Flemington, New Jersey

In a matrimonial proceeding, we were asked to determine the value of the Foxy Company (Foxy) and its related entities, as well as to determine the actual earnings of its president, Mr. Fox. The Foxy Company and its related operating company, Roxy, provide fabric creations and custom work on these fabrics for the garment industry. The companies were the sole tenants of a building owned by a real estate company whose sole owners were Mr. and Mrs. Fox.

Foxy would take raw materials provided by the supplier and convert them into a basic fabric. Roxy would use the completed items from Foxy and other companies and turn them into finished goods. The customer would direct Foxy and Roxy to either return the finished product to them or to ship it to a third party.

Our client, Mrs. Fox, had no knowledge of the actual operations of the company, other than the company had moved to a new building three years ago. She said their personal finances were in reasonable shape, with no heavy debt or large investment income. She also said that her husband always had cash and liked to go to the casino and to auto races. Mr. Fox had friends who owned and raced cars. He had a reported annual salary of $\$ 240,000$ and received an annual bonus of approximately $\$ 50,000$.

## The Company

Foxy and Roxy were C corporations, jointly owned by Mr. and Mrs. Fox. The corporations reported minimal net income on combined sales of over $\$ 7,000,000$ per year. Based on information from the corporate tax returns, we prepared an analysis detailing all income and expenses and all balance sheet items for the past five years.

## Income and Expenses

Sales over the past three years were relatively flat, with gross margins shrinking. Cost of sales had a major increase in equipment lease costs and depreciation. The major increase in operating expenses was due to payroll, related taxes, and travel and entertainment. The balance sheet showed an increase in fixed assets and bank debt coinciding with the move three years ago. The only indication of an unusual trend was the increase in accounts payable from $\$ 320,000$ to almost $\$ 1,100,000$ during the three most recent years.

The real estate company tax returns showed that cash flow from the rental income was almost equal to the annual mortgage payments. Foxy was responsible for all building expenses under a net-net lease.

## The Site Visit

We requested the companies to provide us with all the basic accounting records for the past five years. (We have a two-page master document request list that we customize based on the type of company we are analyzing.) We then scheduled a combination site visit, review of financial records, and interview with Mr. Fox and his outside accountant. Mr. Fox was not available when we arrived. We were given a tour of the facilities by the accountant. Most of the work was performed by highly automated computer-programmed machines. There was a section of older machines that performed the "nonspecialized, low-profit" operations. During the tour, we noticed boxes neatly labeled for shipments. In addition, a large quantity of raw materials, which appeared to be odds and ends as opposed to new materials, were maintained in storage. Because there was no inventory reported on the tax returns, we wanted to know how Foxy accounted for the raw materials and finished goods.

Mr. Fox arrived, and when asked about the inventory, he said that the raw materials were the customers' goods. He then described the operations of the companies in a few easy steps. The customer would provide Foxy with raw materials that were woven on Foxy's machines to create a basic fabric. Most of these items were then sent to other companies for additional processing.

Foxy and Roxy were paid by the customer for all the steps needed to finalize the product. This meant that Foxy had to pay for the subcontracting, which was recorded as part of their purchases. In some cases, they also had to purchase additional items to complete the finished product.

When we asked to see the records, we were informed that only the past three years' financial records were kept, and prior years' records had been destroyed as a part of the move several years ago. Mr. Fox then asked that we direct all questions to his accountant, who would gather all the information and documents and respond to us.

## REVIEW OF THE RECORDS

The first items we wanted to see were the aged accounts receivable and the accounts payable schedules as of the end of each year. The receivables were produced. Subsequent payments were tested, and we felt that no adjustments were needed to arrive at the appropriate value of the receivables. However, the accountant wanted to go over the payables with us.

## The First Problem

It seemed that on each company's detailed list of payables was a line each year listed as "Other." This amount was shown on both companies' payables schedule and increased from $\$ 125,000$ to $\$ 755,000$ during the three years. The accountant said that Mr. Fox was going to provide him with the details for these items each year but he never received them. This was the only item the accountant knew that was not on the up-andup with this company. Based on this, we had our first adjustment to the company's financial statement.

We then proceeded to look at the rest of the detailed accounts payable and noticed a significant number of old open invoices for various companies. We requested and were provided with copies of these invoices. According to Mr. Fox, the items in question were in dispute and while they were being resolved, the companies still maintained good relations with both the subcontractors and the customers.

## The Second Crack

As part of our document request, we always ask for bank statements, copies of deposit tickets, and canceled checks. We prepare a list of all checks made payable to related parties as well as any unusual checks. In this case, we were specifically looking for checks made payable to cash, Art Fox, Foxy, Roxy, and the real estate company.

When we examined the checks, we were looking for answers to the following questions:

1. Are checks to the principals going to bank accounts of which we are aware?
2. If the check is to a company, was a manual endorsement present?
3. Were there two endorsements?
4. Was the check deposited at a bank located near the payee?

In the first month we reviewed, we saw a check from Foxy to Roxy for $\$ 72,412.80$. The check went to Roxy's bank account, and the endorsement was correct. We then went through the following steps for this transaction (as well as for all items we listed on our related-party schedule).

1. We traced the check to Foxy's cash disbursements journal and verified that the payee matched the check. We traced the payment to the general ledger account titled "Purchase of materials."
2. We then attempted to trace the item to Roxy's cash receipts journal. Interestingly, we could not find a cash receipt for that amount. There was a receipt on the same day for $\$ 75,000$, which was shown as a loan from Mr. Fox.
3. We then looked at the deposit ticket for that day and saw that the $\$ 75,000$ deposit was made up of two checks, one of which was \$72,412.80.
4. We then went to Roxy's general ledger and saw that there were sizable receipts and disbursements going through the loan account for Mr. Fox. There was an entry for the $\$ 75,000$.
5. A look at Foxy's general ledger also showed a large volume of loans to and from Mr. Fox.
6. We asked the accountant to find out why the $\$ 72,412$ check was not recorded as a sale. After researching the transaction, he said the bookkeeper must have made a mistake and recorded the transaction incorrectly.
7. We also asked the accountant if he could provide details about why there was a large amount of loans to and from Mr. Fox. He said that Mr. Fox would sometimes gamble and needed money. However, the accountant expressed his surprise at the frequency of the transactions.
At this point, my associate and I split up the two companies and looked for all related-party transaction checks that we could find.

## The Flood Gates Open

During the review of Foxy's canceled checks, it quickly became apparent that we had a potentially massive diversion of funds. Certain other checks did not look right, and we asked for additional documentation. Some of the problems found were as follows.

## Accounts Payable

Checks to vendors are generally shown as a payment of accounts payable. However, some checks were recorded directly to purchases. In addition, we found checks issued by Foxy that were listed as purchases even though they actually paid the accounts payable of Roxy. We were also able to find Roxy checks that paid the old accounts payable of Foxy.

## Intercompany Checks

Several of the checks that were written from one company to the other were shown as purchases on the issuing company's general ledger and a credit (increase) to the loan account of Mr. Fox on the other company's books.

## Checks to Mr. Fox

We found many checks payable to Mr. Fox. Some of these were recorded in the general ledger as loans to Mr. Fox. However, when we traced other large checks payable to Mr. Fox to the cash disbursements journal, we found that they were described as payable to other companies.

These checks were charged to machinery and equipment, moving expenses, purchases, and several other accounts. We then asked the company to provide us with copies of the invoices to support these payments. We noted that even though a large amount of the smaller checks were cashed, most of the other checks to Mr. Fox went into the same checking account as the one Mr. Fox used to deposit his paychecks. We were given copies of all the invoices requested.

## Bank Payments

Periodically, we noted that checks were made payable to a major bank and charged to purchases. Although the bank was local, the endorsement showed that it was negotiated at an out-of-state location. Furthermore, the amounts of the checks were exactly the same as some of the old open accounts payable invoices. We asked the company for copies of the invoices, to support the payment to this major bank and the reasons why payments to a bank were recorded as purchases. We were told that these payments were being made to vendor X's factory directly, and that was the reason for the disbursement to the bank.

## Other Checks

Questions arose from many of the checks we reviewed.

1. We noted checks that were deposited several states away and for items that would have been performed locally, for example, moving the equipment and programming the machines.
2. Checks were paid to an individual for consulting and were being cashed at a nearby racetrack. One check, for $\$ 123,000$, payable to an automobile auction house, was charged to purchases.
3. We saw checks to one vendor that were manually endorsed and then deposited by a beer distributor.

We were given copies of invoices that supported every disbursement.

## Checks to Cash

Every week, both companies would write a check for $\$ 500$ to petty cash. According to the accountant, the company had no supporting documentation to support petty cash expenditures.

## Travel and Entertainment

We also had requested copies of all travel and entertainment backup. During the review of the American Express bills, it was obvious that the Roxy credit card was not being used for company business or related purchases. Also, the name on the credit card did not match any of the employees of the business. We asked for more details and were told that this had to do with an interest Mr. Fox had in a race car.

## Payroll

During our tour of the factory, the accountant pointed with pride to the highly automated machinery. We noted that there were relatively few employees in the factory. When we later reviewed the payroll records, there appeared to be many more people paid than were actually working. We asked for copies of time cards and other materials to verify the payroll.

We were told that time cards and other materials could not be found and that most of the employees work on an "as needed" basis. We were informed that we had seen the location during a slow time and, therefore, it was not indicative of normal operations.

## Additional Proceddures

We asked for and obtained copies of both the front and back of the checks for the items we questioned. We also obtained copies of the relevant cash receipts, cash disbursements, and general ledger pages.

We made inquiries of the local bank about its factoring operations. It responded that it is not in that line of business. When asked about what check payments would be processed at the out-of-state location, the bank told us that this was where personal-lines-of-credit payments were processed.

The invoices that were provided were then examined to determine whether they were, in fact, valid business expenses. We noted that several invoices were on generic forms, with the company names and address simply typed. We put these in the "questionable" category. The real prize was invoices from one company, dated with appropriate 1995 date stamps on them, showing a telephone area code that did not exist until 1997!

## Summary Schedule

In preparation for our meeting with our client and her attorney, we prepared a schedule that showed the proposed adjustments based on the information received to date (see appendix A.)

The total amount of the unreported profits was so high that we had to question how something this large could go undetected for so long. The obvious answer was that if someone, such as an accountant, relies only on reviewing the cash receipts and disbursements journals and does not look at underlying documents, that person would see only what the owner wanted him or her to see.

## Client Meeting

We presented the schedule to our client and her attorney. After they expressed the thought that we were out of our minds, we showed them the backup for all the adjustments. With copies of the canceled checks, we showed how the transactions were improperly recorded in the cash receipts and disbursements journals and general ledgers. By the time we got to the altered invoices, they went from disbelief to anger. They couldn't believe how the husband had cried poverty and how he couldn't afford alimony and child support payments because the companies were "barely making a go of it"!

The client asked that we meet with Mr. Fox and his attorney to discuss our proposed schedule of adjustments. At this meeting, we again went through the schedule. When we got to the altered documents, Mr. Fox asked for a break. Upon his return, the two attorneys had a private meeting. After a few minutes of discussions between Mr. and Mrs. Fox, our client informed us that she had conditionally accepted a very generous offer pending the ironing out of a few details.

## Summary

Our engagement was completed without issuing a report. It was important for us to collect the backup data as we went along. If we had been dealing directly with Mr. Fox, who obviously knew the details of the fraud, as opposed to his accountant, who obviously did not, we might not have received all the necessary records.

We all need to keep a professional skepticism when we do our work. All the records looked fine on the surface and could easily have convinced someone that the cash receipts and disbursements journals were accurate. As forensic accountants, we need to at least test the underlying documents to see if they are recorded properly. In this case, we did not get the opportunity to look into Mr. Fox's personal checking account to see what he did with the money. Nor were we able to pursue the ownership of at least one and possibly more race cars. However, we did make sure that our client received an indemnification agreement against any past income taxes to which she may be a party.

## Appendix A

Proposed Adjustments

|  | 1995 | 1996 |  | 97 |
| :---: | :---: | :---: | :---: | :---: |
| Pretax income | \$ 40,100 | \$ 42,800 | \$ | 31,200 |
| Adjustments |  |  |  |  |
| Unidentified accounts payable | 125,000 | 246,000 |  | 384,000 |
| Old accounts payable | 25,000 | 32,600 |  | 40,000 |
| Paid by sister company | 12,500 | 8,500 |  | 21,500 |
| Paid to factor | 121,200 | 81,000 |  | 101,300 |
| Intercompany checks | 216,200 | 82,300 |  | 124,800 |
| Loans to Art Fox | 110,100 | 108,000 |  | 114,300 |
| Machinery and equipment | 42,000 | 44,400 |  | 38,600 |
| Other personal checks | 15,700 | 12,000 |  | 19,100 |
| Other checks | - | 4,400 |  | 15,200 |
| Check for purchase of race cars | - | 123,000 |  | - |
| Checks to wrong area code vendor | 22,300 | 24,500 |  | 20,200 |
| Company checks cashed at racetrack | 19,400 | 29,200 |  | 41,900 |
| Other transactions |  |  |  |  |
| Travel and entertainment | 51,300 | 43,200 |  | 50,900 |
| Petty cash checks | 42,000 | 42,000 |  | 42,000 |
| Total Definite Adjustments | \$802,700 | \$881,100 |  | ,013,800 |
| Possible adjustments |  |  |  |  |
| Other checks | 31,200 | 14,800 |  | 25,600 |
| Payroll | 19,000 | 28,300 |  | 47,400 |
| Adjusted pretax income | \$893,000 | \$967,000 |  | ,118,000 |

# Case Study L—Landscaping 

Stanley M. Heller, CPA Robert S. Peare, CPA

Peare \& Heller, PC
Hauppauge, New York

In late spring of 1997, a doorbell rang and two agents from the Internal Revenue Service (IRS) Criminal Investigation Division (CID) appeared at the home office of our soon-to-be new client. They produced their identification cards and were invited in. Coffee was provided and the agents explained the reason for their visit.

At about 11 o'clock one beautiful day in May, we got a phone call from Stanley Stone, a corporate attorney with whom our firm does business. There was urgency in his voice as he requested we meet that afternoon. This was unusual; Stan normally scheduled meetings a week in advance, but he insisted on seeing us that same day. He arrived at our office that afternoon, accompanied by a very troubled and distressed couple. Stone introduced Melvin and Barbara Green.

The husband described the prior-day's visit from the IRS agents. Stone explained that the Greens had been referred to him by their attorney, Leon Lowe, who specialized in real estate matters. Lowe had thought that his colleague Stone could deal better with what appeared to be a complex business tax matter.

Stone described a pattern of facts that could possibly result in charges of tax evasion being brought against the Greens, who operate their unincorporated business as Green Tree Landscaping Company. Green Tree Landscaping is a horticultural company that maintains lawns, trees, and anything related to their customers' property. The company pays forty employees, who provide both regular weekly maintenance and onetime horticultural projects. The customer base consisted entirely of residential real estate owners.

Stone described how the Greens ran their business-specifically, the manner in which they reported income on their income tax returns. We listened to him carefully, raising our eyebrows higher with each disclosure. The Greens had been operating what would commonly be called a "mom and pop" operation or, as they say, a "candy store." They received income mostly in cash, which would be deposited in a personal savings account. The Greens did not maintain a business checking account. Occasionally, customers would pay with checks, which also would be deposited in the personal savings account. The Green's practice of depositing large sums of cash into the savings account and subsequently withdrawing large amounts of cash required the bank to file a CTR report with the IRS in accordance with the currency-reporting requirements of the federal structuring statutes. Under most circumstances, small cash transactions would go unnoticed. However, in this case, there was a pattern of weekly withdrawals between $\$ 9,000$ and $\$ 9,900$. The nature and size of these cash transactions, which were obviously done to avoid what the client thought were the reporting requirements, in fact appeared to violate the structuring statutes.

As yet, there was no correspondence from the IRS requesting data from the taxpayer, nor were any warrants issued nor legal issues raised. Our assignment, if we chose to accept it, was to reconstruct the taxpayer's income and expenses for the prior three years and, if necessary, to prepare amended tax returns for 1993 and 1994 and to complete 1995 tax returns. The taxpayers filed their Form 1040 with a Schedule C for the unincorporated business, in the business category of landscaping.

## The Request for Records

We accepted the assignment and told the Greens and Stone that we would have an engagement letter in the mail the following morning. We then made our initial request for certain financial records. The clients responded that they didn't have any. Of course, they had bank passbooks and some customer invoices and accounts receivable schedules, but the Greens were unable to produce general accounting books and records that we as accountants would expect to have available. We asked, "How do you run the business? What did you do with the customer payments? How did you pay your bills?" Their responses were mind-boggling.

The clients maintained no cash receipts, no cash disbursements, no purchase journal, no payroll journal, no payroll records, and no business checking accounts-and to top it all off, the clients were making cash payments to illegal aliens who worked "off the books."

The bank passbook account was used for funds coming in and going out. The Greens would deposit cash receipts into the savings account and then, weekly, would withdraw just enough to stay under $\$ 10,000$. They paid labor and other expenses from that withdrawal.

As expected, the prior accountant could not produce supporting records for any of the tax returns that he had prepared for the client. Because that accountant, according to Stone, is a possible target for an IRS investigation, we could not contact him directly.

Melvin Green admitted to us at this point that he had made up numbers. The numbers he had given to his accountant were a figment of his creativity. When we inquired about the basis of information used to prepare the company's sales tax returns, Green informed us that sales reported on such returns were fictitious transactions. He kept no records and reported inaccurate numbers on state sales tax returns.

Our clients produced a 1995 tax return prepared by their prior accountant. Among other things reflected on the return was a gain from a gambling transaction in excess of a quarter of a million dollars. These winnings were offset on Schedule A with undocumented losses of $\$ 190,000$. In view of the fact that the taxpayers reported $\$ 25,000$ of adjusted gross income for the year in question, we were impressed by the magnitude of their gambling activities.

At the next meeting, we provided the attorney and his client with a second checklist of documents that we would require in order to pursue this engagement. We confirmed with Stone that we were being retained by him, the attorney, not the Greens, to shield our work from discovery within the rules regarding attorney-client privilege. In fact, under the law, tax work is not protected and our records could be subpoenaed by the government.

## Planning the Engagement

We sent our guests on their way, and went to the conference room to plan our engagement. We had to consider the tools available for us to judge the completeness of information provided.

The taxpayers could provide the savings account passbooks, deposit slips, and withdrawal slips for each of the years. Barbara Green maintained a hand-written daybook, sort of a student's lined notebook, which contained the details of their cash receipts, including customer name, date, and amount received.

Green also could produce vendor invoices for the purchase of materials and supplies. Beginning with the latter part of 1994, Green had begun using a computerized accounts receivable ledger, which included both charge and cash sales.

Beginning with 1995, Barbara Green was able to provide us with her personal checkbook registers, which detailed deposits into the checking account. These deposits did not always correspond with the amount shown as income. Other than the aforementioned vendor's invoices, there was no record of pay outs made in that period.

The other reference we immediately put our hands upon was Robert Morris Associates Annual Statement Studies, which would provide what could be considered normal operating factors for similar companies in this business.

## Reconstructing Income

Of the periods in question, the most reliable information available was for the year 1995. Because of that, we made a determination to examine and
reconstruct the income and expenses for the year 1995 and then use that as a guide when we reviewed 1994 and 1993.

Melvin Green began to deliver to our office, on what became a weekly basis, his operating data. We received passbooks, daybooks, vendor invoices, computerized accounts receivable runs, and cartons of backup documents. Our first step was to segregate the 1995 documents from those of 1993 and 1994. We then began to examine the sales volume of the business.

Preparing detailed analysis of Green's savings account passbooks, we were able to arrive at what appeared to be total income deposits for the year 1995. We needed to corroborate that number. We reviewed the company daybook and compared the income reflected with the amounts deposited in the bank. For the most part, they were similar. Any differences, we determined, would be credited to the taxpayer. Where the daybook reflected higher income than the passbook, we increased additional income to the Greens. We reconciled these records to the computerized accounts receivable ledger, and discovered that those runs were incomplete.

Still, we were satisfied that we could substantially reflect all the taxpayers' income. We now needed to reconstruct the direct cost of operations and general administrative expenses.

We had numerous vendor invoices, which couldn't be reconciled to payments, and we were still unable to arrive at an accurate cost of operations. We requested that the Greens come to our office. At that time, we gave them an assignment. Melvin informed us that his company provided a variety of services, from lawn and tree maintenance to landscaping. We had him cost out each service to the best of his ability, emphasizing that whatever he did would possibly be examined by the government-thereby putting the fear of God in him to be accurate.

After numerous attempts, which took hours of his time, Green provided us with his "cost sheets." We reviewed them and compared the results with the Robert Morris Associates Operating Statistics; they were surprisingly close. We concluded that the analysis Green furnished was as accurate as we could get. The cost analysis detailed purchases of supplies and materials, such as fertilizers, chemicals, and seed; and estimated direct labor, truck costs, and sundry operating expenses. We calculated percentages from the analysis, and applied them to gross income to arrive at "cost of sales."

It was now time to analyze the operating expenses of Green Tree Landscaping Company, referred to as general and administrative costs. Operating expenses included equipment parts, repairs, supplies, business meals, outside services, bookkeeping, professional fees, fuel, office expense, insurance, and telephone. Green furnished receipts for numerous expenses that had been paid in cash. We prepared a schedule of these payments and included them in our final product.

Now we had to calculate net income for 1995. Using the foregoing information, we were able to construct an income and expense statement, beginning with gross income and working through to net profit. Our results were again compared with the Robert Morris Associates Annual Statement Studies. We concluded that our results were reasonable.

To test the reasonableness of our numbers, we reconstructed the 1995 income and living expenses of Melvin and Barbara Green. Doing a cost-ofliving analysis would account for personal funds used in that year and the adequacy of earnings to cover the same.

The calculations indicated that the Greens' cost of living for 1995 was at minimum $\$ 100,000$. Net income we constructed as coming from Green Tree Landscaping amounted to only $\$ 60,000$. As a result, we knew the Greens' income for 1995 had to increase by at least $\$ 40,000$.

The Greens had been maintaining brokerage accounts with various stock brokers. There were numerous transfers of cash between these accounts. We did a detailed analysis of all brokerage accounts for 1995. Our analysis resulted in a determination that the Greens had a capital loss for the year that was not reported on their tax return. We compared the 1995 taxable income on Form 1040 as prepared by our predecessor with our own calculations. The Greens had to increase 1995 taxable income by $\$ 70,000$. (See appendixes $A$ through $D$, at the end of this chapter.)

We then focused our attention on the Greens' income for 1993 and 1994. We were able to reasonably estimate each year's income in a manner consistent with 1995. We analyzed the company's passbook account, to calculate the gross income for each year. Comparing our analysis with the company's daybook, we found them surprisingly similar. We increased the income in our analysis to that reflected in the daybooks. Using the statistical analysis from 1995, we calculated gross profit for 1993 and 1994. To determine gross profit, we had Green build up costs. We applied these percentages to our gross income.

General and administrative expenses for 1993 and 1994 were adjusted to be consistent with the 1995 statistical analysis. Similar to 1995, we applied a cost-of-living adjustment to 1993 and 1994 income from business operations.

Again, we analyzed the Greens' 1993 and 1994 brokerage accounts. The Greens had substantial income and losses for each year. The net effect in each year was negligible. Using the foregoing information, we prepared amended tax returns for 1993 and 1994. We also completed the Greens' 1995 return.

During this period of time, we were keeping an eye on the clock. We were aware that the clock on the statute of limitations for 1993 and 1994 was running. Our concern was that we amend these tax returns before the IRS notification of an examination. Initial contact had already been made, so receipt of an audit notice was imminent. With the probability that a fraud charge could be brought against the Greens, we wanted these tax returns amended and filed immediately. Also, the extended filing due date for the 1995 return was approaching.

As our work was proceeding, Stone referred this matter to Jack Gold, a premier New York City criminal attorney.

We were invited to a meeting at Gold's office. We provided our opinion on the case and explained the relative tax provisions. Gold exclaimed, "This is the worst case of tax evasion I have ever seen!" He offered to take the case on an advance retainer of $\$ 70,000$. Considering their position, the Greens agreed and retained Gold. His involvement and fee ultimately grew to $\$ 100,000$.

We amended and prepared the tax returns, which the Greens filed. As months passed, we all anxiously awaited contact from a government agency. After the busy tax season, at the end of April, two young men came to our office and requested to see the partner on the Green account. These were the same individuals from the IRS CID who, months earlier, had begun this investigation. After presenting their identification documents they made a request for information concerning the Greens. Pointing out that we were under our attorney's umbrella of privilege, we could not accommodate their request. They advised us that they would obtain our attorney's permission for us to transfer the Green records and information to their possession. At that initial contact, we clarified that we were not a target of the investigation.

About a week later, having given it some thought, we discussed the advisability of retaining separate counsel for our firm and decided to do so. Our attorney thought that we were somewhat premature. We were not a target of the investigation and had only been asked to produce information and documents. Knowing that we would be required to turn over documents to the government, we began photocopying all the documentation and records in our possession. These documents included our working papers, the clients' files, passbooks, tax returns, and other records. About a week later, the CID officers called to inform us that they had authorization to pick up the Green records. On a lovely day in May, they signed a receipt for all records of Green Tree Landscaping.

Months later, our next contact was a telephone call from the U.S. Attorney for the Southeastern District. We were requested to appear at a hearing.

With our attorney, Joe Morris, we arrived to be interviewed at the office of the U.S. Attorney. We were escorted to the third floor. Although most of the offices in the building were nondescript, the building had a professional appearance and was well maintained. We were ushered into a dimly lit room, where we met a male law-enforcement type, with a very large gun at his hip. We immediately felt the atmosphere of government investigation. Our new acquaintance asked that we identify ourselves. We were searched and were asked to take a seat until the U.S. Attorney arrived. This was a great intimidation ploy. Approximately five minutes passed; it felt like an hour.

We were escorted to the U.S. Attorney's office to meet with him and the two IRS CID investigators. They proceeded to outline the government's case against Green Tree Landscaping. The engagement partner from our office was questioned in regard to our work. The inquiries were to the engagement partner's background, our firm's background, our knowledge of the taxpayer, the length of time we had known Green.

The U.S. Attorney asked how we had determined the Greens' income for the years 1993, 1994, and 1995. Apparently, the government's case was restricted to these years and did not go back before 1993. We described in detail the procedures used to calculate the Greens' income. We were advised that the government's calculations were very close to our result. In one year, our calculation of income was actually higher.

At this point, the U.S. Attorney was apparently satisfied that we were independent and that what they had in their files was an accurate
representation of the taxpayers' income for the three years. The meeting ended cordially; again, emphasis was made that we were not a target of their investigation.

At the conclusion of this meeting, we met with Stone and Gold. There was serious concern over the result of the case. We all felt that our clients were facing some form of jail time. We concluded that our clients also faced significant monetary penalties. We were not optimistic concerning the outcome of this case.

Months passed without further contact from the IRS. Our team was in agreement: "The taxpayers are both going away." In addition to jail time, we were attempting to calculate the penalties, which would be very, very severe.

Sometime during the winter of 1998, the U.S. Attorney asked for a meeting with Stone. They wanted to settle. We were all apprehensive. Stone arranged a conference with the U.S. Attorney and the IRS CID investigators. The U.S. Attorney said the government wanted to settle this matter, as they had no interest in continuing to contest this issue with Gold.

The two representatives from the IRS were furious. They entertained no question that the Greens should pay for their tax fraud. The Greens were being slapped on the wrist. Mrs. Green, who was as much a part of this as her husband, was not to be charged at all. Mr. Green would be charged with one count of tax evasion and not be incarcerated. The monetary penalty is still pending.

Our experience with this case reminds us how important it is for you as tax preparers, involved in litigation, to be prepared to defend your work and your working papers. Be careful to eliminate nonpertinent reminder notes from your working papers, because all your work product can be discoverable. Know who your client is and whether you have privilege. It is also important to prepare accurate tax returns and to display a cooperative attitude to help minimize potential penalties.

Everyone who has seen Peter Pan may remember how Tinkerbell would save Peter Pan from each pending disaster. Although Mr. Gold does not fly, and is well over six feet tall, our Peter Pan can thank his lucky stars and his Tinkerbell.

## Appendix A

## Green Tree Landscaping Worksheet to Construct Sales/Cost of Sales Year Ended December 31, 1995

| Procedure | Sales | Materials | Subcontractors | Gross Profit |
| :---: | :---: | :---: | :---: | :---: |
| Lawns | \$246,540 | \$ 75,841 | \$ 46,796 | \$123,903 |
| Aerations | 10,530 | - | 4,290 | 6,240 |
| Limestone | 11,470 | 2,433 | 2,480 | 6,557 |
| Zoysia | 4,120 | 1,000 | 1,120 | 2,000 |
| Mole | 1,950 | 475 | 475 | 1,000 |
| Extra seed | 7,200 | 4,000 | 500 | 2,700 |
| Trees | 196,512 | 35,328 | 39,744 | 121,440 |
| Flea and tick | 20,880 | 928 | 2,320 | 17,632 |
| Root feed | 30,576 | 4,992 | 8,736 | 16,848 |
| Sprays | 4,800 | 600 | 1,200 | 3,000 |
| Poison ivy | 1,800 | 200 | 200 | 1,400 |
| Cleanup | 24,200 | 2,200 | 10,000 | 12,000 |
| Sprinkler | 10,000 | 4,300 | 2,800 | 2,900 |
| Landscaping | 6,506 | 2,314 | 1,850 | 2,342 |
| Lawn and tree applications | 700 | 13,380 | 8,028 | $(20,708)$ |
| Total | \$577,784 | \$147,991 | \$130,539 | \$299,254 |

## Appendix B

## Green Tree Landscaping Worksheet to Construct Sales/Cost of Sales: Lawns Year Ended December 31, 1995

|  | Material | Labor | Totals |
| :---: | :---: | :---: | :---: |
| Sales |  |  |  |
| 1,174 customers $\times 5$ applications each @ \$42 |  |  | \$246,540 |
| Cost of sales |  |  |  |
| Material cost for annual basic services and grub control, 259 customers $\times \$ 72.45$ | \$18,765 |  |  |
| Direct labor, 259 customers $\times \$ 45$ |  | \$11,655 |  |
| Material costs for annual basic service, 915 customers $\times \$ 60.30$ | 55,174 |  |  |
| Direct labor, 915 customers $\times \$ 37$ |  | 33,855 |  |
| Material costs for reapplication of chemicals, 105 customers $\times \$ 18.11$ | 1,902 |  |  |
| Direct labor, 105 customers $\times \$ 12.25$ |  | 1,286 |  |
| Total Direct Costs | \$75,841 | \$46,796 | 122,637 |
| Gross profit |  |  | \$123,903 |
| Percentage |  |  | 50\% |

## Appendix C

## Green Tree Landscaping

## Worksheet to Construct Sales/Cost of Sales: Trees Year Ended December 31, 1995

Totals

## Sales

1,104 customers $\times 4$ applications each $\times \$ 44.50$ ..... \$196,512
Cost of Sales
Material cost 1,104 customers $\times 4$ applications each $\times \$ 8$ (see assumptions) ..... 35,328
Direct labor 1,104 customers $\times 4$ applications each $\times \$ 9$ ..... 39,744
Total Material and Labor ..... 75,072
Gross profit ..... $\$ 121,440$
Percentage: 41\%
Assumptions:
Material cost of $\$ 145$ for 1,000 gallons, which equals 14.5 cents per gallon Material usage for each job is 45 gallons ..... 6.52
Average no charge re-sprays each day cost $20 \%$ ..... 1.307.82
Rounded ..... 8.00

## ApPENDIX D

## Green Tree Landscaping <br> Analysis: Other Income Year Ended December 31, 1995

| Barbara Green's personal checking account |  | $\$ 248,570$ |
| :--- | ---: | ---: |
| 1995 deposits |  |  |
| Identified source of funds | $\$ 77,409$ |  |
| $\quad$ Money orders received from customers | 52,619 |  |
| Stock broker wire transfers | 15,000 |  |
| Savings account of Green Tree Landscaping |  |  |
| Reimbursement for GTL business expense paid | 49,282 |  |
| $\quad$ by Barbara Green | 18,000 | $\mathbf{2 1 2 , 3 1 0}$ |
| Rental income |  | $\$ 36,260$ |

# Case Study M—Gaming Casino 

Carlton R. Marcyan, CPA, JD, CFP, DABFA<br>Schiller, Du Canto \& Fleck<br>Chicago, Illinois

The client, a well-known socialite in a Midwestern city, living an exciting life with her husband, came face-to-face with the possibility that it was ending. Her husband had just announced an end to their thirty-year marriage. She realized that their relationship had really ended years earlier; her entrepreneurial husband had long ago immersed himself in his work. Soon after his declaration, Mrs. Bayer arrived at our offices armed with documents; most were the standard portfolio of bank statements and 1099s. However, a few pieces of paper in her husband's handwriting made reference to a Native American tribe out West, along with the name of a person vaguely familiar to her. We marked this in the file but otherwise took no other special note.

During the marriage, Mr. Bayer had become a financial success while also becoming a local legend. From modest beginnings as a purveyor of food products, he amassed a fortune in various holdings and other investments. He had also acquired a reputation for sharp dealing and being less than honorable with some of his former business partners.

As Mrs. Bayer related, the couple lived a most enviable lifestyle. You would recognize the locations of their numerous residences as the most prestigious in the country. The husband and wife enjoyed creature comforts usually available only to the rich and famous: vacations in Europe for months on end; maids, cooks, drivers, and house servants; high-fashion clothing purchased in Europe from famous designers; furniture and furnishings of exquisite taste; and other benefits. The couple's social circle included famous industrialists, politicians, and European royalty. The reality of this coming to an end rightfully frightened Mrs. Bayer. She also
knew her husband had a dark side; he had a reputation as a person not to be trusted.

## Assembling the Initial Documents

As in most cases involving numerous assets and diverse sources of income, we began assembling a detailed personal financial statement, including a schedule of sources of income and cash flow. Initially, this was based on Mrs. Bayer's personal, albeit limited, knowledge of the family finances. As we gleaned additional information, we supplemented these financial working papers. These would serve as a focal point for discussions with our client, help rank issues according to priority, and keep us focused. Periodic meetings with the client were essential. Bits and pieces of what she told us helped us fit facts together, just like assembling a jigsaw puzzle.

Shortly after the case filing, we received a gratuitous delivery of financial documents from the husband and eagerly began digesting the new information. Those of you who have performed these kinds of assignments appreciate the exhilaration of opening boxes of just-produced documents. It closely rivals the anticipation of opening gifts during the holidays! The delivery included individual tax returns, corporate tax returns, and the husband's own version of a personal financial statement. We did not place much faith in the financial statement.

The individual tax returns provided were less than helpful and supported Baruch Bayer's position that his personal income was anemic. They showed that he received W2 income for the past years from a corporation, which bore his name, Baruch Bayer \& Co. However, the amount of this employment income was insignificant. The returns also reflected ownership in various partnerships and other investments.

The corporate returns told more of the same story, but they also gave us a glimpse into a complicated structure of other partnership interests, corporate subsidiaries, real estate holdings, and security holdings. Yet still, the returns offered only a preview of what was about to unfold.

We requested access to general ledgers, transaction journals, and copies of canceled checks. Once we reviewed them, we realized that Bayer had earlier placed most assets into his "incorporated pocketbook," Baruch Bayer \& Co. His company owned two of the three family residences. For tax purposes, the homes were depreciated, rent was charged to the husband, and utility payments were expensed and deducted. Other expenses, though seemingly personal in nature, were taken as deductions and claimed on the tax returns. It was clear that Bayer was not timid about taking an "aggressive" tax position; sometimes this is an indicator of a person who is opportunistic and less than forthright.

An interesting entry in the current year's transaction journal proved to be a significant lead. Although recorded as an expense item, this obscure entry charged to an outside services account was in reality an initial investment in what proved to be a very profitable venture. We exposed this deceptive entry after a painstaking review of all the canceled checks and supporting documentation for that period. The reverse side of
the check payable to the so-called vendor was negotiated in a far Western state-a state in which Bayer usually had no dealings.

We made an inquiry with the secretary of state, who provided us official information that Bayer was a principal in this "vendor" along with another gentleman, the same person referred to on the note Mrs. Bayer had brought to us at the commencement of the case. After being served with a carefully worded document request, Bayer provided us with what appeared to be monthly income statements from this company, First Creata Corporation. First Creata was a gaming management company providing services to a Native American tribe's gaming casino. We were on our guard and reviewed these statements with a keen eye.

## Corporate Income Statements

The income statements for First Creata Corporation were prepared by Bayer's employees at Baruch Bayer \& Co. They showed that income averaged about $\$ 100,000$ per month during each of the most previous six months. The income statement noted that Baruch received half of that amount in his capacity as a shareholder owning 50 percent of the stock. Something about the purported income statements disturbed us. They were not the "normal" kind of statements generated from financial software; the format was different from the Baruch Bayer \& Co. general ledgers and transaction journals. In fact, these income statements were set up in typical word-processing fashion.

Subpoenas were issued to Bayer's business partner and the Native American tribe, requesting financial statements prepared by the casino and copies of all checks paid to First Creata. The judge presiding over the case provided further "incentive" to Bayer by entering a court order imposing sanctions if the husband did not provide us with the needed information within seventy-two hours.

Within two days we received the needed documents; our suspicions were confirmed. The actual monthly income paid to First Creata for the months in question was closer to $\$ 300,000$ per month than the $\$ 100,000$ earlier represented on the purported income statements. This also meant that his portion of the monthly income was not $\$ 50,000$, but $\$ 150,000$. Of course, Bayer later claimed that the initial income statements were only representative of funds of which he actually took receipt; the other $\$ 100,000$ was "in reserve" for more casino projects and not really income as far as he was concerned. This blatant misrepresentation cost Bayer a tremendous loss of credibility before the court and affected judicial decisions throughout the length of the case. Bayer, however, did not learn from his mistake in judgment and continued his deceit.

Sometimes information can be found in obvious places. Accountants' working papers are one such place. Because of certain inconsistencies in yearly tax reporting (for example, investments noted as passive one year and active the next), a subpoena was issued to the husband's accountants, who also happened to do the tax work for Baruch Bayer \& Co. and other entities controlled by the husband. After repeated extensions to produce these documents and the threat of court-imposed sanctions for failure of
the accountants to provide to us the documents, the working papers finally arrived.

## Aggressive Tax Practices

In the tax working papers for First Creata, we found an obscure footnote referencing a payment to a company; however, we could locate neither that payment in the corporate disbursement journal or general ledger nor any corporate check payable to that company. After extensive searching through various states' corporate listings, we located the company. It did business in the state where Bayer's business partner lived. The deposition of the accountant who wrote the footnote gave us even more insight. She had been orally informed by Bayer's comptroller that a check payment of $\$ 250,000$ from the Native American casino was endorsed over to this outside company. As explained to the accountant by the comptroller, the check was negotiated back to an affiliate of the casino and therefore was not income. We later learned from the husband's former business partner that this was not the case. The bottom line was that this $\$ 250,000$ was unrecorded income from the casino to First Creata and was negotiated over to a company in which Bayer was making an equity investment. Bayer attempted to simultaneously keep income hidden and create an undisclosed investment, all in the same transaction.

The comptroller later testified under oath that he relied exclusively on Bayer's word when Bayer told him to endorse the check over to the other company rather than deposit the check in the First Creata account and issue a check to the other corporation.

Although the outside accountants attempted to convince us that they had been victimized by their client, Bayer, it became obvious to us that they were aiding him in tax practices that one could euphemistically call aggressive.

First, Bayer's homes in Long Island and Vail were titled in the corporate name of Baruch Bayer \& Co. The company was depreciating them and fully deducting utility costs, real estate taxes, and repair bills as business expenses. One slight problem-no business was conducted from those residences. Except for Bayer, no other employee had use of these. Mrs. Bayer and her adult children primarily used the residences. The accountants imputed no income to Bayer for his or his family's personal use of these corporate assets. Our analysis showed that when properly added back to his personal income, it represented more than $\$ 200,000$ in additional annual income.

Second, Bayer considered almost every trip he had taken in the past ten years a business expense. Travels included trips to Europe at least three times per year, as well as trips to the Orient and other exotic locales. The trips themselves were full of extravagancies: dinners at world-renowned restaurants, at an average cost per dinner of $\$ 750$; accommodations at five-star hotels, averaging $\$ 500$ to $\$ 1,000$ per night; limousines; and other lavish purchases. All these expenses had been treated as necessary business expenses and, when added back to personal income, they represented more than a quarter of a million dollars per year in additional disposable income for the Bayers.

All during the course of the case, the husband continually protested that his income was limited and that he had to "cut back" spousal support. He repeated this mantra so many times he almost had us believing him. But again, as he had done in the past, he proved to be his own worst enemy. During the course of trial, we received information reported in a Vail newspaper that Bayer had purchased another residence in Vail. The cost: $\$ 3,500,000$. The debt service on the mortgage alone was more than $\$ 20,000$ per month! When this information was told to the court, Bayer claimed that because of this obligation, he certainly could not afford to pay maintenance to his wife-much like the child who murders his parents and asks for mercy because he is an orphan!

## The Offshore Trust

Despite repeated requests to the husband for information on any trusts he created, we received almost no information. We were skeptical when he failed to provide us with a written representation that no trusts existed. We got a break. One of Bayer's disgruntled investors informed our client that he had received a letter from Bayer's company. A payout from a partnership deal was about to occur. The letter described that the investor was to receive a part of the distribution, and Bayer alone, as a general partner, would receive a sum exceeding $\$ 500,000$. About the same time, we received information from a confidential source that Bayer had just recently created an offshore trust. It is important to note that these facts came to light during the trial phase of the case and, as with most lengthy divorces, this trial took place not on a consecutive-day basis but over a couple of days a week for many months.

It was advantageous that we received these late-breaking leads at the time the husband was under cross-examination. Responding to carefully crafted questions, Bayer first denied that the partnership in question made a distribution to him or on his behalf; however, when he was confronted with a copy of the letter the investor gave us, Baruch Bayer finally gave in. He admitted that there was a distribution but that he had not received it and could not recall who had. He was next asked whether it was true that he had directed the $\$ 500,000$-plus into a trust. He sputtered and stammered that he could not recall. His attorney asked for a lunch recess, which the court granted.

After the recess, Baruch claimed that he had had a chance to go back to his office and review his records. He admitted that his corporate comptroller directed that the money go into a trust. After several more questions, he finally admitted that he told the comptroller to do this. With more questioning and less-than-gentle prodding from the judge, Baruch was compelled to have the comptroller bring a copy of the trust to court that same afternoon.

Baruch's pattern of deception was unchanged. Only days after an earlier, adverse court ruling, Bayer had created an "offshore" trust located in a country that did not recognize the jurisdiction of U.S. courts. Later, at trial, Baruch arrogantly admitted that most of his private and corporate holdings had been transferred into the trust.

## Conclusion

When all the testimony had been heard, all five hundred exhibits were in evidence, and closing arguments had been given, the court awarded Mrs. Bayer substantial assets and maintenance based on our calculations of the husband's true income.

Divorce cases are notorious for their length, degree of dishonesty, and contentiousness. This case had all three elements. Much of the success we achieved for our client was the result of a combination of perseverance, intuition, and skill. As noted, sometimes pure luck helps out, as well. Acknowledgment is due Donald C. Schiller, of Schiller, Du Canto \& Fleck, who provided guidance and was instrumental in the development and success of this case.

# Case Study NAccounting Practice 

Drew S. Dorweiler, CPA/ABV, CBV, ASA, CFE<br>Wise Blackman<br>Montreal, Quebec

In quantifying the income of an accounting practice, the valuation professional must consider the fact that the amount of the reported income from the practice may not necessarily be equal to its true, or notional, ${ }^{1}$ income.

Among the unique characteristics defining the nature of an accounting practice from a valuator's standpoint are-

- The practice may engage in a number of professional activities, including (but not limited to)-
-Audit.
-Financial statement review.
-Financial statement compilation.
-Bookkeeping.
-Forensic or fraud accounting.
-Tax return preparation.
-Insolvency.
-Business valuation and litigation support.
-Financial consultation and advisory.

[^10]- Accounting firms are service businesses that generally have lower amounts of tangible assets than do many other small businesses.
- Accounting professionals are licensed by a professional agency or regulatory agency, or both.
- The practice often obtains its client base through referrals.
- The client work may or may not be of a recurring nature.
- Goodwill often represents an important component of firm value.
- Goodwill may be personal or professional in nature, or both.
- Accounting practices may be highly dependent on one or more "key persons."


## Notional Income Quantification

When applying an income-based approach to value an accounting or auditing practice, the valuation professional finds that the practice's value essentially represents the present value of the prospective economic income stream to be generated in the future by the practice.

In following an income approach, the valuator must therefore consider the practice's "income-earning capacity" to be representative of its "notional income," which is typically viewed as the income capable of being received directly or indirectly from all sources, including income over which the practice has control and, at the partners' direction, could cause the payment thereof to themselves. Notional income therefore includes all income that may be viewed as being constructively received by or imputed to the partners of the practice.

Moreover, the valuation professional should be aware of some considerations when analyzing an accounting firm's income statement and balance sheet, which, in turn, may require certain adjustments to be made in determining the firm's notional income. For example, "normal" or "economic" salary expense and other forms of compensation or benefits paid to partners, staff, or both may need to be adjusted to reflect the levels of remuneration an arm's-length professional possessing comparable experience would earn. In this respect, the firm's income is often analyzed on (1) a basis before any distributions to partners and (2) a before-tax level, as many accounting firms are partnerships whose pretax profits are distributed to the partners, who subsequently pay taxes on an individual basis. Details of other such frequently encountered financial statement adjustments are discussed in the section "Financial Statement Adjustments," later in this chapter.

Typically, the notional income of an accounting firm is measured, on a pretax basis, as the aggregate of-

1. Earnings by way of salaries that the partners received directly or indirectly from the practice, including those paid to their relatives (to the extent not fairly earned).
2. Earnings, benefits, and all other income that the partners enjoyed or received from the practice, including without restriction all other taxable benefits and emoluments received or enjoyed from the practice and not included in the partners' respective income tax returns.
3. "Other income" that the practice constructively received from sources other than the provision of accounting-related services, including, but not limited to, marketable securities portfolios and business investments.
4. Interest, dividends, and other investment income.
5. Personal expenses of the partners or their family members paid for by the practice.
6. Undeclared cash income, if any (that is, income not reported by the partners or the firm on their respective income-tax returns).
7. Airline points, if any, earned by the partners on their air travel and expenditures under any frequent-flyer programs.
The aggregate of the foregoing components of pretax income represents a practice's minimum notional income (gross pretax real income).

## Financial Statement Adjustments

For the valuator to become sufficiently familiar with the subject accounting practice for purposes of adjusting the reported financial statements to determine notional income, he or she must first follow a due-diligence process of gathering relevant information. A sample list of certain key documents and information that should be obtained by a valuator seeking to quantify the notional income of an accounting practice is presented at the end of this chapter in appendix $A$.

## Income Statement Adjustments

When analyzing the income statement of an accounting practice to quantify notional income, adjustments are typically made for factors such as (but not limited to): noneconomic compensation, personal expenses, income-statement effects from excess or nonoperating assets, and nonrecurring or unusual items. Often, these adjustments may be made as a result of discussions with management or identification through a comparative analysis of the firm's income statements over several fiscal years.

Another method valuation analysts often use to make incomestatement adjustments is to consult publicly available statistical reference sources providing industry "norms" with which a subject firm may be compared. Examples of reference sources containing industry benchmarks are-

1. The Internal Revenue Service, Superintendent of Documents, Corporation Income Tax Returns: Statistics of Income and Statistics of Income Source Book (Washington, D.C.: U.S. Government Printing Office, annual).
2. Dun \& Bradstreet, Cost of Doing Business-Partnerships and Proprietorships and Industry Norms and Key Business Ratios (New York: Dun \& Bradstreet, annual).

## 3. Financial Research Associates, Financial Statement Studies of the Small Business (Orlando, Fla.: Financial Research Associates, annual).

4. National Society of Public Accountants, Income and Fees of Accountants in Public Practice (Alexandria, Va.: National Society of Public Accountants, triennial).
5. Schonfeld \& Associates, IRS Corporate Financial Ratios (Lincolnshire, Ill.: Schonfeld \& Associates, annual).
6. AICPA and Practitioners Publishing Company, Management of an Accounting Practice Handbook (Jersey City, N.J.: American Institute of Certified Public Accountants, annual).
7. California Society of Certified Public Accountants, Management of an Accounting Practice Surveys (Redwood City, Calif.: California Society of Certified Public Accountants, annual).
8. Texas Society of Certified Public Accountants, Practice Management Survey: National Results (Dallas, Tex.: Texas Society of Certified Public Accountants, annual).
9. Robert Morris Associates, RMA Annual Statement Studies (Philadelphia, Penn.: Robert Morris Associates, annual).
10. Neil Sheflin, Ph.D., Tax and Financial Statement Benchmarks (Somerset, N.J.: John Wiley \& Sons, Inc., annual).
11. Leo Troy, Almanac of Business and Industrial Financial Ratios (Englewood Cliffs, N.J.: Prentice Hall, annual).

## Balance-Sheet Adjustments

In quantifying the notional income of an accounting practice, it may also be necessary to consider various balance-sheet adjustments that may affect the notional income value, practice value, or both.

Among the more significant balance-sheet-related factors that may affect the income of an accounting practice are accounts receivable, work in progress, supplies, and equipment. For example, accounting firms using a cash-basis accounting system do not report accounts receivable balances on their financial statements; consequently, their revenue and income may differ materially from what would be reported under an accrual-basis accounting system.

Moreover, for those practices reporting on an accrual basis, the accounts receivable balances appearing on the balance sheet may be improperly aged, or not adequately adjusted for collectibility, or both. On the one hand, accounts receivable balances may be due from clients who lack creditworthiness or may have been granted special "extended payment" plans as a result of their size or importance. In a situation in which a sale of the practice is contemplated, an incentive exists to engage in "window dressing" the balance sheet to conceal the true likelihood and timing of collectibility and thus maximize the value of accounts receivable. In such cases, improperly valued accounts receivable balances may also affect the income statement of an accounting firm, so that valuation adjustments to the timing of receipt of client payments or adjustments to bad-debt
expense are required. Conversely, if a divorce is pending, the divorcing spouse (who is also, say, the sole partner in an accounting practice) may be unduly aggressive in writing off receivables, lowering both income and net assets, and therefore lowering implied practice value.

Accounting firms also typically have unrecorded work-in-process inventory assets (also called unbilled accounts receivable) representing work performed but not yet billed. When quantifying notional income or valuing an accounting practice, the valuator should make an adjustment to the balance sheet (and often the income statement) to reflect these unrecorded firm assets, as they represent past services performed by the firm that have not yet been billed to the client. Frequently, the valuator may encounter situations in which an accounting practice's work-inprocess inventory may be "held back" and not billed for an unusually long period of time, thereby suppressing reported income for income tax or divorce "planning" purposes. This conduct is most frequently encountered in small accounting practices or sole-practitioner firms in which a single partner has the ability to delay billing, often in collusion with practice clientele. ${ }^{2}$

To estimate the work-in-process inventory, the valuator can usually reconstruct the amount of unbilled services from the time records of each of the firm's billable professionals. Moreover, the valuator should pay attention to such factors as the billing procedures of the practice (which may vary significantly from firm to firm), the billing frequency, the procedures used to compile and bill work in process, the criteria used to determine accounts billable, write-off policies, the estimated percentage of completion (for fixed-fee contracts), and collectibility of such imputed billings. Once the net realizable value of the unreported and unbilled work-in-process inventory has been determined, the valuator should then reflect such asset value on the practice's balance sheet and adjust revenues accordingly.

Other balance-sheet items that may require adjustment by a valuator include-

- Inventory of supplies.
- Prepaid expenses.
- Equipment.
- Leasehold improvements.
- Intangible assets.
- Accounts payable.
- Accrued and deferred liabilities (these represent obligations that are generally not reflected on cash-basis practice balance sheets).
- Long-term debt.
- Lease obligations.
- Contingent liabilities.

[^11]
## Forensic Adjustments

Frequently, the valuation professional is required to determine the notional income of an accounting practice in situations in which the financial statements are missing, incomplete, or do not reflect certain transactions properly (for example, cash or barter transactions). When the valuator has sufficient reason to suspect that either improperly reported or unreported transactions exist (that is, services performed for clients by practice professionals, including partners, that are omitted from the financial statements), it may be necessary to test these assumptions by applying forensic techniques. Sufficient reason may arise in a number of situations in which a particular opportunity or motive exists (for example, small practices in which a partner may have the ability to conceal revenues for tax reduction or matrimonial litigation purposes). Frequently, the valuator may be "tipped off" about the possible existence of unreported or underreported revenues by such individuals as a divorcing spouse or disgruntled ex-employees.

Other "red flags" that are potentially indicative of unreported or improperly reported transactions may be detected by the valuator through financial statement analysis. One such method of detection is "horizontal analysis," in which the percentage change in individual financial statement items is calculated and compared from one year to the next. Horizontal analysis may be useful in detecting sudden dramatic changes in financial statement items that may (or may not) be explained by changes in the firm's operations having a similar impact on other financial statement items.

Another technique for financial statement examination, "vertical analysis," involves analyzing the relationships between financial statement items by expressing the components as percentages or ratios. Such percentages or ratios may be useful in detecting financial statement irregularities when they are either compared with the firm's own ratios for prior periods or contrasted with similar ratios for other practices operating in the same industry or lines of business. The valuator should exercise particular care in drawing conclusions from the latter technique. Even though industry norms may provide an extremely useful basis for comparison and forensic techniques relying on industry norms have frequently been accepted by the courts, they are not by themselves conclusive determinants of unreported revenues or income. As financial ratios, profitability, and other factors may vary materially among accounting practices, a valuator using ratio analysis without relying on other methods of corroboration may incorrectly conclude that reporting irregularities exist on an accounting practice's financial statements when, in fact, the existence of ratios differing from industry norms may result from an accounting practice being legitimately less (or more) profitable than many of its peers.

To this extent, the Fraud Examiners Manual states that:
"If large enough, both financial statement fraud and internal fraud will affect the financial statements in such a way that relationships between the numbers become questionable. Much internal fraud is detected because the financial statements do not make sense. To
> detect internal fraud that is large enough to affect the financial statements, the statements must be examined over several periods. Comparisons between the individual items on the financial statements and the changes from year to year will aid the fraud examiner. [Vertical analysis, horizontal analysis, and ratio analysis] will not in-of-themselves prove fraud. They will, however, point the examiner in the right direction. [They] will help point out vulnerable areas to the fraud examiner or auditor., ${ }^{3}$

Furthermore, if the valuator suspects that a significant amount of unreported or underreported revenue exists for an accounting practice, these suspicions may also be confirmed or dispelled through direct observation or inquiry of practice employees, their family members, former employees of the practice, clients, and (with particular caution with confidentiality) competitors. Such inquiry should attempt to gain information on the identity of practice clients, the nature of services performed for each, the length of time each has been a client, and the existence of any personal relationships between practice members and the client. Another method by which the hypothesis of significant unreported revenues may be tested, particularly in the case of small or solepractitioner accounting firms (in, for example, matrimonial matters) would be to gain an understanding of the cost to maintain the accountant's lifestyle, and reconcile that with the amount of income reported earned from the practice (as well as from all other known sources).

Typically, forensic techniques may be applied to the financial statements of the subject practice by obtaining reasonable industry norms from published reference sources (such as those noted in the previous section, "Income Statement Adjustments") for accounting practices of similar sizes, operating in comparable markets, providing the same range of services. Among the most useful statistics for imputing unreported income are profitability margins (or ratios). Accounting practices seeking to minimize their income by concealing certain revenue sources often report the entire amount of their actual costs and expenses on the income statement against an "artificially diminished" revenue base, resulting in a correspondingly reduced level of income (such suppression of revenues, profits, or both may be advantageous to certain partners of the practice for taxation purposes, matrimonial litigation purposes, or both).

Accordingly, the level of actual revenues may be imputed by dividing certain profit- or expense-related line items appearing on the subject firm's income statements by an appropriate "industry norm" profit margin or percent of sales statistic (such as total salary and benefit expense, operating profit margin, and gross profit margin). The reported revenues may then be deducted from the imputed actual revenues, with any positive balance representing the amount of indicated understated revenues. Moreover, such indicated understated revenues also directly contribute to the accounting practice's "bottom line" (that is, cash flows or earnings), as the very nature of this forensic method implies that actual costs and expenses remain constant (that is, as reported).

[^12]
## Sample Valuation of an Accounting Practice

The remainder of this chapter constitutes relevant sections of a hypothetical report depicting the reconstruction of the notional income of an accounting practice for use in a valuation context for matrimonial litigation purposes.

The hypothetical sample pertains to the valuation of an accounting and auditing practice (the Practice) located in Chicago, as of December 31, 1997 (the Valuation Date), operated by Cheryl P. Andrews, CPA, (CPA), a sole practitioner who is in the process of obtaining a divorce from her husband (Spouse).

## Determination of Annual Gross Fees

The financial statements of the Practice are filed with CPA's personal income-tax returns for each respective taxation year. However, as these financial statements are prepared by CPA solely for income-tax purposes, the reported net income of the Practice excludes the effect of accumulated unbilled time (work in process). ${ }^{4}$ More specifically, to the extent that the closing work in process exceeds the Practice's opening work in process in a fiscal year, the gross fees are accordingly understated for accounting purposes. Accordingly, because the staff salaries have been charged (deducted) as an expense of the Practice each year, CPA's exclusion of unbilled professional time (work in process) has the effect of (1) minimizing actual gross-fee income while simultaneously (2) charging operating expenses with the related salaries the Practice deducts to earn such gross fees. As generally accepted accounting principles require the matching of costs with related revenues, the net income of the Practice has accordingly been understated each year (if it is in a growth mode).

Moreover, we were informed by Spouse that CPA provided (through the Practice) a number of clients with a substantial amount of professional services for which payment was received in the form of cash or barter and was, therefore, not reported on the Practice's financial statements. Spouse also mentioned that most of these clients who pay the Practice in cash or by way of barter are long-standing personal friends of CPA (in some instances, since childhood). During the course of our interview with CPA, she denied that either she or the Practice receives unreported cash or barter income (or unreported income of any kind); however, she acknowledged that she did consider several of her clients to be personal friends.

In attempting to corroborate Spouse's allegations of the existence of unreported revenues of the Practice, we contacted two former employees of the Practice, Mr. Guy and Ms. Mitt, who are both certified public accountants and auditors previously employed by CPA. Guy and Mitt provided us with a list of names of individuals who, during Guy's and Mitt's employment, were Practice clients. Guy and Mitt also indicated the nature of services performed by the Practice for each client, noting which

[^13]appeared, based on their observations, to be personal friends of CPA. Moreover, both Guy and Mitt cited several occasions on which they witnessed CPA receive large sums of cash, as well as other items (for example, tickets for a Caribbean cruise from a travel agent and a Rolex watch from a jeweler), which were discussed as representing payment for services rendered by the Practice.

Coupled with the foregoing, to the extent that gross fees were further understated because of alleged unreported cash or bartering, the net earnings of the Practice (that is, the "bottom line") have been directly and negatively affected.

## Adjustments to Reported Earnings

Accordingly, we reconstructed the Practice's income statement to take into account the foregoing. In this connection, gross fees of the Practice have been imputed as described here.

As a starting point, we reviewed the financial statements prepared by CPA of the operating results of the Practice for the six years ended December 31, 1997 (see Schedule 5, in appendix B), to determine the likely future level of annual gross fees.

Next, the annual gross fees of the Practice reported for the six years ended December 31, 1997, were adjusted by adding an amount to each year's gross fees to match the apparent understatement of revenues. This amount was obtained by applying industry profit margins to the Practice's adjusted operating expenses (discussed in the section "Adjustments to Reported Operating Profit Margin," later in this chapter) and to the Practice's adjusted salaries and benefits expense (discussed in the section "Adjustments to Reported Salaries and Benefits Expense," later in this chapter), as reported by CPA for each of the six years 1992 to 1997.

More specifically, the reported net earnings of the Practice (see Schedule 6, in appendix C) for each of the six years ended December 31, 1997, were adjusted for items appearing to be of a personal (rather than a Practice-related) nature. These adjustments were for personal automobile, travel, parking, taxi, and business-promotion expenses, based on amounts reported by CPA on the financial statements of the Practice.

In addition, the salaries to CPA's husband (Spouse), CPA's parents, ${ }^{5}$ and CPA's son and daughter, (Children), that were charged to, and paid by, the Practice, using amounts provided by CPA, were added back based on the assumption that such salaries were not Practice-related (see Schedule 6).

Finally, in adjusting the earnings of the Practice (for use in subsequently determining the indicated gross fees for each of the six years ended December 31, 1997), depreciation, bank charges, and interest were added back for purposes of analyzing the Practice's operating earnings on a cash-flow basis before financing-related considerations. The Practice's average adjusted operating cash flow was calculated at between $\$ 132,000$

[^14]and $\$ 186,000$ for the six-year period from 1992 to 1997 (see Schedule 3, in appendix D).

## Adjustments to Reported Operating Expenses

In determining the Practice's operating expenses for each of the years 1992 to 1997, the adjusted Practice operating cash flow (see the section "Adjustments to Reported Earnings," previously discussed in this chapter) was deducted from reported (unadjusted) gross fees. Because the difference between gross fees and net earnings (before depreciation and interest) equals operating expenses, such operating expenses were used as a base from which to reconstruct the annual gross fees of the Practice.

## Adjustments to Reported Operating Profit Margin

A well-known statistical reference source, the Illinois Small Business Financial Performance Survey, states that offices of certified public accountants in Illinois report, on average, a net profit margin of 39.7 percent of gross fees, with depreciation, interest, and bank charges representing an additional 4 percent, thereby indicating an operating earnings margin of approximately 43.7 percent of gross fees.

This reference source also compiles data for offices of certified public accountants on an aggregate basis for all the United States, reporting an operating profit margin of 40.2 percent of gross fees for the upper middle 25 percent of firms surveyed ${ }^{6}$ and a top 25 percent $^{7}$ of 18 percent. Furthermore, the operating profit margin is 30.1 percent for the upper 50 percent ${ }^{8}$ and is 26.3 percent for all firms included in the study. ${ }^{9}$ Based on (1) the significant variation in profitability among the states covered by this study, (2) the exact number of Illinois accounting firms included in the upper middle 25 percent and top 25 percent quartiles being unknown, ${ }^{10}$ and (3) the extent of dispersion among Illinois accounting firms by revenues within the top 25 percent category being unknown, ${ }^{11}$ the Illinois data for offices of certified public accountants appear to provide the most representative basis to be applied to the reported profit structure of the Practice for purposes of determining the implied gross fees thereof.

For purposes of conservatism, the said 4 percent component of revenues (representing depreciation, interest, and bank charges) was applied to an estimated net profit (base) percentage of 33.3 percent, indicating a profit margin for the Practice of 37 percent (see Schedule 3).

[^15]A 37 percent profit margin implies that operating expenses represent 63 percent of gross fees. ${ }^{12}$ Accordingly, the operating expenses for each year were divided by 63 percent to impute the level of annual gross fees (see Schedule 3).

## Adjustments to Reported Salaries and Benefits Expense

Another statistical reference source was consulted. A database has been compiled by the Illinois CPA Society and Foundation from a survey of accounting firms in Illinois relating to their profitability, titled "Management Data" (the Survey). These statistics indicate that, for Illinois accounting firms employing two to five certified public accountants, during the two years covered by the Survey (the 1996 and 1997 calendar years), salaries and benefits, measured as a percentage of total revenue, ranged from a reported "average percentage" of 28.64 percent to a maximum of 47.64 percent.

Therefore, to impute the level of annual gross fees for the fiscal years of the Practice from 1992 to 1997, the salaries, wages, payroll, and consulting fees ${ }^{13}$ reported by the Practice were accordingly divided by 40 percent (for purposes of conservatism) to arrive at indicated gross fees based on salaries and benefits as a percentage of sales (see Schedule 4, in appendix E).

## Indicated Understated Gross Fees

Applying a method based on the operating profit margin of the Practice set forth in the section "Adjustments to Reported Operating Profit Margin," the difference between (1) the gross fees reported by CPA and (2) the imputed gross fees for each of the years 1992 to 1997, representing the indicated apparent understatement of gross fees for each respective year, ranged between $\$ 14,000$ and $\$ 57,000$ (Schedule 3).

Similarly, using the method set forth in the section "Adjustments to Reported Salaries and Benefits Expense," based on the Practice's salaries and benefits expense to impute gross fees of the Practice for each of the years 1992 to 1997, indicated understated gross fees were estimated as ranging from $\$ 15,000$ to $\$ 151,000$ (see Schedule 4).

Next, the simple average of the two methods based on (1) operating expense levels and (2) salaries and benefits expense levels for each of the years from 1992 to 1997 in Schedule 2 (see appendix F) was determined as representing the indicated understated gross fees of the Practice for this period. ${ }^{14}$

[^16]
## Conclusion

Although the exact nature of the indicated understatement of gross fees cannot be precisely determined, the discussions held with CPA, Spouse, Guy, and Mitt, transcripts from the out-of-court examinations of CPA, and the application of the forensic procedures discussed in this chapter indicate that the reported gross fees of the Practice were understated during the six years from 1992 to 1997 by amounts ranging from $\$ 26,000$ to $\$ 104,000$ (see Schedule 2). Moreover, a simple average of the adjusted annual gross fees of the Practice for the six years ended December 31, 1997, namely $\$ 564,000$ (rounded), represents a conservative determination of the annual gross fees of the Practice (see Schedule 1, in appendix G).

## Appendix A

## Key Documents and Information to Be Obtained

Among the types of items that should be considered by the valuation professional as part of the due-diligence process in determining the notional income of an accounting practice are-

## FINANCIAL INFORMATION

- Financial statements, including balance sheets, income statements, statements of changes in financial position or statements of cash flow, and statements of stockholders' equity or partners' capital accounts for the last five fiscal years, if available.
- Most recent interim financial statements for the period from the end of the last fiscal year to the valuation date, and for the comparable period during the prior year.
- Federal and state income-tax returns for the last five taxation years.
- Income statements (if available) by service category, including-
—Audit.
-Accounting (review, compilation, and bookkeeping services).
-Personal tax.
-Corporate tax.
—Management advisory or specialized consulting services.
-Other services.
- Revenue analysis for the last three years by service category, as well as on a total basis, indicating-
-Number of clients served.
- Number of engagements performed.
-Gross fee revenue generated (at standard billing rates).
-Gross fee revenue unbilled (and portion written off).
-Gross fee revenue billed but uncollected (and portion written off).
-Net fee revenue collected.
-Number of hours billed.
-Utilization percentage of staff.
- Aged accounts receivable schedule.
- Number of days of billed receivables outstanding.
- Number of days of unbilled receivables outstanding.
- Schedule of unbilled work in progress.
- Schedule of prepaid expenses.
- Detailed equipment list (including cost and depreciation base).
- Aged accounts payable schedule.
- Compensation schedule for all owners for the last five years, including all benefits and personal expenses, with detailed descriptions of base salary levels, bonuses, return of capital payments, and profit distributions.
- Details of all related-party transactions.
- List of all stockholders or partners, with number of shares and dollar amount of capital owned by each or percentage of each partner's interest (in firm's earnings and capital).
- List of all clients served during past year by service category, indicating fees collected from each client.
- Copies of all budgets or financial projections prepared during the last five years-including current budget or financial plan.
- List of all employees (partners, nonpartner professionals, and support staff), including-
-Name.
-Tenure (years) with firm.
-Base compensation.
-Total compensation.
-Standard billing rate.
-Number of hours billed.
-Standard annual fees.
-Actual annual fees generated.
-Utilization percentage by standard hours.
-Utilization percentage by standard fees.


## Corporate Data

- Articles of incorporation or partnership agreement, bylaws (including amendments), and corporate minutes.
- History of the practice, including length of time in business and details of any changes in ownership or bona fide offers to purchase the practice (or any interest in the practice) received during the last five years.
- Description of the subject practice, including-
-Industry specializations.
-Service category specializations.
-Geographic market specializations.
-Estimated market share.
-List of all direct competitors (with estimated market share of each) by geographic specialization, by industry specialization, by service category specialization, and by size (for example, number of partners and professionals and amount of revenue).
- Organization charts, by department.
- Copy of business or strategic plan.
- Description of any awards or other professional service recognitions received by the practice or its professionals during the previous five years.
- Itemized list of all locations where the practice operates, including-
-Total number of employees.
-Total number of partners.
-Total number of nonpartner professionals.
-Physical size of office.
-Indication of whether space is owned or leased.
- Copies of all marketing literature (for example, brochures, advertisements, and newsletters).
- List of the top twenty-five major accounts, with annual dollar fee revenue, services provided, principal industry, partner contacts within the practice, and number of years as a practice client for each.
- Résumés of all partners and all senior nonpartner professionals, including age, position, compensation, length of tenure at firm, education, industry specialization, and prior experience.
- Copy of most recent property tax assessment (if applicable).
- Copy of office lease (if applicable).
- Copies of all material contracts (for example, employment agreements with partners and accounting staff, employee benefit plans, covenants not to compete with former owners and others, supplier agreements, software agreements, maintenance agreements, equipment leases or rental contracts, and loan agreements).
- Schedule of insurance coverage in effect, including key-person life, business interruption losses, and professional liability.
- Any existing buy-sell agreements, options to purchase stock or partnership interests, rights-of-first-refusal, trust agreements, or other documents affecting the ownership interest being valued.
- Copy of any appraisals (of real estate, equipment, and practice value) performed during last five years.
- Details of any contingent or off-balance-sheet assets or liabilities (for example, pending lawsuits and compliance requirements).
- Any filings or regulatory correspondence with professional associations or governmental agencies (including state CPA societies and the AICPA).
- Copy of all professional peer-review reports received during the past five years.
- Information on all prior equity or partnership interest transactions involving the firm that have occurred during the past five years, including-
-Partner retirements or other departures.
-New partner admissions.
-Sales between partners.
Note that this list is applicable to much larger businesses, and should be trimmed to your specific needs.


## Appendix B

## Schedule 5 CPA v. Spouse Practice Income Statements For the Years Ended December 31, -

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fees (net of client disbursements) | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$498,991 | \$506,808 |
| Net change in accounts receivable | - | - | - | - | 2,367 | $(17,603)$ |
|  | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$501,358 | \$489,205 |
| Expenses |  |  |  |  |  |  |
| Salaries, wages, payroll, and consulting fees |  |  |  |  |  |  |
| Telephone and long distance | 4,710 | 7,206 | 8,997 | 9,589 | 6,907 | 7,271 |
| Office, postage, copies, printing, and general | 18,479 | 19,468 | 19,330 | 28,894 | 23,477 | 23,126 |
| Computer services and supplies | 6,014 | 1,239 | 1,080 | 8,587 | 5,484 | 10,720 |
| Bad debts (recovered) | - | $(8,556)$ | 19,223 | 16,271 | - | - |
| Entertainment <br> and client |  |  |  |  |  |  |
| Advertising and promotion | 1,669 | 3,247 | 1,236 | 6,339 | 2,616 | 3,204 |
| Rent, taxes, and insurance | 34,883 | 32,820 | 42,399 | 44,568 | 35,069 | 34,334 |
| Travel | 1,926 | 924 | 4,937 | 8,839 | 884 | 5,738 |
| Membership dues | 2,549 | 1,544 | 1,523 | 2,174 | 1,835 | 1,116 |
| Parking, taxis, delivery, and auto allowance | 8,080 | 5,108 | 4,905 | 7,419 | 4,121 | 4,501 |
| Bank charges and interest | 10,919 | 9,530 | 9,366 | 17,236 | 10,466 | 14,544 |
| Depreciation |  |  |  |  |  |  |
| Furniture and equipment | 3,053 | 4,825 | 5,212 | 5,185 | 5,093 | 4,168 |
| Computers | 4,363 | - | - | - | - | - |
| Computer software | 1,254 | - | - | - | - | - |
| Automotive |  |  |  |  |  |  |
| Running costs | 9,666 | 11,608 | 10,691 | 11,526 | 6,097 | 5,574 |
| Depreciation | 3,204 | 4,577 | 3,379 | 2,487 | 1,749 | 2,499 |
| Less: Personal use | $(4,504)$ | $(5,664)$ | $(4,925)$ | $(4,034)$ | $(2,747)$ | $(2,825)$ |
|  | \$377,675 | \$392,742 | \$430,619 | \$471,760 | \$412,700 | \$406,387 |


|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Practice earnings | 76,738 | 72,264 | 87,022 | 95,182 | 88,658 | 82,818 |
| Add: $20 \%$ of entertainment and client promotion | - | - | 1,334 | 1,336 | 1,861 | 1,735 |
| Add: $50 \%$ of entertainment and client promotion | 1,888 | 2,883 | - | - | - | - |
| Net income of the Practice (for tax purposes) | \$ 78,626 | \$ 75,147 | \$ 88,356 | \$ 96,518 | \$ 90,519 | \$ 84,553 |

## Appendix C

## Schedule 6 CPA v. Spouse Comparative Income Analysis of the Practice For the Years Ended December 31, -

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross fees reported (Schedule 5) (1) | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$498,991 | \$506,808 |
| Net Practice earnings reported (Schedule 5) (1) | 76,738 | 72,264 | 87,022 | 95,182 | 88,658 | 82,818 |
| Add (deduct) personal amounts (Schedule 5) (1) |  |  |  |  |  |  |
| Automobile personal amount declared | $(4,504)$ | $(5,664)$ | $(4,925)$ | $(4,034)$ | $(2,747)$ | $(2,825)$ |
| Automobile (at estimated $50 \%$ of total) (1) | 6,435 | 8,093 | 7,035 | 5,763 | 3,923 | 4,037 |
| Travel (at estimated $50 \%$ of total) | 963 | 462 | 2,469 | 1,000 | 442 | 2,869 |
| Parking, taxis, etc. (at estimated 50\% of total) | 4,040 | 2,554 | 2,453 | 2,000 | 2,061 | 2,251 |
| Sales promotion (at estimated |  |  |  |  |  |  |
| 50\% of total) (1) | 1,888 | 2,883 | 3,335 | 3,340 | 4,653 | 4,338 |
|  | \$ 85,560 | \$ 80,592 | \$ 97,389 | \$103,251 | \$ 96,990 | \$ 93,488 |
| Add family salaries included in expenses (1) |  |  |  |  |  |  |
| Spouse | 2,417 | 29,000 | 29,000 | 29,000 | 29,000 | 29,000 |
| Son | 6,600 | 13,200 | 13,200 | 13,200 | 13,200 | 13,327 |
| Daughter | 16,580 | 13,200 | 13,200 | 13,200 | 8,100 | 4,800 |
| CPA's parents | - | - | - | 12,000 | 12,000 | 12,000 |
|  | \$ 25,597 | \$ 55,400 | \$ 55,400 | \$ 67,400 | \$ 62,300 | \$ 59,127 |
| Adjusted net |  |  |  |  |  |  |
| Practice earnings (before adjustment for indicated understatement of gross fees) | \$111,157 | \$135,992 | \$152,789 | \$170,651 | \$159,290 | \$152,615 |

[^17]
## APPENDIX D

| Schedule 3 <br> CPA v. Spouse <br> Determination of Indicated Understated Practice Fees Based on Operating Expenses Level For the Years Ended December 31, - |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| Gross fees reported (Schedule 5) (1) [A] | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$498,991 | \$506,808 |
| Net Practice earnings reported (Schedule 5) (1) | 76,738 | 72,264 | 87,022 | 95,182 | 88,658 | 82,818 |
| Add (deduct) personal amounts (Schedule 5) (1) |  |  |  |  |  |  |
| Automobile personal amount declared | $(4,504)$ | $(5,664)$ | $(4,925)$ | $(4,034)$ | $(2,747)$ | $(2,825)$ |
| Automobile (at estimated $50 \%$ of total) | 6,435 | 8,093 | 7,035 | 5,763 | 3,923 | 4,037 |
| ```Travel (at estimated 50% of total)``` | 963 | 462 | 2,469 | 1,000 | 442 | 2,869 |
| Parking, taxis, etc. (at estimated 50\% of total) | 4,040 | 2,554 | 2,453 | 2,000 | 2,061 | 2,251 |
| Sales promotion (at estimated $50 \%$ of total) | 1,888 | 2,883 | 3,335 | 3,340 | 4,653 | 4,338 |
|  | \$ 8,822 | \$ 8,328 | \$ 10,367 | \$ 8,069 | \$ 8,332 | \$ 10,670 |
| Add family salaries included in expenses (1) |  |  |  |  |  |  |
| Spouse | 2,417 | 29,000 | 29,000 | 29,000 | 29,000 | 29,000 |
| Son | 6,600 | 13,200 | 13,200 | 13,200 | 13,200 | 13,327 |
| Daughter | 16,580 | 13,200 | 13,200 | 13,200 | 8,100 | 4,800 |
| CPA's parents | - | - | - | 12,000 | 12,000 | 12,000 |
|  | \$ 25,597 | \$ 55,400 | \$ 55,400 | \$ 67,400 | \$ 62,300 | \$ 59,127 |

(1) Extracted from financial statements and analyses prepared by CPA.

## Appendix D (continued)

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Add additional depreciation and interest |  |  |  |  |  |  |
| Automobile (remaining 50\% not deducted above) | 1,602 | 2,289 | 1,690 | 1,000 | 875 | 1,250 |
| Furniture and equipment | 3,053 | 4,825 | 5,212 | 5,100 | 5,093 | 4,168 |
| Computers | 4,363 | - | - | - | - | - |
| Computer software | 1,254 | - | - | - | - | - |
| Bank charges and interest | 10,919 | 9,530 | 9,366 | 10,000 | 10,466 | 14,544 |
|  | \$ 21,191 | \$ 16,644 | \$ 16,268 | \$ 16,100 | \$ 16,434 | \$ 19,962 |
| Adjusted Practice operating cash flows [B] | \$132,348 | \$152,636 | \$169,057 | \$186,751 | \$175,724 | \$172,577 |
| Indicated Practice operating expenses $[\mathrm{C}]=[\mathrm{A}]-[\mathrm{B}]$ | \$322,065 | \$312,370 | \$348,584 | \$380,191 | \$323,267 | \$334,231 |
| Indicated gross fees based on profit margins of $37 \%$ $[\mathrm{D}]=[\mathrm{C}] /[100 \%-$ $37 \%$ ] | \$511,214 | \$495,825 | \$553,308 | \$603,478 | \$513,122 | \$530,525 |
| Indicated understated gross fees based on profit margins of [D] - [A] |  |  |  |  |  |  |
| 37\% | \$ 56,801 | \$ 30,819 | \$ 35,667 | \$ 36,536 | \$ 14,131 | \$ 23,717 |

## Appendix E

## Schedule 4 CPA v. Spouse <br> Determination of Indicated Understated Practice Fees Based on Salaries and Benefits Expense Level For the Years Ended December 31, -

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross fees reported (Schedule 5) | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$498,991 | \$506,808 |
| Salaries, wages, payroll, and consulting fees (Schedule 5) | 267,634 | 299,099 | 296,597 | 300,000 | 302,344 | 283,742 |
| Less family salaries included in above (Schedule 3) | $(25,597)$ | $(55,400)$ | $(55,400)$ | $(67,400)$ | $(62,300)$ | $(59,127)$ |
| Adjusted salaries and benefits expense | \$242,037 | \$243,699 | \$241,197 | \$232,600 | \$240,044 | \$224,615 |
| Indicated gross fees based on salaries and benefits expense as a percent of sales of 40\% | \$605,093 | \$609,248 | \$602,993 | \$581,500 | \$600,110 | \$561,538 |
| Indicated understated gross fees | \$150,680 | \$144,242 | \$ 85,352 | \$ 14,558 | \$101,119 | \$ 54,730 |

## Appendix F

Schedule 2
CPA v. Spouse
Determination of Indicated Understated Practice Fees For the Years Ended December 31, -

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indicated understated gross fees based on levels of: |  |  |  |  |  |  |
| Operating expenses method (Schedule 3) | \$ 56,801 | \$ 30,819 | \$35,667 | \$36,536 | \$ 14,131 | \$23,717 |
| Salaries and benefits expense method (Schedule 4) | $150,680$ | $144,242$ | $85,352$ | $14,558$ | $101,119$ | 54,730 |
| Indicated understated gross fees (simple average of above two methods) | \$103,740 | \$ 87,531 | \$60,509 | \$25,547 | \$ 57,625 | \$39,223 |

## APPENDIX G

## Schedule 1 <br> CPA v. Spouse <br> Estimated Maintainable Gross Fees of Practice As of December 31, 1997

|  | 1997 | 1996 | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross fees reported (Schedule 3) | \$454,413 | \$465,006 | \$517,641 | \$566,942 | \$498,991 | \$506,808 |
| Add adjustment for understated gross fees (Schedule 2) | 103,740 | $87,530$ | $60,509$ | $25,547$ | 57,625 | 39,223 |
| Adjusted Practice fees | \$558,153 | \$552,536 | \$578,150 | \$592,489 | \$556,616 | \$546,031 |
| Estimated annual maintainable gross fees (simple average of 1992 to 1997) | \$563,996 |  |  |  |  |  |
| Rounded | \$564,000 |  |  |  |  |  |

## Case Study O-Construction

Sheri L. Betzer, CPA, CFE<br>Betzer \& Company, PC<br>Denver, Colorado

He was nearsighted-very nearsighted-and that's why he was the lowest-priced pilot a drug dealer could hope to find. Even though he had made the run from Mexico many times before, this night as he tried to fly into the United States under the radar screens, his visual impairment caused him to misjudge how close he was to the ground.

The plane, loaded with marijuana, crashed onto the Arizona desert. When the authorities picked him up, the pilot was hopping mad. In a fit of anger about his high-risk, low-pay job, he was more than ready to tell them all about the twenty-two-year-old college kid who was drug dealing-and not giving him his fair share!

The pilot talked a lot, even revealing that the drug dealer, Joe Smith, was "investing" the money in construction projects. That's why we used the net worth method of income reconstruction.

The net worth method is particularly useful in this industry segment, because construction projects are cash intensive, involve traceable assets, and leave a paper trail of deeds and construction permits.

If the bank records provide 100 percent of the information needed, you don't need the net worth method of income reconstruction. That's rare, though, because when someone is hiding income, he or she ordinarily avoids the paper trail that bank deposits provide.

In cases involving the construction industry, the net worth method of income reconstruction has many applications:

- In divorce cases, when you need to trace cash or assets not reported by a spouse
- In cases involving business fraud
- In tax cases
- In any financial dealings involving assets common to construction projects
In this particular case, the Internal Revenue Service (IRS) was notified by the Drug Enforcement Agency (DEA) after the plane crashed in Arizona, and a criminal tax investigation was launched. A point of emphasis: Although this case involved an IRS investigation, the net worth method can be useful in virtually any situation involving hidden income, cash, and assets.

In 1954, the Supreme Court sanctioned the use of the net worth method in Holland v. U.S. (348 U.S. 121 [1954]). It marked the first time that a court employed this method to determine income without adequate books and records.

The theory behind the net worth method is simple accounting: Assets minus liabilities equals net worth. Net worth at the beginning of the period, plus net income, less expenses equals net worth at the end of the period.

The net worth method uses the double-entry accounting method comfortable to all accountants, presenting a simple balance sheet.

The case detailed in this chapter gained significant recognition as the first time the net worth method was used in a criminal tax case in the U.S. District Court of Colorado. The income reconstruction method was instrumental in obtaining a criminal conviction.

Beginning the investigation, we traced Joe Smith to the Roaring Forks Valley, in Aspen, Colorado.

Immediately before the three-year period in question, Smith was a student at the University of Colorado, Boulder; he listed his taxable income as $\$ 2,000$ to $\$ 7,000$ per year and his occupation as "rug sales." We couldn't help but joke among ourselves, "Did he inadvertently leave off the beginning ' $d$ ' from that word rug?"

In almost no time, he had gone from struggling student to an "entrepreneur," with literally hundreds of thousands of dollars in assets. He began his "construction career" in a Colorado ski town near Aspen, renovating the Old Laundry Building, an aging warehouse in the middle of town, and naming it after himself-the Smith Mall.

When using the net worth method, there are four major areas in which to look:

1. Bank records
2. Public records
3. Third parties
4. Cash transactions that bank records would not disclose

While we were waiting for the bank records, we asked ourselves, "What would Smith need in the construction process?"

This led us to the county public records. Each construction project, whether a home remodeling, new home construction, commercial construction, or renovation, provides a paper trail, including-

- Deeds
- Construction permits
- Inspection certificates

This information is readily available and extremely valuable in proving assets and financial transactions.

In addition to construction records, you also can look at other sources of public information. For example, we had learned that Smith had two Porsches, trucks, motorcycles, and of course, an airplane (or what remained of it), so we gathered information from the motor vehicle department and the Federal Aviation Administration.

Typically, in a construction project, a general contractor, architect, and subcontractors are required to provide the following:

- Lumber
- Drywall
- Electricity
- Heating and cooling systems
- Plumbing
- Roofing
- Paving
- Glass
- Insulation

That led us to a wealth of excellent third-party sources-all more than willing to talk to us. Let me emphasize that in obtaining information from third-party sources, you don't need an IRS investigation backing you. Of course, the IRS does have more power than an individual accountant to obtain personal information. However, a great deal of information can be gathered by phone interviews and over the fax machine, without face-toface interviews. A critically important point in this case is that we did not "strong arm" sources.

Because we put people at ease with an informal, friendly approach instead of using intimidation, they gave us information. In fact, once they began talking, they answered questions we never would have thought to ask.

For example, we started with the lumber company Smith had chosen. As we spoke with the supplier, we simply asked questions such as, "Do you remember who placed the orders with you and who came to pick up the stuff?" The supplier readily gave us a name: Giant. The supplier also told us where to find Giant.

We then visited the construction site and just inquired if anyone had ever heard of a guy nicknamed "Giant." The reply was, "Hey, Giant, someone over here wants to talk to you."

Giant remembered the names of subcontractors on the mall-and much more. One specific thing that stuck out in his mind was the homenot just the mall-that Smith had built. He told us about a three-foot high sculpture of a man and woman warming their hands at the fire. It was soldered directly into the fireplace of the living room.

Did Giant know the artist?
"Oh sure," he said. "He lives up around Sunlight [a ski area]." Giant even gave us detailed directions to the house, up a steep, winding, dirt road, tucked away in a remote area of the mountain.

One third party led to another. We found Smith was putting the drug money into construction projects and land, including three homes, buildings up and down the Roaring Forks Valley, and high-priced mountain property in 80 - to 100 -acre lots.

Smith had sold one of his homes, and the new owners, who had heard of the investigation, were almost proud to reveal some unusual things about the house. For example, there were no closets. Instead, the couple had discovered hidden panels in the walls and up the staircase-places that were literally made just for hiding drugs and cash.

When looking for third-party sources, it's important to look at the obvious. Neighbors are nosy, and when they see a building going up or a renovation, they watch as if it were a spectator sport. So, unless you ask, you'll never know what the little old lady across the street saw one day when she was just sitting in her rocking chair on the porch.

Even people you expect not to talk may do just that. For example, there were these twin brothers, big burly guys, serving time in federal prison on drug running. Smith had been buying big shipments of amphetamines from them before they were caught, and he didn't pay up! They were so happy to tell everything they knew about Smith that they didn't even ask us to cut a deal, such as lesser jail time for cooperating with the investigation. As a matter of fact, one of the investigators did get one of the brothers moved to a penitentiary nearer home. (Moral: Treat your sources well!)

The twins were angry with Smith. They wanted him to "get it."
When we talked with third parties, we also were attempting to identify cash payments. As it turned out, Smith had made some payments by check and some very large payments in cash. Most people make significant purchases with a check or credit card, not cash.

This confirmed that Smith had a lot of cash, but the question was, how could we reconstruct one vital piece of the puzzle-cash on hand at the beginning of the period? How could we prove that Smith didn't have a great deal of cash on hand from sources such as gifts from family?

Surprisingly, there were strong clues in the bank records, incomplete as they were. As we went over and over the checks, a trend emerged. Most checks were for amounts of $\$ 1$ to $\$ 3$, such as $\$ 2.35$ to a pharmacy and $\$ 3$ for a ticket for one of Smith's Labrador Retrievers at Dog at Large, a pet store. Moreover, Smith consistently was in an overdraft position with the bank. He also had small credit card balances of $\$ 100$ to $\$ 200$ that he wouldn't pay off until they went to a collection agency.

A couple more strong clues: Smith was in the habit of writing checks to cash, the largest of which was $\$ 100$, and his friends disclosed that they constantly were lending him $\$ 50$ to $\$ 100$.

The answer to cash on hand, one of the most critical to any indirect method and often the most difficult aspect to substantiate, was made clear. This was not a person who carried around a lot of cash. As soon as he got it, he "invested" it in construction or property-assets easy to trace. We listed cash on hand as $\$ 100$ - the amount of the largest check to cash we found.

With a beginning cash on hand of $\$ 100$ and assets of hundreds of thousands of dollars, our use of the net worth method was successful in reconstructing Smith's income and in obtaining a judgment of guilty. (See appendix A.)

Even Smith was surprised by the information we uncovered by tracking the paper and money trail. At trial, he commented to one of the investigators, "You know things about my life that I've totally forgotten."

In conclusion, the net worth method of indirect proof is ideal for income reconstruction in the construction industry. With an industry that is cash intensive, involves assets, and provides a paper trail through permits and inspections, the net worth method is the way to go in proving hidden income in a divorce case, tax evasion, business, or personal fraud.

## Appendix A

## Computation Example (Hypothetical) of the Net Worth Method of Income Reconstruction

| Description | $\begin{gathered} 12 / 31 / 93 \\ \text { (Starting Point) } \\ \hline \end{gathered}$ | 12/31/94 | 12/31/95 |
| :---: | :---: | :---: | :---: |
| Assets (at cost) |  |  |  |
| Current Assets |  |  |  |
| Cash on hand | \$ 100 | 100 | 100 |
| Bank account \#1 (reconciled) | 131 | 99 | 156 |
| Bank account \#2 (reconciled) | 463 | 488 | 492 |
| Construction account (reconciled) | 0 | 9,768 | 179 |
| Real property |  |  |  |
| Shopping mall renovation | 0 | 527,966 | 551,434 |
| Residence constructed | 18,900 | 286,550 | 301,945 |
| Rental residence constructed | 17,300 | 138,243 | 176,980 |
| 5-acre vacant lot | 0 | 15,500 | 15,500 |
| 80 acres, ranching property | 0 |  | 981,000 |
| Personal property |  |  |  |
| 1983 Porsche 911 | 0 | 22,200 | 22,200 |
| 1975 Porsche 911 (restored) | 3,200 | 5,400 | 6,800 |
| 1978 Harley Davidson |  |  |  |
| 1978 Beechcraft Bonanza | 28,000 | 28,000 | 28,000 |
| Artwork | 0 | 8,700 | 8,700 |
| Total Assets | \$ 68,094 | \$1,043,014 | \$2,093,486 |
| Liabilities |  |  |  |
| Short-term liabilities |  |  |  |
| Overdraft line of credit | \$ $(1,051)$ | \$ (1,200) | \$ (1,145) |
| Visa | $(3,076)$ | (131) | (87) |
| MasterCard | $(5,798)$ | $(5,544)$ | $(5,482)$ |
| Long-term liabilities |  |  |  |
| Construction loan | 0 | $(326,115)$ | 0 |
| Business property mortgage | 0 | 0 | $(325,587)$ |
| Home mortgage | 0 | 0 | $(178,439)$ |
| Total Liabilities | \$ (9,925) | \$(332,990) | \$(510,740) |
| Net worth | 58,169 | 710,024 | 1,582,746 |
| Less prior year's net worth |  | $(58,169)$ | $(710,024)$ |
| Increase in net worth |  | 651,855 | 872,722 |
| Add expenditures (excluding mortgage, credit card, and other loan payments) |  | 35,655 | 38,910 |
| Corrected gross receipts/ income for year |  | \$ 687,510 | \$ 911,632 |

# Case Study PELECTRONIC REPAIR (A THREE-ACT FORENSIC DRAMA) 

John W. "Ted" Ibex, CPA, ABV Sharyn Maggio, CPA, PFS, ABV Alan C. Winters, CPA, CFE, ABV<br>RosenfarbWinters and Co. Eatontown, New Jersey

Setting: A small wholly owned repair shop specializing in TVs, VCRs, and other small electronic appliances

Place: Could Be Anywhere, USA
Players: Ben Slick-Owner/operator of Slick's TV Repair Shop for many, many years
Melvin G. Eyeshade-Longtime accountant for Ben Slick
Alan Winters-Forensic accountant
Ted Ibex-Forensic accountant
Sharyn Maggio-Forensic accountant
The firm of Winters, Ibex \& Maggio was retained by Linda Slick in connection with her matrimonial litigation for the purpose of valuing Mr. Slick's business, a TV repair shop specializing in the repair of various electronic devices, such as TVs, VCRs, and radios, to name a few. Slick's TV Repair Shop is solely owned and operated by Ben Slick, who has been in the business for many years. Over the years, Ben became an authorized repair shop for major manufacturers of electronic equipment, such as Sony, RCA, and others. Ben is an accomplished repairman and spends every day in the shop supervising up to eight repairmen. Ben also is responsible for invoicing customers, making bank deposits, reconciling the bank account, maintaining customer relations, recordkeeping, and
essentially all administrative duties. Linda informed us that there was unreported income, which is a very common claim from a spouse who did not work in the business. We were nevertheless put on alert.

## Act I: The First Field Visit

Our initial visit to the shop provided all the clues to confirm Linda's allegations of unreported income. We were kept waiting until Melvin Eyeshade, the company's accountant, arrived. We were perceived as the adversary, and it is usual for the company's accountant to be present to assist and to direct the forensic accountant through the volumes of financial documents and records. We used the time before Melvin showed up to observe the surroundings. The most striking feature was the signs posted in the shop detailing prices of repairs and services and the accepted methods of payment-cash and money orders only. No checks were accepted. Immediately, we knew that the scope of our work would include reviewing sales invoices and tracing receipts to bank deposits. We just did not know to what extent the scope of the work would take.

The initial field visit always entails interviewing the business owner to determine relevant operating procedures and the system of internal control. Our primary focus was on the revenue cycle, following the transaction trail from start to finish. We learned quickly that Ben was a jack of all trades and he controlled the system. All business flowed through Ben, including the collection of receipts. As we would learn, he kept excellent detailed records. Customer sales invoices were clearly marked for the method of payment, and bank deposit slips listed each deposit by customer name, invoice number, and amount.

Business was generated from three primary sources:

1. Warranty income, received directly from the manufacturer
2. Road sales, from taking the repair services to the customer (Slick's shop used a fleet of vans to pick up and deliver appliances. Payment is in the form of cash and money orders.)
3. Over-the-counter sales, from walk-in customers at the shop (Payment is also in the form of cash and money orders.)

Another form of revenue, although minor, is from the sale of appliances left for repair and never claimed by the owner. The income from those sales was unreported. We randomly requested one month's recent sales invoices and several months of bank statements. Ben supplied us with the over-the-counter sales for the month of October 1987 and the bank statements for October and November. The scope of the work was to account for the numerical sequence of invoices and to trace the sales through the bank deposit slips to the bank statement. The accountant recorded monthly sales in the general ledger directly from the collections in the bank. We wanted to test the accounting procedures that Slick described, to measure the degree to which those procedures matched reality. An interesting side note is the observation that the more we reviewed invoices and bank deposit slips, the more the accountant and Slick conferred. As time and future events would confirm, the realization
of what we would find had hit them squarely between the eyes. But it was too late. The cat was out of the bag.

## What Did We Find?

It became quickly apparent that not all cash receipts were being deposited into the bank. The method of payment was clearly noted on nearly all invoices, and all but three invoices had been accounted for in the test sample. Slick wrote "Pd.-Ch" by hand to indicate payment in the form of currency. None of these payments could be traced to a bank deposit. All other payments were traced without exception by customer name, invoice number, and amount-first to the bank deposit slip and second to the deposit in the bank statement. Further, we were able to follow the bank deposits into the company's accounting records for sales. Cash was never deposited.

We wanted to expand the scope of our work. Requests to see sales and banking records for additional months for different years were met with stonewalling. Slick claimed that: the records were filed away in the attic; he had an appointment to get to; he was shorthanded; he would get the documents after lunch. Melvin said that he was very, very hungry because he had missed breakfast. With the noon hour approaching, he offered to take us to lunch. Besides, as he explained, Slick needed a little time anyway to locate the additional records. After securing our working papers along with all the invoices marked "Pd.-Ch," we left with the accountant for lunch.

We believe the wonderful aromas at the restaurant satisfied Melvin's hunger. His appetite faded as he picked at a salad and made small talk. We paid.

Upon our return to the store, several more months of records were awaiting. Slick changed his appointment so he could pull the records for our inspection. However, the records were less than complete. There were numerous missing invoices, and the invoices presented contained none with the "Pd.-Ch" notation. Inspection of bank records clearly showed no cash being deposited. The die was cast.

When the owner and the accountant were asked about the missing invoices, they hesitantly answered that the missing invoices most likely were used for warranty work and were either of no sales value or would have been sent to the manufacturer. (Note: Payment for warranty work, although an important source of revenue, was not a problem area and is not germane to the subject of this chapter.) We requested that Slick locate the missing invoices. We had previously determined the warranty invoices used a different format.

To examine additional records covering several years, we would have to schedule another field visit. Mr. Slick agreed to contact us as soon as he could locate the records. Because of the volume of records we wanted to examine, Slick said he needed some time-how much, as yet unspecified.

The day ended. We left with the knowledge that there was unreported income. We just did not know how much. Quantification was to come.

## Act II: The Next Field Visit

Approximately six weeks after our first field visit and after many followup telephone calls and much correspondence with Ben Slick, he telephoned to tell us that the records we wanted were available. We reviewed many, many invoices and discovered that all the invoices in the numerical sequences were present. The inspection revealed that-

- Some invoices showed signs of having been in files, with folds, bends, and tears.
- Other invoices looked brand new, although they were in the correct numerical sequence.
- The new-looking invoices were always marked with "no charge," "canceled," and other notations to indicate there was no sales value.
- The date sequencing further revealed that invoices were in perfect date sequence- except for the new-looking invoices. The invoice dates on those invoices were always out of sync with the date of the preceding or subsequent invoice number.
Further inspection confirmed beyond any doubt that Slick had substituted false invoices for the ones he did not want us to see. Slick had gone to the effort to get a duplicate set of invoices printed. This is where he slipped up. His inattention to detail would prove to be his downfall and support our conclusive evidence of chicanery.

Sales invoices had distinctive red and blue bands. At the time of our initial review, the number of the invoice in the upper-right corner was preceded by the abbreviation for number, "No." The abbreviation was eventually dropped. Slick had forgotten this detail when he ordered the reprints. Further, the distinctive red and blue bands on the false invoices were different shades from the bands of color on the original invoices, and the bands were positioned slightly lower on the false invoices.

Among the real invoices were several marked "Pd.-Ch" that Slick had missed. None of these could be traced to bank deposits, which was just more icing on the cake.

We asked Slick why some invoices bore the notation "No." and others did not. The exchange of stares and the silence to the question was answer enough. The curtain on this show was about to fall.

> End of Act II

## ACT III: COMPILING THE UNREPORTED INCOME

All that was left to do was to estimate the amount of unreported income Slick had put in his pocket. A best estimate was all we were going to get. The real invoices were gone, and there was no trail of customer names to reconstruct the missing invoices. Based on the few months of data obtained during our initial visit, we were able to calculate the value of the false invoices. Remember that at the first visit, Slick provided us with all the invoices before he realized his mistake. None of the invoices paid in cash could be traced to the bank statement.

By developing a ratio of cash sales to all sales and assuming no cash sales were reported, we were able to estimate the amount of money Slick had taken over a period time. The sequence in procedures was something like this:

- "Cash" invoices examined during initial visit totaled $\$ 8,986$. Each of the forty-five invoices bore the handwritten notation "Pd.-Ch," and we could not trace a corresponding deposit into the bank. (See appendix A.)
- All invoice numbers before invoice number 33001 should have been preceded by "No."
- The cash invoices were for route sales only. We did not have the opportunity to review over-the-counter sales. The ratio of route sales to over-the-counter sales was about $1: 1$. The ratio was developed by segregating invoices over a long period of time by their respective revenue category. We noted that the ratio was relatively consistent throughout the period.
- Sales were summarized by the company and the accountant into two categories. One is warranty sales and the other is cash on delivery (C.O.D.) sales, which combined route sales and over-the-counter sales.
- Reported C.O.D. sales for October 1987 were $\$ 11,504$ and represented 7.69 percent of total reported C.O.D. sales, $\$ 149,680$ for the year. (See appendix B.)
- Unreported sales for the month were calculated at $\$ 17,972$ : $\$ 8,986$ for route sales and $\$ 8,986$ for over-the-counter sales, based on a ratio of $1: 1$ of route sales to over-the-counter sales.
- Unreported sales of $\$ 17,972$ were annualized to $\$ 233,710$, based on the relationship of monthly C.O.D. sales to total C.O.D. sales:

Reported C.O.D. sales (October 1987) $=\$ 11,504=7.69 \%$
Total Reported C.O.D. Sales (1987)
Unreported cash sales 7.69\%

$$
=\frac{17,972}{7.69 \%}=\$ 233,710
$$

- Unreported sales of $\$ 233,710$ were 156 percent of total reported C.O.D. sales for the year. Unreported sales for other years in the business valuation period were estimated at 156 percent of each year's reported C.O.D. sales. (See appendix C.) We assumed that Slick was consistently dishonest each year. We had no other information, because he had most likely destroyed the real cash invoices.
$\begin{aligned} & \text { Unreported sales for year } \\ & \text { Total reported C.O.D. sales (Oct. 1987) }\end{aligned}=\frac{\$ 233,710}{149,690}=156 \%$
- Unreported sales for the valuation period amounted to $\$ 809,858$. The business has reported losses historically. The unreported income adjustments transformed a seemingly valueless business into a significant asset. Because the unreported income was proven to be a
normal recurring activity, considerable weight was given to them in determining Slick's ability to pay support to Linda Slick.
Unreported sales by year are shown in appendix D.


## Curtain Call

Although Slick kept a great deal of information from us, we had enough information with which to develop a logical, well-thought-out approach to estimate the amount of unreported income. We will never be sure how close to the actual unreported cash we came. Only Slick knows for sure. However, from the levels of protests that our reports elicited from Slick and his supporters, we believe we came close. Slick was the key to his own demise in this matter. Our paying attention to detail in the beginning was an important factor in establishing conclusively that there was unreported cash. The primary task quickly became one of quantification.

The End

## Appendix A

## Slick's TV Repair Shop Invoices Marked "Pd.-Ch" All From the Month of October 1987 Route Sales

| Invoice Number | \$ | Invoice Number | \$ |
| :---: | :---: | :---: | :---: |
| 31905 | 161.20 | 31974 | 200.52 |
| 31907 | 183.99 | 31978 | 322.60 |
| 31908 | 166.55 | 31982 | 346.34 |
| 31910 | 206.03 | 31985 | 140.05 |
| 31912 | 87.05 | 31993 | 87.05 |
| 31913 | 87.05 | 31996 | 201.21 |
| 31915 | 197.23 | 31998 | 150.60 |
| 31918 | 302.16 | 31999 | 175.60 |
| 31925 | 182.39 | 32000 | 226.21 |
| 31927 | 140.00 | 32002 | 87.05 |
| 31928 | 186.43 | 32003 | 165.05 |
| 31929 | 158.54 | 32004 | 321.34 |
| 31932 | 428.10 | 32007 | 297.60 |
| 31934 | 102.95 | 32009 | 225.52 |
| 31938 | 113.55 | 32010 | 87.05 |
| 31943 | 87.05 | 32011 | 106.73 |
| 31946 | 167.02 | 32012 | 296.57 |
| 31962 | 224.79 | 32014 | 552.00 |
| 31964 | 577.00 | 32015 | 249.79 |
| 31970 | 271.57 | 32016 | 192.02 |
| 31972 | 81.73 | 32018 | 87.05 |
| 31973 | 89.05 | 32019 | 138.55 |
|  |  | 32020 | 127.95 |

Total Number of Invoices 45
Sales Value of Invoices
$\$ 8,985.88$

## Appendix B

Slick's TV Repair Shop Sales as Recorded 1987

| Month | Warranty (1) | C.O.D. (2) | Total | Monthly C.O.D. Sales to Total C.O.D. Sales (\%) |
| :---: | :---: | :---: | :---: | :---: |
| January | \$ 25,311 | \$ 11,998 | \$ 37,309 | 8.02 |
| February | 31,477 | 9,608 | 41,085 | 6.42 |
| March | 25,293 | 10,582 | 35,875 | 7.07 |
| April | 28,324 | 13,152 | 41,476 | 8.79 |
| May | 21,838 | 10,060 | 31,898 | 6.72 |
| June | 26,780 | 10,933 | 37,713 | 7.30 |
| July | 26,190 | 15,307 | 41,497 | 10.23 |
| August | 21,007 | 12,294 | 33,301 | 8.21 |
| September | 25,386 | 13,118 | 38,504 | 8.76 |
| October | 26,498 | 11,504 | 38,002 | 7.69 |
| November | 22,077 | 17,343 | 39,420 | 11.59 |
| December | 23,756 | 13,791 | 37,547 | 9.21 |
| Totals | \$303,937 | \$149,690 | \$453,627 | 100.00 |

(1) Warranty sales are with the major manufacturers.
(2) C.O.D. sales are over-the-counter sales and route sales.

Unreported route sales October $1987 \quad \$ 8.986$
Estimated over-the-counter sales October $1987 \quad 8 \quad 8,986$
Unreported sales $1987 \quad \$ 17,972$

| Extrapolated by the percentage of October 1987 C.O.D. sales |
| :--- |
| to total C.O.D. sales for the year |
| $7.69 \%$ |

Unreported sales for $1987 \quad \$ 233,706$
C.O.D. sales as reported $\quad \div 149,690$

Unreported sales as a percent of reported sales
156.13\%

## Appendix C

## Slick's TV Repair Shop <br> Sales as Recorded

|  | Warranty (1) | C.O.D (2) | Total | Monthly C.O.D. Sales to Total C.O.D. Sales (\%) |
| :---: | :---: | :---: | :---: | :---: |
| 1987 |  |  |  |  |
| January | \$ 25,311 | \$ 11,998 | \$ 37,309 | 8.02 |
| February | 31,477 | 9,608 | 41,085 | 6.42 |
| March | 25,293 | 10,582 | 35,875 | 7.07 |
| April | 28,324 | 13,152 | 41,476 | 8.79 |
| May | 21,838 | 10,060 | 31,898 | 6.72 |
| June | 26,780 | 10,933 | 37,713 | 7.30 |
| July | 26,190 | 15,307 | 41,497 | 10.23 |
| August | 21,007 | 12,294 | 33,301 | 8.21 |
| September | 25,386 | 13,118 | 38,504 | 8.76 |
| October | 26,498 | 11,504 | 38,002 | 7.69 |
| November | 22,077 | 17,343 | 39,420 | 11.59 |
| December | 23,756 | 13,791 | 37,547 | 9.21 |
| 1987 totals | \$303,937 | \$149,690 | \$453,627 | 100.00 |
| 1988 |  |  |  |  |
| January | \$ 32,065 | \$ 14,732 | \$ 46,797 |  |
| February | 17,521 | 16,394 | 33,915 |  |
| March | 30,256 | 13,359 | 43,615 |  |
| April | 21,354 | 14,696 | 36,050 |  |
| May | 27,483 | 11,495 | 38,978 |  |
| June | 32,981 | 13,385 | 46,366 |  |
| July | 20,848 | 14,058 | 34,906 |  |
| August | 30,381 | 14,140 | 44,521 |  |
| September | 25,198 | 17,002 | 42,200 |  |
| October | 21,265 | 15,645 | 36,910 |  |
| November | 51,563 | 13,829 | 65,392 |  |
| December | 32,434 | 16,601 | 49,036 |  |
| 1988 totals | \$303,937 | \$175,337 | \$518,686 |  |
| 1989 |  |  |  |  |
| January | \$ 53,062 | \$ 13,162 | \$ 66,224 |  |
| February | 50,760 | 11,825 | 62,585 |  |
| March | 25,829 | 16,103 | 41,932 |  |
| April | 37,698 | 12,189 | 49,887 |  |
| May | 37,848 | 13,286 | 51,134 |  |
| June | 43,628 | 14,076 | 57,704 |  |
| July | 33,128 | 16,494 | 49,622 |  |
| August | 24,502 | 19,635 | 44,137 |  |
| September | 54,193 | 19,922 | 74,115 |  |
| October | 39,748 | 20,069 | 59,817 |  |
| November | 42,648 | 19,384 | 62,032 |  |
| December | 25,040 | 17,536 | 42,576 |  |
| 1989 totals | \$468,084 | \$193,681 | \$661,765 |  |

(1) Warranty sales are with the major manufacturers.
(2) C.O.D. sales are over-the-counter sales and route sales.

## Appendix D

## Unreported Sales by Year

| Year | Reported C.O.D. Sales (\$) | Unreported Sales at 156\% of Reported Sales (\$) |
| :---: | :---: | :---: |
| 1987 | 149,690 | 233,710 |
| 1988 | 175,337 | 273,754 |
| 1989 | 193,681 | 302,394 |
| Total | 518,708 | 809,858 |

# Case Study Q-Pasta 

Leonard M. Friedman, CPA, ABV, CVA<br>Rosenberg Rich Baker Berman \& Company<br>Bridgewater, New Jersey

Our firm was engaged to value a pasta company (the Company) in a major East Coast city. The establishment was more than sixty years old. The son of the founder had purchased or been gifted all the stock during his marriage and five years before his marital separation. We were stipulated to by the parties in the divorce action to be their joint expert, rather than working for one side.

Let me start off by saying that this was a well-established company with extraordinary pasta products. What made the sales extremely difficult to reconstruct was the Company not only sold homemade pastas, it also wholesaled many goods purchased from other vendors and had a retail shop that sold both homemade and dry goods. After our initial interview, based solely on the gross profit margin, we were convinced that there was significant unreported income.

The investigative accountant has an advantage when looking into an establishment that potentially has a lot of cash and sells a tangible product, as opposed to investigating a business that provides primarily services, such as a beauty salon, because the product can generally be costed and its profit margin can be determined.

In our first interview with the son and his accountant, we costed out the recipes of three types of commonly purchased pastas (see appendix A). They were very proud to tell us in our first meeting that they had little waste in the preparation process. However, after some preliminary work, they changed their story.

The books and records of the Company were generally horrendousmuch like any heavy cash business. There were virtually no records before 1993. Fortunately, we had a relatively detailed accounting of the

Company's purchases journal sorted by vendor. Based on the magnitude of activity in the purchases account, we felt reasonably comfortable that almost all the purchases were accounted for in the cash disbursements journal.

We then met with the owners again and went through all the vendors to allocate purchases into three categories-raw materials, wholesale goods, and retail goods. We did this for 100 percent of all the purchases from 1993 to 1995. The resulting ratios were consistent year to year. Once we performed the above, it was a matter of putting all the pieces of the reconstruction puzzle together.

We had developed at least fifteen significant schedules to try to support our conclusions.

Some of these schedules included-

- Test for ratio of wholesale and retail costs to sales for markup by vendor.
- Weighted average markup for three years.
- Recipe cost analysis.
- Cost of purchases by vendor.
- Analysis by year of allocated cost per vendor by type (that is, raw materials and wholesale goods).

Some of these represented two to three different schedules for each category.

The following are segments from our report detailing the process we used to measure unreported income. Under the son's ownership, the Company had grown significantly. Reported sales grew from $\$ 1.3$ million in 1990 to $\$ 2.1$ million in 1994. Actual sales reconstructed grew from approximately $\$ 1.6$ million to $\$ 2.5$ million, a growth rate of approximately 12 percent annually.

In addition to retail, the Company sells a variety of pasta products to between 300 and 400 restaurants in a major city. The product lines consist of the Company's manufactured pastas, purchased dry pastas, cheeses, and imported specialties. The majority of the Company's revenues are derived from restaurant sales. The Company has three vans for deliveries to its various commercial accounts.

The Company's tax return is on a cash basis, reflecting no balances for accounts receivables or accounts payables (this is an improper tax accounting method for retail and wholesale manufacturers). The Company's reported cash activity is summarized by its accountant, who prepares nondetailed cash receipts and detailed cash disbursements journals. The Company allegedly kept no detailed sales journals before 1995, so we used alternative procedures-that is, the conversion of reported purchases to sales-to test the accuracy of the reported sales. As illustrated later, our tests revealed significant unreported income, acknowledged at least in part by the owner.

On our third visit to the Company's manufacturing facilities, the son showed us a separate journal with the "actual" amounts paid to employees in 1995. The journal reflected an estimated $\$ 150,000$ of unreported cash payroll. He also revealed to us that family members were paid $\$ 50,000$ rent on the retail facility-in cash. The son also admitted to $\$ 50,000$ of
additional payments to himself. This reflects an admission of $\$ 250,000$ of unreported sales. Our tests revealed that unreported revenues were more like $\$ 400,000$ in each year, 1992 through 1995.

In our first interview, the son advised us that there were no daily sales journals for 1994 and 1995 for us to test. It was later revealed to us that a 1995 sales journal did exist. The ledger recorded daily and cumulative sales to commercial customers and a cumulative total.

The 1995 journal reflected a total of approximately $\$ 1,850,000$ in commercial sales. Based on our tests, we suspected this to be short, even though the journal indicated cash and charge sales for the last half of 1995. Most of the cash sales in this journal were not deposited.[!]

We were also given a schedule of alleged actual retail sales register tapes for the period December 5 through December 20, 1996, a total of twelve business days. The average retail sales per day totaled approximately $\$ 1,800$. Using a 262 -day retail business year, this equates to approximately $\$ 470,000$ in retail sales-an amount the son agreed to.

Thus, the son's own records acknowledge that there was approximately $\$ 2,320,000$ in sales in 1995 . The reported sales were $\$ 2,070,000$. Therefore, unreported revenue in 1995 begins at no less than $\$ 250,000$.

We also chose at random and tested five days of sales slips-July 25, 1995; August 10, 1995; September 21, 1995; November 8, 1995; and December 5, 1995. The test revealed that, on average, the ratio of commercial, or nonretail, sales of manufactured products to wholesale products was 2:1. This was consistent with our initial interviews with the son. This ratio was a key factor in determining the amount of unreported income.

The starting point for testing for unreported income was the Company's records of food purchases for the years 1993 through 1995. We asked the son to advise which of three categories each vendor fell into: raw materials, wholesale goods, or items sold at the retail facility.

After adjusting for accounts payable-items paid for in one year belonging to a prior year -purchases were as shown in appendix $B$.

Next we determined the profit margin on each category. For retail and wholesale goods, the tests were straightforward. For manufactured items, however, there were extreme inconsistencies between what the son told us in our first interview and what was said in later interviews.

In our initial interview, for example, the son gave us the recipes for egg pasta, spinach pasta, and spinach ravioli. We concluded that spinach and egg pasta yielded a 75 percent materials profit margin, or had a 25 percent cost of materials. The spinach ravioli, which we were initially advised was produced in batches yielding 17,000 ravioli, had a 68.5 percent profit margin. We initially concluded that overall the manufactured products yielded a 72 percent profit margin, or a 28 percent material cost. Based on this same margin, unreported revenue would be between $\$ 550,000$ and $\$ 650,000$ per year. We were concerned about the magnitude of this preliminary conclusion, and we asked the son for another interview.

In our second interview, he told us that the specialty pastas yielded a lower profit margin, the spinach ravioli recipe yielded only 14,000 instead of 17,000 , and there was waste for which we did not account. However, in
our initial interview, he had made it a point to say that there was little waste in the manufacturing process. We also went through specialty pasta recipes with him. The recipes, as represented to us, showed a profit margin as illustrated in appendix $C$.

In addition, we tested several days' sales slips to test the ratio of specialty pastas to the regular type pastas.

Coupling these representations by the son with our initial tests, we concluded there was a weighted material cost of 40 percent, based on our two-day sales test. In addition, the son advised that $\$ 300,000$ of commercial sales are to larger customers, which offer 10 percent to 20 percent discounts off the normal price. This would add an additional 2 percent cost factor, making his representation of manufacturing cost of materials at 42 percent. Our tests of retail and wholesale goods profit margins reflected 30 percent and 22 percent profit margins, respectively.

Appendix $D$ shows the results of applying these amounts to the above adjusted purchases.

The result of the tests in appendix D , calculated using the son's most recent representations, presented obvious problems and inconsistencies.

1. One key problem is the ratio of commercial manufactured goods sales to wholesale goods sales. In all the cases in the tables, wholesale sales of manufactured pastas were equivalent to or greater than commercial manufactured goods sales. Based on our interviews with the son and our tests of sales, the ratio of these sales should have approximated $2: 1$. If we assume that the wholesale revenues in 1995 were accurate, commercial manufacturing sales should approximate $\$ 1.6$ million at $2: 1$ and are short in the calculation by $\$ 600,000$.
2. 1994 and 1995 reported revenues were close to the calculated amounts. Even by the son's own admission of unreported income, this cannot be true.

As a result of the inconsistencies, we calculated the sales of manufactured pastas based on a 30 percent cost factor, which is consistent with the representations made by the son at our initial interview, allowing for a wastage factor of an additional 10 percent (see appendix D).

Even after we settled on these figures, the ratio of manufactured goods sold to wholesale was still less than $2: 1$. It was possible that the unreported income was higher, but we were trying to rely on as solid figures as possible. These same principles of testing can be applied to a bakery or bread manufacturer.

The analysis illustrated in appendix $E$ caused us to conclude that there was at least $\$ 400,000$ per year of gross unreported income. Because we had previously concluded that unreported payroll was $\$ 150,000$ and unreported rent another $\$ 50,000$, net unreported income to the son was about $\$ 200,000$ per year. Interestingly, we needed $\$ 150,000$ just to be consistent with his lifestyle.

## Appendix A

## Margin Tests Using Recipes of Basic Pasta Products

Our interview with the son included a recipe and cost discussion on his homemade pastas. We analyzed the recipes of regular egg pasta, spinach pasta, and spinach ravioli.

The following is a summary of the recipes and costs and our conclusions regarding the profit margin on the homemade items. We also used 1996 costs and prices for this illustration.

## Regular Egg Pasta

Recipe

| 150 pounds of flour | $@ \$ .24$ per pound | $\$ 36.00$ |
| :--- | :--- | :--- |
| 20 dozen eggs | @\$.80 per dozen | $\$ 16.00$ |
| Water | N/A | $\$ 0.00$ |

3 pounds of nonstick powder
N/A \$ 0.00
@\$2.12 per pound \$ 6.36
Total yield: 173 pounds ( 182 pounds,
less $10 \%$ waste)
Total cost: $\$ 58.36$
Total price per pound: $\$ .36$
Sale price
Wholesale: $\$ 1.39 \quad 85 \%$
Retail: $\$ 1.60 \quad 15 \%$
1.42

Profit margin $\quad 75.01 \%$

## Spinach Pasta

Recipe
100 pounds of flour @\$.24 per pound \$ 24.00
10 dozen eggs
@\$. 80 per dozen
$\$ 8.00$
Water
N/A
\$ 0.00
2 pounds of nonstick powder
18 pounds of chopped spinach
@\$2.10 per pound
\$ 4.20
1.8 pounds of dehydrated spinach
$@ \$ .44$ per pound
\$ 7.92
Total yield: 99 pounds ( 139 pounds, less
$10 \%$ waste)
Total cost: $\$ 47.12$
Total price per pound: $\$ .38$
Sale price Weight
Wholesale: $\$ 1.49 \quad 85 \%$
Retail: $\$ 1.70 \quad 15 \%$
1.52

Profit margin 75.30\%

## Spinach Ravioli

Recipe

| 200 pounds of flour | $@ \$ .24$ per pound | $\$ 48.00$ |
| :--- | :--- | :--- |
| 20.17 dozen eggs | $@ \$ .80$ per dozen | $\$ 16.13$ |
| Water | N/A | $\$ 0.00$ |
| 160 pounds of ricotta cheese | $@ \$ 1.24$ per pound | $\$ 198.40$ |
| 48 pounds of chopped spinach | $@ \$ .44$ per pound | $\$ 21.12$ |
| 24 pounds of parmesan cheese | $@ \$ 3.09$ per pound | $\$ 74.16$ |
| 5 pounds of dough mix | $@ .5$ per pound | $\$ 2.50$ |

Total yield: 17,000 ravioli
Total cost: $\$ 360.31$

## Appendix A (continued)

## Total price

Per ravioli: \$. 0212
Per 500 ravioli: $\$ 10.60$

Sale price
Wholesale, per 500 ravioli: $\$ 32.90$
Retail, per 500 ravioli: $\$ 38.00$
Profit margin

Weighted average
33.67\%1.52

## Appendix B

Food Purchases

| Year | Raw Materials <br> (\$) | Wholesale Goods (\$) | Retail Goods (\$) | Total Purchases <br> (\$) |
| :---: | :---: | :---: | :---: | :---: |
| 1993 | 415,027 | 545,941 | 143,600 | 1,104,568 |
| 1994 | 468,966 | 605,354 | 143,978 | 1,218,298 |
| 1995 | 447,348 | 638,355 | 106,535 | 1,192,238 |

## Appendix C

## Recipe Profit Margins

| Recipe | Materials Profit Margin <br> $(\%)$ |
| :---: | :---: |
|  | 47 |
|  | 50 |
|  | 44 |
|  | 60 |

## APPENDIX D

|  | Sales |  |  | Retail Goods |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Materials |  | olesale oods |  |  |  |
| 1993 |  |  |  |  |  |  |
| 1993 adjusted purchases | \$ 415,027 | \$ | 545,941 | \$ | 143,600 |  |
| Relative markup (1) | 2.38 |  | 1.29 |  | 1.41 |  |
| Adjusted sales | 987,764 |  | 704,264 |  | 202,476 |  |
| Assumed raw material sales |  |  |  |  |  |  |
| sold at retail location (2) | $(270,000)$ |  | - |  | 270,000 |  |
| Adjusted sales, per the son | 717,764 |  | 704,264 |  | 472,476 | \$1,894,504 |
| Sales per tax return |  |  |  |  |  | 1,826,151 |
| Underreported sales 1993 |  |  |  |  |  | \$ 68,353 |
| 1994 |  |  |  |  |  |  |
| 1994 adjusted purchases | \$ 468,966 | \$ | 605,354 | \$ | 143,978 |  |
| Relative markup | 2.38 |  | 1.29 |  | 1.41 |  |
| Adjusted sales | 1,116,139 |  | 780,906 |  | 203,009 |  |
| Assumed raw material sales sold at retail location | $(270,000)$ |  | - |  | 270,000 |  |
| Adjusted sales per the son | 846,139 |  | 780,906 |  | 473,009 | \$2,100,054 |
| Sales per tax return |  |  |  |  |  | 2,122,451 |
| Overreported sales 1994 |  |  |  |  |  | \$(22,397) |
| 1995 |  |  |  |  |  |  |
| 1995 adjusted purchases | \$ 447,348 | \$ | 638,355 | \$ | 106,535 |  |
| Relative markup | 2.38 |  | 1.29 |  | 1.41 |  |
| Adjusted sales | 1,064,688 |  | 823,478 |  | 150,214 |  |
| Assumed raw material sales sold at retail location | $(320,000)$ |  | - |  | 320,000 |  |
| Adjusted sales per the son | 744,688 |  | 823,478 |  | 470,214 | \$2,038,380 |
| Sales per tax return |  |  |  |  |  | 2,070,980 |
| Overreported sales 1995 |  |  |  |  |  | \$ $(32,600)$ |

[^18]
## Appendix E

## Sales of Manufactured Pastas



# Case Study RCar Stereo Systems 

Kalman A. Barson, CPA, CVA, CFE, ABV<br>Rosenberg Rich Baker Berman \& Company<br>Bridgewater, New Jersey

It can be surprising to those of us who tend not to dirty our hands in "real" work (that is, retail) how profitable some of those businesses can be, even when the surface impression (from tax returns or financial statements) do not give an inkling of what the truth is. This can be the case even for what seems to be a relatively small business on a welltraveled country side road and in dire need of a major maintenance overhaul, having deteriorated far more than should have been allowed in the first place.

We had the pleasure of working on such a situation not long ago, involving a business that installed after-market stereo systems in cars. We were engaged by Mrs. Audio to assist her and her attorney in the income determination and value determination of her husband's business. Mr. Audio, of course, had been complaining during the early stages of the divorce proceeding that he could barely make a living at the business, and that providing child support, let alone alimony, was out of the question. However, he assured all that he would be most cooperative. At the fear of sounding cynical, we immediately were faced with two improbabilitiesthat he was hardly making any money (considering he had been in this business for years and was well-established and well-known in the area), and that we indeed would receive such freely promised cooperation. In fact, not surprisingly, we encountered an extreme level of difficulty in obtaining records. In addition, we observed numerous irregularities.

Perhaps the biggest issue we faced was the unwillingness (if we were to be kind, we would then say inability) of Audio to provide routine
business as well as personal financial records. Despite repeated requests, and after much delay, he was able to provide us with records for only several months of one year (and even then, those records were incomplete). Allegedly, he had discarded or destroyed all prior-year records-but he claimed that was not done to avoid discovery in the divorce action, but merely to clean up a messy storage problem and an overload of paper. Unfortunately, despite efforts of Mrs. Audio's attorneys, we could obtain only very limited prior-year records from third-party sources. Even then, much of that was incomplete and not all that useful.

Fortunately, we did obtain a sufficient extent of records to give us the necessary insight into reconstructing the business operations. We also had the accountant's working paper files. Those were sufficient for us to conclude that the tax returns were based on that long-established, tried-and-true accounting method-not accrual basis, not really cash basis, but deposit basis. Our preliminary overview made it clear that we were looking at unreported income as well as significant perquisites run through as if they were business expenses.

Our first step was trying to reconstruct the actual sales revenues. Though most of the records had been destroyed, we were able to obtain a limited amount of records-including some purchase and sales invoices. From those records, along with inquiries of others in the industry, we were able to determine that the gross profit should have been 56 percent-that purchases should have been 44 percent of the sales. Based on the physical presence of the location, it was likely that inventory did not change all that much, and even if it was understated in the tax returns, the understatement was not relevant as long as there was an approximate consistency from year to year, for purposes of income generation.

Using purchases as constituting 44 percent of sales, based on the purchases as reflected in the tax returns, we then backed into what sales had to have been to justify that extent of purchases.

We also did a detailed analysis of certain relationships involving gross profits and increases and decreases in sales and purchases from 1992 through 1995. (See appendixes A and B.) The analysis very clearly highlighted that the gross profit was wildly understated and that the only reasonable explanation for the figures presented in the tax returns was a significant degree of unreported income.

Our reconstruction of sales proceeded as shown in appendix C.
Clearly, we were looking at a major tax fraud problem, and significant misrepresentations to everyone in this case-including Audio's own attorney and accountant.

Besides the unreported-income issue, we were also faced with various expenses that we were able to determine were inappropriate. As an example, the payroll made very little sense. During the four years we reviewed, it was astoundingly inconsistent (see appendix D).

This was obviously illogical. Further, Audio's reported compensation is absurdly inconsistent with his family's living needs. In addition, we were advised that his payroll included some of his children.

We were able to reconstruct the payroll based on discussions with clients of ours in similar type businesses who were able to advise us about what to expect under normal conditions. We were advised that payroll
would approximate $\$ 40,000$ per year-in addition of course to the fulltime services of Audio. We deemed anything in excess of that to be personal or nonbusiness.

We also noticed that the rents increased dramatically in 1994 and 1995. We were able to determine that the unrelated third-party landlord for one business location was receiving rent of approximately $\$ 9,000$ per year. There was no satisfactory explanation for rents above that level. We did find some indications that Audio paid himself additional thousands of dollars a month for rent for alleged warehousing space-which didn't exist, and which wasn't reported anywhere in his tax return.

Our review of the tax return figures also highlighted a number of other areas that required adjustments, for instance-

- Advertising. Advertising expense in 1995 was nearly three times that in 1994, even while sales decreased by 22 percent. No explanation was given for this high level of advertising, nor could we find support for same. It was our determination that fully $\$ 30,000$ of that expense was fictitious.
- Insurance. For the most part, this expense looked appropriate-except for 1994, when it was three to four times the magnitude of any other year. Again, we inquired of Audio, and again he had no answers for us. Even though we were somewhat reluctant to make another such adjustment without foundation, the reality was we had already proven (to our satisfaction) that Audio was guilty of significant tax fraud and underreporting of income, and further there was no credible reason for the absence or alleged destruction of the various records. Therefore, we felt justified in considering that approximately $\$ 15,000$ of the alleged insurance expense in 1994 was nonexistent.
- Travel and entertainment. Based on everything we knew of this business, including the discussions with both Mr. and Mrs. Audio, there was absolutely no travel involved or any reason for entertainment. This was a neighborhood retail walk-in-business type of store. When asked, Mr. Audio couldn't provide any credible specific reasons for why he would have travel or entertainment expense. Therefore, we treated this expense in its entirety as an add back.
- Utilities. As modest as this expense might appear at first blush, it seemed out of line when we considered that the store was a relatively small one. We were able to obtain from the local utility company details of the billings to the store for 1994 and 1995. The amount shown on the tax returns was greatly higher than those amounts. Interestingly, we also obtained from that same utility company the bills for those two years for the marital home (the Audios lived near where the store was located). Of major coincidence, the sum of the home and store utility bills closely approximated the deductions claimed on the tax returns. Because we also found no evidence of Audio paying any personal utility bills in the personal checking account, it seemed very clear that the business was paying for and deducting both business and the personal utility bills. Therefore, we of course added back those amounts also.
As is evident from the illustration above, after making these various adjustments, what was on the surface a horrendous loser of a store,
turned out to be somewhat profitable, and certainly able to provide a living wage to Audio.

When presented with our findings, Audio disparaged our approach and conclusions, and very loudly made it clear that he intended to fight this all the way. About one week before trial was to commence, he must have had some form of a conversion to the straight and narrow because, through his attorney, he approached us with a fairly reasonable settlement proposal.

## Appendix A

## Audio v. Audio

## Comparative Statements of Income (As per Tax Returns)

|  | 1995 |  | 1994 |  | 1993 |  | 1992 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\%) | (\$) | (\%) | (\$) | (\%) | (\$) | (\%) |
| Net sales | \$ 394,618 | 100.0 | \$ 506,009 | 100.0 | \$510,661 | 100.0 | \$442,833 | 100.0 |
| Inventory beginning | 30,000 | 7.6 | 32,000 | 6.3 | 16,000 | 3.1 | 13,500 | 3.0 |
| Purchases-materials | 331,964 | 84.1 | 367,501 | 72.6 | 309,491 | 60.6 | 249,085 | 56.2 |
| Other cost of sales | 3,234 | 0.8 | - | - | - | - | 1,475 | 0.3 |
| Less ending inventory | $(33,500)$ | (8.5) | $(30,000)$ | (5.9) | $(32,000)$ | (6.3) | $(16,000)$ | (3.6) |
| Total Cost of Sales | 331,698 | 84.0 | 369,501 | 73.0 | 293,491 | 57.4 | 248,060 | 55.9 |
| Gross profit | 62,920 | 16.0 | 136,508 | 27.0 | 217,170 | 42.6 | 194,773 | 44.1 |
| General and administrative expenses |  |  |  |  |  |  |  |  |
| Officers compensation | 6,400 | 1.6 | - | - | 25,600 | 5.0 | 25,600 | 5.8 |
| Salaries and wages | 95,870 | 24.3 | 68,960 | 13.6 | 84,415 | 16.5 | 112,280 | 25.4 |
| Repairs | 5,512 | 1.4 | 5,532 | 1.1 | 3,897 | 0.8 | 5,372 | 1.2 |
| Rents | 43,431 | 11.0 | 35,974 | 7.1 | 8,597 | 1.7 | 9,621 | 2.2 |
| Taxes | 11,765 | 3.0 | 12,119 | 2.4 | 17,400 | 3.4 | 14,939 | 3.4 |
| Interest | - | - | - | - | 1,884 | 0.4 | - | - |
| Advertising | 47,480 | 12.0 | 17,455 | 3.4 | 8,173 | 1.6 | 2,493 | 0.6 |
| Supplies |  | - | 5,223 | 1.0 | 3,315 | 0.6 | 4,949 | 1.1 |
| Vehicle expense | 961 | 0.2 | 1,924 | 0.4 | 767 | 0.2 | 722 | 0.2 |
| Bank and credit card fees | 7,321 | 1.9 | 4,098 | 0.8 | 3,304 | 0.6 | 1,030 | 0.2 |
| Employee benefit programs | 2,238 | 0.6 | 3,297 | 0.7 | 5,910 | 1.2 | 6,382 | 1.4 |
| Insurance | 5,333 | 1.4 | 22,523 | 4.5 | 7,451 | 1.5 | 5,525 | 1.2 |
| Office and shop expenses | 3,166 | 0.8 | 1,735 | 0.3 | 2,548 | 0.5 | 3,153 | 0.6 |
| Professional fees | 8,079 | 2.0 | 7,604 | 1.5 | 8,621 | 1.7 | 5,693 | 1.3 |
| Telephone and yellow pages | 10,333 | 2.6 | 14,503 | 2.9 | 19,622 | 3.8 | 7,589 | 1.7 |
| Travel and entertainment | 4,727 | 1.2 | 11,302 | 2.2 | 5,401 | 1.1 | 4,138 | 0.9 |
| Utilities | 8,264 | 2.1 | 8,819 | 1.7 | 7,283 | 1.4 | 5,701 | 1.3 |
| Amortization | 500 | 0.1 | 500 | 0.1 | 500 | 0.1 | 375 | 0.1 |
| Depreciation | - | - | - | - | - | - | 2,000 | 0.5 |
| Total Expenses | 261,380 | 66.2 | 221,568 | 43.7 | 214,688 | 42.1 | 217,562 | 49.1 |
| Operating profit (loss) | $\underline{\$(198,460)}$ | (50.2) | \$(85,060) | (16.7) | \$ 2,482 | 0.5 | $\underline{\text { \$ }} \mathbf{}$ (22,789) | (5.0) |

## Appendix B

## Audio v. Audio <br> Reconstructed Statements of Income

|  | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: |
| Operating profit (loss) (as reported) | \$(198,460) | \$(85,060) | \$ 2,482 | \$(22,789) |
| Adjustments: |  |  |  |  |
| Unreported sales | 359,846 | 329,221 | 192,728 | 123,269 |
| Owner salary | 6,400 | - | 25,600 | 25,600 |
| Fictitious payroll | 55,870 | 28,960 | 44,415 | 72,280 |
| Rent | 34,431 | 26,974 | - | - |
| Advertising | 30,000 | - | - | - |
| Insurance | - | 15,000 | - | - |
| Travel and entertainment | 4,727 | 11,302 | 5,401 | 4,138 |
| Utilities | 3,755 | 4,162 | 2,984 | 2,317 |
| Adjusted net income before owner's compensation | \$ 296,569 | \$330,559 | \$273,610 | \$204,815 |

## Appendix C

## Reconstruction of Sales

|  | 1995 | 1994 | 1993 | 1992 |
| :---: | :---: | :---: | :---: | :---: |
| Purchases as reported | \$331,964 | \$367,501 | \$309,491 | \$249,085 |
| Cost of goods sold as determined | 44\% | 44\% | 44\% | 44\% |
| Amount of sales necessary to justify $44 \%$ cost of goods sold | 754,464 | 835,230 | 703,389 | 566,102 |
| Reported sales | 394,618 | 506,009 | 510,661 | 442,833 |
| Unreported sales | \$359,846 | \$329,221 | \$192,728 | \$123,269 |

## Appendix D

## Payroll

|  | 1995 |  |  | 1994 |  |  | 1993 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  | 1992 |  |  |
| Salary and wages | $\$ 95,870$ |  | $\$ 68,960$ |  | $\$ 84,415$ |  | $\$ 112,280$ |
| Percent of reported sales | $24.30 \%$ |  | $13.60 \%$ |  | $16.50 \%$ |  | $25.40 \%$ |
| Number of employees | 6 |  |  |  |  | 10 |  |
| Mr. Audio's salary | $\$ 6,400$ | $\$$ | 0 |  | $\$ 25,600$ |  | $\$ 25,600$ |

## Case Study S—Retail Clothing

Earl Salsman, CPA<br>Brown Smith Wallace, LLC<br>St. Louis, Missouri

"Here is $\$ 400$ cash for groceries and some money to cover your daily needs," Robert told his wife Alice each week. When she filed for divorce after much embarrassment from his many extramarital affairs, he claimed no knowledge of such matters.

Robert owned and operated two retail clothing stores and resided with Alice in an upscale suburban neighborhood. In addition to living in a luxurious home, they drove several expensive cars and vacationed frequently at popular resorts. Furthermore, Alice did not work or bring in any additional money. How did they manage on Robert's annual reportable income, which was less than $\$ 90,000$ per year, inclusive of the company's profits?

## Skimming

The most obvious source of hidden income was the stores' revenues. "Skimming" allowed Robert to report total sales of $\$ 900,000$ and a gross profit of $\$ 400,000$ ( 44.4 percent of sales), rather than the true gross margin of 50 percent of sales, thereby providing an additional $\$ 100,000$ for personal use.

What is meant by the term skimming? It refers to a defalcation in the sales and collections cycle typically committed by withholding cash receipts without recording them. Skimming is one of the easiest forms of fraud to commit and among the most difficult to detect. Ringing up the transaction on the cash register adds the receipt to the total receipts, which can be compared with the cash on hand. However, not ringing up a
transaction may result in taking the cash without detection. Even though detection of unrecorded cash receipts is very difficult, unexplained changes in the gross profit percentage or sales volume could indicate that cash receipts have been withheld.

Because Robert, as store owner, was frequently around the register, he had access to the tape located inside the register and merely had to discontinue the tape at some point during the day and report only the amount reflected on the tape.

A store that is heavily dependent on credit card sales might make skimming more difficult, because much less cash is involved. In Robert's case, a shrewd individual could limit such daily amounts to less than $\$ 350$ (based on $\$ 100,000$ spread over 300 business days).

How was the skimming measured? Several approaches were used to determine the estimated amount. First, various publications provide statistical data regarding specific industries, including average gross profit margins applicable to retail stores in different categories.

Second, carefully selected individuals were sent to the store in question and instructed to make "cash purchases" of merchandise. Subsequently, they reported their findings and noted any unusual events in recording such sales. They were also told to witness other such customer purchases and detect any further irregularities.

Third, the "planted customers" examined selling prices on selected clothing items. Purchase invoices of such items subsequently were tested and then compared with the cost of the sale merchandise. This testing, to determine the actual profit margins supported our belief of unreported income.

## Monitoring Cash Register Activity

How can the accountant (or auditor) take steps to ensure that all cash receipts are processed and properly recorded? First, the prelisting and cash register procedures should be monitored. To avoid the misappropriation of cash, some businesses count the envelopes given to the prelister; others have a supervisor observe the prelisting process. To reduce the likelihood of cash misappropriation, some businesses institute cash register procedures, such as assigning separate individuals responsibility for particular cash drawers, making daily cash counts, and reconciling the total to the register's locked-in total.

A second control procedure requires checks to be restrictively endorsed upon receipt. Such a procedure prevents an unauthorized individual from gaining access to the checks and cashing them. Restrictively endorsing checks reduces the opportunity for misappropriation of cash receipts.

A third control procedure is to deposit cash receipts intact daily, to reduce the likelihood of misappropriation and to facilitate checking to see that cash has been deposited, because the prelisting can be compared with the deposit ticket. This procedure also tends to avoid unrecorded cash.

A fourth control procedure designed to ensure that all cash receipts are recorded is the preparation of a daily cash summary that is reconciled to the total of the prelisting and cash register receipts. The summary total is compared with the total in the cash receipts journal and the total on the
validated deposit ticket. Such a procedure ensures that all cash receipts are deposited and recorded. If such a procedure is not employed, cash can be misappropriated or remain unrecorded through an oversight.

## Overstatement of Expenses

Overstated expenses can also have a significant effect on the net income reported. Salaries and wages can include payments to owners' minor children or to fictitious individuals, whose "income" is then directed back to the owners. In Robert's case, he paid his store manager, Sally, an abnormally high salary. She then redirected part of the funds back to Robert. (Sally also was "involved" with Robert outside the business, as evidence later showed.)

Other expenses also tended to be overstated. Travel and entertainment frequently included many "buying trips" that in fact were personal in nature. (Robert often found it necessary to take Sally along with him, and the two of them often stayed in extravagant hotels and dined lavishly.) Expensive vacations also were hidden under the designation travel and entertainment.

Legal expenses charged to the business also included personal matters, such as the preparation of wills and trust agreements, and in Robert's case, included the costs of handling his divorce. Rent, telephone, and utilities, as well as insurance, can also frequently include amounts pertaining to personal residences and second homes, which have no business relationship. Auto expense, including depreciation, might apply to vehicles used by children and other family members for which there is no business use. Assets owned and depreciated by the company frequently include computers and home furnishings that are strictly personal in nature. Office supplies and postage, to a lesser extent, often include family member expenditures that are unrelated to the business. Even "store supplies" can include detergent and similar items used in the home.

As reflected in the company's income statement (see appendix A), pretax income in this case was understated by almost $\$ 200,000$. In determining the understatement of income (as reflected in the Variance column in the appendix), amounts have been rounded to increments of $\$ 500$ to $\$ 1,000$ to simplify the illustration. The understatement of the gross profit represents the unreported revenue (that is, skimming).

The unreported income also takes into account the overstatement of expenses (of approximately $\$ 90,000$ ) based on the business paying personal items as previously indicated. Appendix B shows a breakdown of the various categories and how such amounts were determined.

How did Robert fare when it came to his final divorce settlement and determination of maintenance as well as child support?

The court determined that approximately 50 percent of the value of the couple's residence, vacation home, and other personal property, including automobiles, was to be given to Alice, because the majority of assets were acquired after the couple married.

Robert was found legally obligated to pay Alice $\$ 4,000$ per month in perpetuity, unless she remarried, and statutory child support based upon his "reportable" income until the children reached majority.

On the other hand, Alice was expected to contribute to her own support by obtaining employment and earning at least $\$ 1,000$ per month to support herself. Sally, who managed Robert's stores, resigned her position and moved 300 miles away to another city. She and Robert no longer see each other.

Robert has been forced to work longer hours and find a new store manager. He is also trying to improve his relationship with his children.

Hopefully, all will learn from their mistakes, including Alice, who is now less naïve than she was before the divorce.

## Appendix A

# Robert's Retail Clothing Company <br> Income Statement <br> For the Year Ended December 31, 19XX 

|  | Reported | Actual | Variance |
| :---: | :---: | :---: | :---: |
| Sales | \$900,000 | \$1,000,000 | \$100,000 |
| Cost of sales | 500,000 | 500,000 | - |
| Gross profit | \$400,000 | \$ 500,000 | \$100,000 |
|  | (44.4\%) | (50.0\%) |  |
| Operating expenses |  |  |  |
| Salaries |  |  |  |
| Officer | 60,000 | 60,000 | - |
| Store manager | 30,000 | 24,000 | 6,000 |
| Others | 70,000 | 40,000 | 30,000 |
|  | \$160,000 | \$ 124,000 | \$ 36,000 |
| Advertising | 60,000 | 60,000 | - |
| Auto expense | 15,000 | 7,500 | 7,500 |
| Insurance | 9,000 | 6,000 | 3,000 |
| Legal and accounting | 12,000 | 6,000 | 6,000 |
| Office supplies and postage | 8,000 | 5,000 | 3,000 |
| Payroll taxes | 14,000 | 14,000 | - |
| Rent | 24,000 | 18,000 | 6,000 |
| Repairs and maintenance | 5,000 | 4,000 | 1,000 |
| Store supplies | 6,000 | 4,000 | 2,000 |
| Telephone | 8,000 | 6,000 | 2,000 |
| Travel and entertainment | 10,000 | 1,000 | 9,000 |
| Utilities | 6,000 | 5,000 | 1,000 |
| Miscellaneous | 8,000 | 4,500 | 3,500 |
|  | \$345,000 | \$ 265,000 | \$ 80,000 |
| Depreciation | 15,000 | 10,000 | 5,000 |
|  | \$360,000 | \$ 275,000 | \$ 85,000 |
| Operating income | 40,000 | 225,000 | 185,000 |
| Other income (expense) |  |  |  |
| Interest expense | $(10,000)$ | $(5,000)$ | $(5,000)$ |
| Income before income taxes | \$ 30,000 | \$ 220,000 | \$190,000 |
| Income taxes | 6,000 | 6,000 | - |
| Net income | \$ 24,000 | \$ 214,000 | \$190,000 |

## Appendix B

## Personal Items by Category

AmountExpense(\$)
Salaries-Store manager ..... 6,000
Net benefit (approximately $\$ 4,000$ after taxes), returned to owner fortrips and entertainment provided, disguised as business in natureSalaries-Others30,000Amounts paid minor children (often can be justified as legitimately
business related), and returned to owner
Auto expense
Repairs, etc. ..... 7,500
Insurance ..... 3,000
Depreciation ..... 5,000
Portion of vehicle expense that was personal, determined by analyzinginvoices, including related repairs, and reviewing depreciationschedules, which included multiple vehicles
Legal and accounting ..... 6,000
Legal fees related to divorce, because actual business expense wasinsignificant
Rent ..... 6,000Examined leases and found additional payments were made to ownerof resort condominium located more than 150 miles from principalresidence
Telephone ..... 2,000
Utilities ..... 1,000Determined by examining utility and telephone bills, which revealedthat many of the utility payments were for resort condominium notedunder rent, and numerous long-distance telephone charges
Office supplies and postage ..... 3,000
Repairs and maintenance ..... 1,000
Store supplies ..... 2,000
Examined invoices over $\$ 500$ and found many to be for householdrepairs performed on principal residence as well as cleaning supplieswhich, when Robert was questioned, were deemed personal
Travel and entertainment ..... 9,000
Personal trips, including those involving store manager, as well aspersonal entertainment involving family members
Miscellaneous ..... 3,500
Examined invoices over $\$ 500$ and found many to be personal Interest expense ..... 5,000
Analyzed interest expense and found numerous payments made on atimeshare owned personally by Robert

# Case Study T-Stunt Pilot 

Nicholas L. Bourdeau, CPA/ABV

Nicholas L. Bourdeau, CPA/ABV
Great Falls, Montana

It was early Saturday morning after a long week. I sat in my office pondering whether to make a fresh pot of coffee or nuke the rest of last night's. The phone woke me out of my deliberations.
"Nick Bourdeau."
"What are you doing there?"
It was a fair question. I'd thought about it a lot. I'd started about ten years ago when I saw a market for forensic accounting. There was a need for somebody who could take a client's financial position and represent it in court. I knew there was a market because I'd tried to find someone to represent the fact that I wasn't the millionaire my soon-to-be ex-wife thought I was. I didn't find that someone, and ended up writing the biggest check of my life in my attorney's office.

It started fast, so I sold the rest of my practice, eventually took on a partner, and harvested while the crops grew. The partner lasted through two interviews with weeping wives and exactly one court appearance, where he was shredded on the stand. I tried to tell him that getting chewed up was part of the job and that you eventually got used to it, sort of. He let his certificate lapse and enrolled in nursing school. I tried to hire employees, but the lawyers wanted me on the stand and able to testify to every aspect of my investigation. So, here I was, sitting alone in my office on Saturday morning wondering how long the crops would grow this time and how I could do the work of three people to take advantage of the season.

But I didn't burden the caller with all that. "What can I do for you?"
"It's just that I expected to get your machine."
"Look, I can hang up and give you another shot at it."
"No, no," he replied quickly, "I need you. I've got this really strange business that I don't know how to handle."

That was my introduction to the Terminator.
Bob Goldstein had inherited a dry land wheat farm outside of Burnside from his father some ten years earlier. He'd hated farming when he was a kid and expressed his discontent by causing all kinds of trouble. Finally, a judge from the old school gave him a choice of enlisting or spending some quality time with Burnside's finest. Bob took the Air Force.

After his hitch was up, the community was a little surprised when he showed up at his old homestead ready to go to work. They were even more surprised when he found his old high-school sweetheart in Los Angeles, threw a wedding, and invited the whole town.

The community forgave, and for a few years Bob fit in pretty well. Then Bob hocked the farm and bought a crop dusting plane. The Air Force had taught him to fly and, while he was really ambivalent about farming, he had a true passion for flying. During the summer, when he wasn't flying, he was knocking on doors to get jobs so that he could fly. To the community Bob was family, but kind of like the demented cousin.

Then word got out that something strange was going on out at the Goldstein place. Everybody lives in everybody else's back pocket in a small town, and Burnside was no exception. People aren't shy about finding out what's going on. Gossip is considered crucial for existence. Therefore, the lady's auxiliary drafted Betty Goldstein into hosting the every other Monday in the wintertime meeting at the Goldstein spread. During lunch, the ladies really turned up the heat. They wanted to know what was happening at the place and wanted answers right now. Betty relented and the troop bundled up and trudged out to the far Quonset hut. There they found Bob up to his ears in a plane's airframe.

It took him two winters, but Bob finished the plane, and promptly sold it. On to bigger and better things. Bob found an antique set of aircraft plans and began his eccentricity in earnest.

I saw the plans. It looked like they had been done on a series of cocktail napkins in the place where you usually get cocktail napkins. I showed the plans to a pilot friend and the first thing he said was, "Nobody built this, did they? The center of gravity has to be way off."

I'm not an engineer, and I don't know anything about centers of gravity, but I did know something my pilot didn't know. The plane was flying and making a small fortune doing it. It looked a little like a pelican with the pilot in the head and the pushing engine in the rear. The pilot was right about the center of gravity. The plane was unstable and had a tendency to nose over. The public knew it and loved it. Bob hadn't named the plane the Terminator-adoring fans had. The BK-47, as it was officially christened, was an accident in progress.

Bob built the BK-47 in his Quonset hut over a period of two and a half years. A lot of the work he did himself, but if he ran into trouble, he would fly experts in to get him back on track. The bigger component pieces, such as the engine and landing gear, were purchased off the shelf, but everything else was custom made. Had to be-no manufacturers in their right mind would participate in a creation like the BK-47.

Bob hit his midlife crisis at about age 47 and decided that a Vet, a hair transplant, an eyelid reduction, and a new wife were in order. I came into the picture when his high-school sweetheart took exception to her husband's hormone imbalance. I started my interviews with her.

Betty was about five foot zero with long brown hair and delicate features. She must have made quite a picture next to the storkish, six-foot-four Bob Goldstein. I asked the usual.
"So, where is the money coming from?"
"They pay us to show up at the air show," she replied. "It depends on the show. Sometimes it's a flat fee, sometimes its a cut of the gate. Anywhere from $\$ 1,000$ to $\$ 5,000$."
"That's not a lot of money."
"Nobody makes a lot of money on the gate. It might cover our expenses to get to the show. If it's overseas, it definitely won't. The money comes from the sale of the merchandise associated with the plane: tee-shirts, coffee mugs, videotapes, pencils, models, baseball caps-you name it."
"Let me guess," I said. "It's all cash."
"Not all." She smiled. "But one year in Miami, there was $\$ 32,000$ spread all over the motel bed."

Terrific. To determine a business value, propose alimony, or compute child support, you have to have economic income tied down. Economic income is the sum total of all the benefits that an enterprise provides to its owners. It isn't just taxable income. It would be if anybody told the truth, but after reviewing maybe thousands of tax returns, I've found that the consideration that someone may have filed a tax return that would reflect all the income and report just business expenses doesn't take up much of my time.

So, a given: The business had a bunch of income that wasn't being reported. I didn't have to guess about the relationship of the expenses on the tax return to the running of the business. All the expenses of the business would be reported, as well as anything else that was handy.

It was time to start getting paint for the picture. Attorneys who know me understand that if I'm not lied to or jerked around, I'll be straight with everybody. All parties will get the information they need to do their jobs. They also know that if they play games with me, they take their chances. I knew the two attorneys involved and didn't expect any trouble when I asked to review the records of the business and interview the bookkeeper, Cathy.

Cathy is about twenty-five, plump, with short curly brown hair. She had maybe five bookkeeping clients. There was a picture of herself with two curly-headed kids on her desk. No wedding ring and no picture of Dad in sight. It added up to a single mom, supporting herself and the kids, who really couldn't afford to lose a client.

I understand some guys get a twinge of conscience. I don't know what a twinge feels like. With me, it's more like a nun creeping up behind me. It happened to me a lot when I was a kid.

The nun was behind me. Cathy and I would spend a lot of time comparing expenses claimed with invoices and she'd spend a lot of time saying, "No, I really don't know what that was for, I'll have to ask Bob." And, "No, I really don't know what a hot tub has to do with running a flying business, but I'm sure that Bob had a good reason for claiming it as
an expense." I'd make an adjustment, and have her deposed. The attorney would make mincemeat out of her. Ol' Bob would figure she'd done a lousy job of lying for him and can her. One of the reasons I can tolerate this job is that every once in a while I can keep the good people out of harm's way.

The expenses I was concerned about are recorded like this: The business owner decides what expenditure is a business expense and tells the bookkeeper to record it. Let's say the owner travels to Alaska to shoot bear. He tells the bookkeeper to record the travel to Alaska as educational travel. The cost for the guide is the course fee, and the cost for stuffing the bear is a supplies expense. The bookkeeper does what she's told. At the end of the year she turns the totals of the expenses, not the details, over to the CPA who dutifully records them, as summarized, onto the tax return.

Most bookkeepers just do as they're told, because they know if they don't, the new bookkeeper will. CPAs are under no obligation to review for personal expenses on the books of the owner, and they avoid doing so with somewhat of a vengeance. The reason is obvious: If the CPA starts playing IRS auditor, he'll be out a client.

Once in a while, you get a fifty-year-old bookkeeper who really runs the business, knows he is invaluable to the owner, and records the expenses so he can sleep at night. Cathy wasn't fifty and didn't run the business. She wasn't dealing from a position of strength. She was doing as she was told.

I told her to give me the check registers, canceled checks, working trial balance, and all the invoices supporting the checks written for the last fiscal year. Then I sighed and settled in for a long day of ticking and tracing. Sometimes attorneys don't understand that not all of this work is glamour and excitement. Some of it is long hours just trying to get enough information to understand what is going on.

The only question I ever asked Cathy was whether she knew the nature of a particular vendor. I didn't ask her why she had recorded the new washer and dryer in supplies expense or why the cost of cutting Bob and Betty's lawn was in contract labor. I went through the entire check register flagging the expenditures as "Okay," "Out," or "?". Later, I would summarize the register and give the opposition a chance to explain the items question marked or contest the items I'd booted out. This kept Cathy out of the fray and put me in the line of fire. Cathy didn't get paid enough to take that kind of heat. Then again, sometimes I don't either.

Meanwhile, my office manager Vickie called. She had finally received a call back from Betty, who indicated that she and Bob usually marked up the stuff they sold on the road from three to five times its cost. She didn't remember which stuff was marked up how much, but could probably figure it out if she was given some of the documents to help her remember.

Vickie said, "I thought the tax return analysis you did indicated that they were selling the stuff at about one and a half times cost." She was right.

The cost of goods sold was about two-thirds of the sales of the merchandise on the tax return. This meant that they were probably reporting just enough sales to cover the cost of merchandise and expenses (business and personal). This would show a small, consistent, net profit,
enough to keep the IRS from calling the operation a hobby, but not enough to cause a serious tax consequence. Except Bob was greedy.

I knew that all the company purchases would be reported and included in the cost-of-goods-sold analysis. Not reporting valid costs of business is just dumb, and the character I was dealing with wasn't. The leak was in the reporting of sales. I had seen various merchandise vendors as I was wheeling through the check register and had been automatically allowing the cost. Now I backtracked and started pulling invoices. Invoices supporting a slurry of payments to vendors were missing. I asked Cathy about it. She turned a little whitish-green, a little like a nervous groom, and went into another room. She came back with two cardboard boxes and put them on the table.
"They aren't very well organized. Am I in trouble?"
Well, no, but I probably was. I sifted through the two boxes and found invoices that covered about two and a half years. I didn't have permission to remove anything from the premises except photocopies, and there were hundreds of documents in the two boxes. I called in the artillery.

I explained the situation to Betty's attorney, Todd Stanford, and indicated that nobody would want to pay the bill for the photocopies. It would be cheaper for all parties if I were given permission to remove the boxes for analysis. He agreed and made a phone call to Mary Murphy, Bob's attorney. I went back to throwing out personal expenses. A couple of hours later, he called back with permission from Murphy to go ahead and take the invoices. The reason I got permission was Murphy had employed me on another case and she knew that I didn't play games. She told Stanford that I was arrogant, obstinate, and maybe petty, but not underhanded. I love the people I work with.

I finished with the check register and headed back to the office. When I came in, Vickie's eyes settled on the boxes and she said, "This isn't good." Vickie isn't fifty, but she deals from a position of strength, and we both knew that the boxes were going to cost me. I set up an Excel spreadsheet with the date of the invoice, vendor, description, quantity, cost, and sales price. It was Vickie's job to enter all the data so the program could be used to extend, sort, and analyze the invoices.

After Vickie finished entering the data into the spreadsheet, I sorted out the expenditures by the date of invoice and graphed them. The purchase of merchandise was, for the most part, seasonal. The couple would buy a ton of stuff starting after the first of the year for the summer flying season. They brought back what they didn't sell. The leftover inventory would supply the mail-order end of the business. I isolated what I thought would be a fair representation of an operating cycle and called Betty.

Betty brought with her a file folder full of promotional material, and we went to work applying sales prices to invoice items. It was immediately apparent that we didn't have all the original invoices. The owner had let a couple, or more, months go by before paying a vendor. When the bookkeeper was instructed to pay a vendor, the source document was often just a follow-up billing from the vendor without the original invoice.

Evidence in these types of investigations is rarely perfect. Perfect is better, but the goal is to obtain convincing evidence. I am seeking what
the court will understand, weighed against the cost of obtaining that evidence. Therefore, even though perfect evidence could be obtained in the form of copies of all original invoices from all the vendors, it wouldn't have been cost-effective. I decided to go with what we had and produce what I hoped would be a valid sample.

Tracking the invoices to the retail price was a real pain, but after a day, we had the pivotal figure. We had the average markup on merchandise. I expressed the figure as a multiple of cost, to keep it simple for the judge.

To properly determine cost of goods sold for a retail operation, it is necessary to have beginning inventory and ending inventory. Because we were after the fact in that we were using a past fiscal year to determine economic income, both figures would be estimates. Simpler is better. Betty indicated that the inventory in December was at its lowest and usually was about the same each year. The tax return showed a consistent beginning and ending inventory for the last three years-not correct, but typical. Numerous small businesses just pick an inventory figure and keep it year after year. Waste was considered, but Betty indicated that it was nominal and no estimate was made.

Therefore, the formula for cost of goods sold became:
Purchases $=$ Cost of goods sold
Simple, to the point, and guaranteed to make most accountants cringe. However, it is crucial to remember the audience. Forensic experts know that you must tailor your presentation to the court. The court will gravitate toward the presentation that it understands. It will become irritated with presentations that it does not. Therefore, it doesn't matter if my concept is perfectly accurate, if the judge is glaring at me over his glasses.

My review of the check register and disbursements journal indicated that the amount recorded for purchases of merchandise was correct. The purchases of $\$ 29,251$ were multiplied by the markup multiple, to estimate total retail sales of $\$ 95,576$.

From the deposit records of the business, and with Betty's help, I isolated the income from gate receipts. The total was $\$ 44,000$. This amount was subtracted from total income reported by the business, $\$ 90,273$. Because the business had only two sources of income, the difference, $\$ 46,273$, was the amount of merchandise sales reported. The difference between the $\$ 95,576$ and the $\$ 46,273$, or $\$ 49,303$, was the amount of unreported income. (See appendix A.)

The formal discovery process had provided photocopies of the couple's personal bank statements, canceled checks, and deposit slips. I reviewed them for cash deposits. Not many.

I returned the boxes of invoices and continued my review of the records. I started with the deposit slips of the business. There were cash deposits, but not enough to come close to what was missing.

I asked Betty where the money had gone. She said that Bob had told her that he had deposited the money and that it was all used to cover expenses. I told her what I'd found and asked about investment accounts with Piper Jaffrey or Edward D. Jones. I also asked about gambling,
drugs, girlfriends, or large purchases for cash. I even questioned how they paid for their groceries. No joy.

If you have a cash business that the bank and the IRS understand is a cash business, depositing large amounts of cash usually isn't too tough. All Bob had to do was make the deposits, make the disclosures, and keep on rolling. But Bob had the idea that if no one really knew it was a cash business, why should he educate them?

What Bob didn't think about was paying for his new Vet in twentydollar bills. To a legit car dealer, this might cause a problem. Our authorities wanted it to be a problem to slow down the conversion of dope to bank account balances. It also has a tendency to tangle up cash business owners who don't want to report all their income, like Bob.

I spent an hour in Betty's attorney's office going through the responses to discovery. Most states have some kind of asset-disclosure process, and I was looking for a hole for the cash. The personal assets of the couple looked in line for the reported income. The financial asset records didn't show any cash transactions. Nothing.

Before you blow a few grand of your client's money, you'd better be sure. I talked to Betty's attorney and ran the situation for him. Betty and Bob had been having marital problems for a couple of years. The marital problems coincided with the success of the air show business. The business hadn't reported nearly enough income in the last two years and it hadn't shown up in personal assets or in life style changes. Bob wouldn't have kept the money in his house, because Betty would have found it. He didn't have a girlfriend, so no cache there. That left a Mason jar in the back yard or a safety deposit box.

The attorney agreed and arranged for subpoenas for five of the area banks. We got a hit on one of the smaller banks. The box was opened in front of the bank president and the two attorneys. The bills had been thrown into a brown paper grocery stack. The president had a teller count the $\$ 32,985$ in bills, returned them to the box, and had it sealed pending court order.

Betty's attorney, Stanford, had a quiet talk with Bob's attorney, Murphy. Stanford told Murphy that if Bob didn't come clean, he was going to subpoena every bank in the area. Then he said that he would ask that the court award Betty anything found under the argument that it was Bob's intent to deprive Betty of her fair share of the marital estate.

Murphy had a quiet talk with Bob. The total finally disclosed was \$79,500.

I had submitted an analysis of the expenditures of TopGun Airshows, Bob's company that ran the Terminator, to Murphy and her expert. I explained in the submission that a flag of "Okay" meant that I considered the expense directly associated with the generation of the income of TopGun Airshows and would be allowed. I also explained that "Out" meant that the cost was not related to the generation of income and was denied. Finally, I told them that certain expenditures could not be identified without further investigation. They could support them as being valid business expenses or, if they chose not to, I would deny them.

Murphy and her expert did not respond. If I had denied a bunch of valid business expenses, they would have been all over me. Therefore, the lack of response meant one of two things. Either I had done an excellent
job of sorting the expenses between business and personal or I had missed a slurry of personal expenses and they weren't going to tell me about it. I decided I had done an excellent job.

I made the adjustments and submitted my pretrial report. Bob's greed had come to light in his claim of material losses associated with the operation of TopGun Airshows. The combination of the unreported income and the personal expenses claimed by Bob on the tax return changed the income reported by TopGun Airshows from negative $\$ 37,719$ to $\$ 71,837$ an increase of $\$ 109,556$. Similar, but not as dramatic, adjustments were made on the farm and crop-dusting businesses Bob operated. The pretrial report was enough.

Bob and Murphy had a long talk about Bob's credibility in light of his unreported income, claim of personal expenses, and the specter of his safety deposit boxes. A settlement was reached out of court.

## Appendix A

## Bob Goldstein dba TopGun Airshows

| Vendor | Description | Quantity | Cost <br> (\$) | Sales Price (\$) | Markup |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Top Craft | Books | 25 | 250.00 | 648.75 | 2.60 |
| CMGS | Video tapes | 200 | 1,500.00 | 3,990.00 | 2.66 |
| Tandy Industries | Wooden models | 12 | 90.00 | 227.40 | 2.53 |
| Williams Inc | Models | 24 | 235.43 | 576.00 | 2.45 |
|  | Gold pins | 300 | 675.00 | 2,400.00 | 3.56 |
|  | Pewter pins | 50 | 112.50 | 300.00 | 2.67 |
|  | Buckles | 25 | 250.00 | 648.75 | 2.60 |
|  | Visors | 250 | 437.50 | 2,000.00 | 4.57 |
| Terri's Toy \& Hobby | Puzzles | 12 | 59.88 | 155.76 | 2.60 |
|  | Puzzles | 12 | 83.88 | 239.76 | 2.86 |
|  | Puzzles | 12 | 119.88 | 359.76 | 3.00 |
| Jersey Imprints | Mugs | 144 | 288.00 | 1,440.00 | 5.00 |
|  | Embossed golf shirts | 12 | 264.00 | 540.00 | 2.05 |
|  | Tee-shirts | 120 | 600.00 | 1,914.00 | 3.19 |
|  | Tank tops | 120 | 480.00 | 1,794.00 | 3.74 |
|  | Sweatshirts | 60 | 720.00 | 1,797.00 | 2.50 |
|  | Embossed sweatshirts | 12 | 360.00 | 780.00 | 2.17 |
|  | Steins | 100 | 350.00 | 1,200.00 | 3.43 |
|  | Hats | 96 | 720.00 | 1,728.00 | 2.40 |
|  | Canvas totes | 25 | 175.00 | 373.75 | 2.14 |
| AK Printers | Postcards | 3,000 | 1,350.00 | 6,000.00 | 4.44 |
|  | Posters | 3,600 | 9,000.00 | 71,820.00 | 7.98 |
|  | Color lithographs | 30 | 450.00 | 1,050.00 | 2.33 |
| Northern Lights | Video tapes | 450 | 2,227.50 | 13,477.50 | 6.05 |
|  | B\&W lithographs | 50 | 250.00 | 750.00 | 3.00 |
| Western | Clocks | 5 | 75.00 | 174.75 | 2.33 |
| Aviation | Thermometer | 5 | 62.50 | 174.75 | 2.80 |
|  | Proc signs | 20 | 126.00 | 599.00 | 4.75 |
|  | $8 \times 10$ photo packs | 15 | 225.00 | 599.25 | 2.66 |
|  | 5x7 photo packs | 25 | 250.00 | 748.75 | 3.00 |
| Total |  |  | 21,787.07 | 118,506.93 | 3.27 |
| Cost of goods sold (per tax return) |  |  |  |  | 29,251 |
| Estimated income from merchandise |  |  |  |  | \$95,576 |
| Total income reported (per tax return) |  |  |  | \$90,273 |  |
| Gate income (from deposit slips) |  |  |  | \$44,000 |  |
| Reported merchandise sales |  |  |  |  | 46,273 |
| Unreported income |  |  |  |  | \$49,303 |

# Case Study U-Skating Rink 

Donald H. Minyard, Ph.D., CPA/ABV, CFE<br>Minyard \& Associates, PC<br>Birmingham, Alabama

The Regal Roller Rink, Inc., opened in 1984 on Gallatin Pike in Nashville, Tennessee. When it opened, it had three shareholders (Mike Clark, Scott Houston, and Bill Freeman), each of whom owned one-third of the corporation's stock. In 1987, just after his retirement from the U.S. Postal Service, Bill Freeman died in a tragic automobile accident. At that time, his shares of stock were left to his widow, Kay. She believed she could rely on income from the skating rink to provide for her during retirement.

When Regal Roller Rink first opened, the business was quite profitable. From the time of its 1984 opening until the end of 1986, the rink was managed by Bill and Kay's son Rick. Rick left employment at the roller rink when Mike Clark and Scott Houston began to question his management skills. From 1987 until the present time, the rink has been managed by Mike Clark.

Beginning in 1987, the profitability of Regal Roller Rink decreased substantially. At first, Kay attributed the decline in profitability to the "new wearing off." Kids tend to go to the hot spots, and maybe the rink was no longer the place for the "in-crowd" to go. Over the years, the rink increased its advertising and its promotional activity, hosting birthday parties, school fund-raisers, and church groups. To appeal to Nashville's country music and line dancing fans, "line skating" was introduced.

Regardless of promotions and advertising, Mike told Kay that the rink was not making money. In 1989, Mike bought the stock owned by Scott. Regal Roller Rink has not paid dividends since that time. The lack of dividend payments was very frustrating to Kay. Again, she was relying on income from the roller rink to meet many of her retirement needs. Kay even asked Mike to consider selling the rink and liquidating the
corporation. Because the area surrounding the rink had experienced tremendous growth, the proceeds from selling the rink might be worth more than the funds the rink would ever generate from operations. Even though the land and rink cost only $\$ 200,000$, as early as 1992 , a realtor friend of Kay's advised her that the property was worth at least half a million dollars. Mike refused to seriously consider selling the property, always telling Kay that profitability should return soon.

Kay and Rick could not understand why the Regal Roller Rink was unprofitable, given its excellent location. Every time they drove by the rink during its operating hours, the parking lot was crowded with cars and parents waiting to pick up their children.

One day in the supermarket, a former long-time roller rink employee (who had been dismissed without cause) confided in Kay that he believed that Mike was skimming funds. Too often he had observed skaters paying the admission fee to Mike. The front cash register drawer was left open (this register had the capability to record admissions with meters indicating the number of admissions at various prices; it was also used to record sales of skates and novelty items), and the skaters were also admitted without their admission being rung on the register. Kay had a very limited understanding of business, but what she heard angered her. She knew that when Mike took money from the business, he was also taking it from her.

Kay went to see her attorney to ask his advice about what to do. The attorney advised her to engage private investigators to determine whether the allegations made by the former rink employee were true. An out-oftown investigation firm was employed to perform surveillance activity. The investigators visited the rink five times over a period of three weeks in September 1994, using hidden cameras and microphones to record their surveillance. The investigation would have continued a little longer, but the investigator present the fifth and final visit believed that Mike was becoming suspicious of her presence.

When the investigators made their report to Kay's attorney, they indicated the number of skaters who attended each skating session and stated their observations that not all admissions were being recorded in the cash register; they believed about one-third were not. They also observed that many food sales were unrecorded; food sales should have been recorded using the "back" cash register. The attorney believed that the investigators were on to something but knew that he needed to get a better grip on how much money was being diverted. A shareholder derivative lawsuit was filed in 1994, alleging diversion of funds. We were engaged to determine the amount of the loss.

Kay provided us with copies of the income tax returns for Regal Roller Rink for all years since its inception. The income tax returns indicated a pattern of continuing losses since 1988. The losses became worse each year. Appendix A contains income and expense information from the income tax returns for 1991 through 1993. The income tax returns, of course, did not contain information about any unreported income. We believed, however, they would provide us with a reasonable record of expenses.

Kay's attorney subpoenaed the corporation's records but agreed with the defense counsel's proposal to accept only three months of documents
for use in our preliminary investigation. We selected the months of August, September, and October 1994 for review. For each month, we received a summary of cash receipts broken down by type (admissions and skate rentals, skate and novelty sales, coin-operated games, and concession sales), and details about payees for cash expenditures. The summary was derived from daily income and expense reports listing the number of regular and discounted admissions (including birthday parties and school fund-raisers), and concession, skate, and novelty sales.

The games in the roller rink were owned by an outside company, Games, Ltd. At the end of each month a Games, Ltd. employee (in this case, a different employee each month) unlocked the games and split the contents fifty-fifty with Regal Roller Rink. Regal's share of the proceeds was documented by the Games, Ltd. employee. Regal immediately deposited these proceeds. Meters inside each of the games indicated how many times the game was played each month. Our comfort level concerning games income and cash handling was fairly high.

However, when we compared the daily reports with the monthly report, we found some discrepancies, especially in income. For example, the meter readings listed in the reports for skater admissions were often out of sequence. Also, there was never any cash overage or shortage reported. These discrepancies led us to believe that Mike was preparing daily reports to match the amount deposited, rather than the amount of revenues. There were also undocumented expenses, especially for pizza purchases. The snack bar purchased pizzas delivered by Pizza King, paying for them by removing cash from the front cash register (the private investigators observed this). Pizza purchase amounts were written down on the daily income and expense report. We questioned whether some of the pizza purchases written down on the daily reports actually occurred. Sometimes several pizza purchases were listed on days when skating admissions were quite low.

We decided to compare the information we obtained from the daily and monthly income and expense reports with industry statistics. We called the Roller Skating Rink Operators Association and obtained these statistics by purchasing a booklet designed to help individuals make decisions on whether to open a skating rink. Industry statistics indicated that the typical profitable skating rink obtained 40 percent of its revenues from admissions and skate rentals, 30 percent from concession sales, 10 percent from skate and novelty sales, and 20 percent from games. These statistics presumed that the skating rink owned its own games. Because Regal Roller Rink operated games owned by an outside operator and split revenues evenly with that operator, we adjusted these percentages to 45 percent from admissions and skate rentals, 34 percent from concession sales, 11 percent from skate and novelty sales, and 10 percent from games.

We compared these percentages with those actually recorded by Regal Roller Rink during the three months we examined. Regal reported 38 percent of its revenues as coming from admissions and skate rentals, 20 percent from concession sales, 22 percent from skate and novelty sales, and 20 percent from games. These percentages were derived from daily and monthly income and expense reports.

One area that complicated our analysis was birthday parties. For a fixed price per invitee, children were admitted and provided with skates, food, and drink. Birthday parties were prepaid, and so admissions were not rung up at the register when the children arrived. Daily reports indicated birthday party sales and numbers of skaters. We allocated birthday party revenues between admissions and skate rental revenues and concessions revenues by including the normal price of a child's admission and skate rental as part of that revenue, and the rest as concessions revenues.

As we suspected, based on information provided to us by the private investigators, both admissions and concession revenue percentages were below industry averages. The skate and novelty sales and games revenue percentages were higher than industry averages, and would be expected to be higher to the extent admissions and concessions revenues went unreported.

The daily income and expense reports also summarized daily payments by vendor. We compared expense percentages with industry statistics (also from the Roller Skating Rink Operators Association) using numbers derived from the daily reports. These statistics indicated that food and paper cost should approximate 32 percent of concessions revenues; Regal Roller Rink's was 69 percent during the three months examined (almost half of its food and paper cost were undocumented pizza purchases). Cost of goods sold for skate and novelty sales should approximate 60 percent of revenues; we found this to be true for Regal.

There appeared to be close control over games revenue, the cost of goods sold for skate and novelty sales equaled industry averages, and the private investigator report showed the potential for unrecorded admissions and concessions revenues, so we decided to focus our investigation on admissions and concessions. Although the private investigators indicated that about one-third of admissions went unrecorded (as borne out by our review of daily reports for the days the investigators were at Regal Roller Rink), we estimated that approximately 40 percent of the unrecorded admissions were due to birthday parties. We therefore believed that about one-fifth ( 60 percent of one-third) of admissions went unrecorded.

To tentatively recompute income, we increased admissions and skate rental revenue by 25 percent (to obtain one-fifth of the adjusted admissions level) and adjusted concessions sales to a level consistent with the cost of goods sold by dividing the reported food and paper cost by the 32 percent industry average cost. Appendix B illustrates this adjustment process.

The percentages obtained from this analysis are much closer to industry averages. The concessions revenues seemed high when compared with the admissions and skate rentals. We attributed this to pizza purchases. To the extent that phantom pizza purchases increased food cost, our adjustment would result in overstated concessions revenues. We reported our findings to Kay's attorney. He suggested we expand our analysis to an additional three months before and after the period we examined. We found results similar to our earlier conclusions. When we adjusted admissions and skate rental revenues up by 25 percent and divided recorded food and paper cost by 32 percent to obtain adjusted
concessions revenues, Regal Roller Rink revenue percentages more closely approximated industry averages.

In our analysis, as illustrated in appendix B, the adjustments to skate admissions and rentals and to concessions revenues resulted in an approximate 33 percent increase to Regal Roller Rink's total revenues (this may be a conservative figure, given the relationship of admissions and concessions revenues to games and skate and novelty sales revenue). Appendix C shows that with such an adjustment, Regal Roller Rink would have been profitable during the years 1991 through 1993. In appendix C, revenues are adjusted to reflect a 33 percent increase, expenses are left unchanged, and income is recomputed. The last line in appendix C shows the change (approximately $\$ 80,000$ a year) from the losses previously reported.

Kay's attorney reported our findings to the defense attorneys. Before scheduling our deposition, we asked that the telephone records for Pizza King be subpoenaed so we could assess the relationship between recorded pizza purchases and pizza orders originating from Regal Roller Rink. Our earlier review indicated that pizzas tended to be ordered one at a time (this seems reasonable, because Pizza King is located less than one-tenth of a mile from Regal Roller Rink). The telephone records were never produced for us, and the case settled before our deposition could be taken.

As things turned out, the Regal Roller Rink was soon sold for $\$ 750,000$. Kay Freeman agreed to settle the case for the $\$ 750,000$ (her $\$ 250,000$ "share" of the sale proceeds plus $\$ 500,000$ ) plus an amount equal to her legal fees. Her attorney had asked us to estimate the unrecorded revenues over the years (which would be entirely profit), and we had indicated to him that we believed them to likely to be at least $\$ 300,000$ and possibly as much as $\$ 1,000,000$. It depended on how long funds had been skimmed. Kay's "share" would be one-third of those amounts. The favorable settlement may have kept the tax authorities from reading the transcript of our deposition. At last report, Mike was living the good life, retired in Las Vegas.

## Appendix A

Regal Roller Rink, Inc.
Income Tax Return Information 1991-1993

|  | 1991 |  |  | 1992 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Revenues | $\$ 260,000$ |  | $\$ 240,000$ |  | $\$ 220,000$ |
| Cost of goods sold |  | $(70,200)$ | $(65,280)$ | $(59,620)$ |  |
| Expenses |  | $(210,000)$ | $(210,000)$ | $(210,000)$ |  |
| Taxable income (loss) |  |  | $(20,200)$ | $\$(35,280)$ | $\$(49,620)$ |

## Appendix B

Regal Roller Rink, Inc.
Adjustments to Revenues August-October 1994

| Type of Revenue | Recorded Amount | Total Revenues (\%) | Adjustment | Adjusted Amount | Total Revenues $\qquad$ (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Admissions | \$20,000 | 40.0 | +25\% | \$25,000 | 37.6 |
| Concession | 10,000 | 20.0 | 6,900/.32 | 21,563 | 32.4 |
| Skate sales | 11,000 | 22.0 | None | 11,000 | 16.5 |
| Games | 9,000 | 18.0 | None | 9,000 | 13.5 |
| Total | \$50,000 | 100.0 |  | \$66,563 | 100.0 |

## Appendix C

## Regal Roller Rink, Inc. Adjusted Income Information 1991-1993

|  | 991 | 1992 | 1993 |
| :---: | :---: | :---: | :---: |
| Revenues (adjusted to reflect |  |  |  |
| 33\% increase) | \$ 345,800 | \$ 319,200 | \$ 292,600 |
| Cost of goods sold | $(70,200)$ | $(65,280)$ | $(59,620)$ |
| Expenses | $(210,000)$ | $(210,000)$ | $(210,000)$ |
| Taxable income | \$ 65,600 | \$ 43,920 | \$ 22,980 |
| Change in income | +\$85,800 | +\$ 79,200 | +\$ 72,600 |

## BIOGRAPHIES

## Editor and Contributing Author

Kalman A. Barson, CPA, CVA, CFE, ABV

Rosenberg Rich Baker Berman \& Company
Bridgewater, New Jersey
Kal Barson has been with Rosenberg Rich Baker Berman \& Company for more than twenty-five years and is currently managing partner of the firm and in charge of the firm's Litigation Services Group. He holds a BS in accounting from Brooklyn College and carries the CPA designation in both New York and New Jersey. Other professional designations include certified fraud examiner, certified valuation analyst, and accredited in business valuation. Barson is a member, and in several cases former chairman, of New Jersey Society of CPAs committees and subcommittees relating to the litigation field, including matrimonial services, litigation services, and judicial liaison. In addition, Barson is president of the National Associated CPA Firms.

An expert in the field of investigative accounting, with an emphasis on divorce work, Barson has been appointed numerous times by the courts in New Jersey, as well as having been jointly stipulated to by litigating parties on many occasions. His hands-on case experience includes investigating the financial operations of a wide variety of businesses. These services have been rendered in matrimonial actions, funds flow tracing, fraud and embezzlement assignments, damages claims, bankruptcy and workout proceedings, insurance losses, and minority stockholder suits and partnership dissolutions; services also include consulting assignments regarding financial and tax aspects of settlement options.

Barson is a prolific writer, having written several books and numerous articles, as well as being primarily responsible for the firm's highly respected litigation services newsletter - Suits on Suits (SOS). Besides
editing this book, Barson has written three others, dealing with investigative accounting and related areas such as business valuation and divorce taxation. In addition, Barson has written or co-authored several chapters in books of others, and for a change of pace, a chapter on Financial Planning for Newlyweds, published in A Plaza Wedding, a book of weddings held at the world renowned Plaza Hotel of New York City. Barson's second book, Investigative Accounting in Matrimonial Proceedings, was featured in the November 14, 1993 business section of the Sunday New York Times.

A frequent public speaker, Barson has spoken on behalf of the New Jersey Institute for Continuing Legal Education, the American Institute of CPAs National Conference on Divorce, New Jersey Judicial College, American Academy of Matrimonial Lawyers (New Jersey chapter), New Jersey Society of CPAs, Institute of Business Appraisers, and numerous other professional, Bar, CPA and business groups and associations.

## Contributing Authors

## William Ackerman, CPA

Putnam, Hayes \& Bartlett, Inc. Los Angeles, California

William Ackerman is a senior associate at Putnam, Hayes \& Bartlett, Inc. He is a CPA licensed in the state of California. Putnam, Hayes \& Bartlett provides, among its many other services, economic consulting services in the areas of litigation and dispute resolution. Ackerman has specialized in this area for the last eight years. Before joining Putnam, Hayes and Bartlett, Inc., Ackerman spent five years at KPMG Peat Marwick, auditing small and middle-market companies.

Ackerman has spent significant portions of his consulting career analyzing the operations of gasoline retailers. This experience was obtained for the most part while assisting the major oil companies defend against antitrust and other anticompetitive cases brought by large plaintiff dealer groups. Ackerman resides in Southern California.

## Ron J. Anfuso, CPA/ABV

Ron J. Anfuso, CPA/ABV
Lomita, California
Ron J. Anfuso is a forensic accountant and expert witness. He has extensive experience in analyzing the financial, accounting, and tax aspects of marital dissolution matters, including business valuations, Pereira apportionment of business interests, Van Camp analyses, determination of gross cash flow available for support, marital standard of living analyses, and tracing engagements for the purposes of determining postseparation reimbursements, family code section 2640 reimbursements, and characterization of property as community or separate. In addition, he has performed services regarding various other family law issues, including allocation of interest in pension plans, apportionment of interests in real property (Moore/Marsden calculations),
and other special project issues. He has testified more than fifty times as an expert witness in family law and civil and commercial litigation matters. He is a certified public accountant licensed in the State of California and is accredited in business valuation by the AICPA.

## Sheri L. Betzer, CPA, CFE

Betzer \& Company, PC
Denver, Colorado
A recognized leader in forensic accounting, Sheri Betzer has been in private practice for almost ten years and was with the Internal Revenue Service (IRS) for fifteen years. She served as an IRS revenue agent, examining individual, partnership, and corporate tax returns, and as a forensic accountant, assisting in fraud investigations and acting as an IRS expert witness. As a certified instructor of IRS agents and technical adviser to them, she also reviewed agents' cases before they were forwarded for prosecution.

Betzer is the author and instructor of several courses, including "Tax Practitioners Prepare for the IRS's Financial Status Audits," "Accountant's Role in Currency Transaction Reporting," "How to Handle an IRS Civil Examination/Criminal Investigation," and "Looking for Fraud? Forensic Accounting at Its Best."

Betzer provides highly specialized financial expertise for matters involving business or personal financial fraud, cash flows, financial positions, and tax and accounting controversies.

Nicholas L. Bourdeau, CPA/ABV

Nicholas L. Bourdeau, CPA/ABV
Great Falls, Montana
Nicholas Bourdeau has been practicing in the area of forensic accounting since 1986. He has appeared in court dozens of times on issues associated with the valuation of marital estates, businesses, child support, maintenance, and pensions. He has also determined damages in the areas of wrongful termination, wrongful death, personal injury, age discrimination, and business interruption.

Bourdeau is a contract instructor for the State of Montana Child Support Enforcement Division on child-support-related issues and serves on the division's Guideline Revision Oversight Committee. He conducts regular continuing legal education seminars for attorneys and paralegals.

He has been accepted by the district courts of Montana as a mediator in the area of family law. He has recently been elected to the board of directors of the Montana Mediation Association.

Bourdeau is the author of a line of computer software that is used by attorneys and forensic CPAs.

## Donald J. DeGrazia, CPA, ABV

Gold Meltzer Plasky \& Wise, PA
Moorestown, New Jersey
Donald J. DeGrazia is a certified public accountant in New Jersey and Pennsylvania, and a shareholder in the accounting firm of Gold, Meltzer, Plasky \& Wise in Moorestown, New Jersey. He is a graduate of LaSalle University, with a BS in business administration. He is a member of the AICPA, the New Jersey Society of Certified Public Accountants (NJSCPA), the Institute of Business Appraisers, the Consulting Services Section of the AICPA, and the Matrimonial Accounting Committee of the NJSCPA.

DeGrazia has been a frequent speaker and panelist at various conferences and seminars conducted by the AICPA, the NJSCPA, the PICPA, and the New Jersey Institute for Continuing Legal Education concerning business and professional practice valuation, forensic and matrimonial accounting, and federal taxation. Conferences at which he has been a speaker include the New Jersey Judicial College, the AICPA National Conference on Divorce, the AICPA National Conference on Litigation Support Services, and the AICPA National Conference on Federal Taxation.

## Drew S. Dorweiler, CPA/ABV, CBV, ASA, CFE <br> Wise Blackman <br> Montreal, Quebec

Drew S. Dorweiler holds a BA from Dartmouth College and an MBA in corporate finance and accounting from the Lubin Graduate School of Business, Pace University. Mr. Dorweiler is senior manager of Wise, Blackman, Montreal, business valuators specializing in sports, media, and entertainment valuation, and has testified as an expert in valuation and forensic accounting. He was with Lazard Freres and Merrill Lynch, New York.

Dorweiler is eastern Canadian director of the American Society of Appraisers. He serves on the Business Valuations, International Business, and Litigation Services Committees of the Illinois CPA Society \& Foundation, is a director of the Montreal Chapter of the Association of Certified Fraud Examiners, and member of the Canadian Institute of Chartered Business Valuators, the AICPA, and Mensa. He has contributed to several publications, including Guide to Canadian Business Valuations (Carswell), Financial Litigation-Quantifying Business Damages and Values (Canadian Institute of Charted Accountants), International Accounting (Ithaca Press), International Mergers and Acquisitions (Wiley), Forbes, Financial World, CA Magazine, the Bottom Line, and the Balance Sheet.

Leonard M. Friedman, CPA, ABV, CVA<br>Rosenberg Rich Baker Berman \& Company<br>Bridgewater, New Jersey

Len Friedman is a partner in the Firm of Rosenberg Rich Baker Berman \& Company, a CPA firm with offices in Bridgewater and Maplewood, New Jersey. Friedman specializes in individual and corporate taxation, as well as business valuation and divorce investigations. He has written articles for several legal publications and has lectured on various tax topics, as well as coauthored textbook chapters on divorce taxation and the use of computers in investigative accounting. Friedman has earned both the certified valuation analyst and accredited in business valuation designations and has conducted numerous financial investigations. Friedman graduated magna cum laude from Fairleigh Dickinson University.

## Stanley M. Heller, CPA

Peare \& Heller, PC
Hauppauge, New York
Stanley M. Heller is a shareholder and officer of Peare \& Heller, PC. He is a member of the AICPA and the New York State Society of CPAs (NYSSCPA). In addition, he is a member of the Institute of Business Appraisers and a candidate in the American Society of Appraisers.

Heller has served on the board of directors of the NYSSCPA, as the president of the Suffolk Chapter of the NYSSCPA, chairman of the Cooperation with Bankers and Other Credit Grantors Committee, chairman of the Members Not in Public Practice Committee, and a member of the Tax Committee and Accounting and Audit Committee. In addition, he is a past director of the Long Island Chapter of the National Conference of CPA Practitioners. He has lectured for the Foundation for Accounting Education. Heller holds professional licenses in New York and Florida.

Vance Horner, CPA, ABV

Pulliam Financial Group, PLLC
Winston-Salem, North Carolina
Vance Horner is a senior consultant at Pulliam Financial Group, PLLC. He works with Pulliam on business valuation matters. He was accredited in 1999 in business valuations by the AICPA. He is a member of the AICPA and the American Society of Appraisers.

John W. "Ted" Ibex, CPA, ABV<br>RosenfarbWinters and Co.<br>Eatontown, New Jersey

John W. "Ted" Ibex focuses his practice in litigation support services and forensic accounting and auditing. He provides services in business
valuation, measuring economic damages, providing expert testimony, consultation with attorneys and the courts, and many other areas involving financial disputes in matrimonial, corporate, and business matters. Ibex is a graduate of Penn State University with a BS and an MBA in accounting. He is a member of the AICPA and the New Jersey Society of CPAs and is former chairman of the Litigation Services Committee of the NJSCPA.

He has had a long professional career with an extensive auditing background in public accounting and many years as a chief financial officer in the private sector.

Carl F. Jenkins, CPA, ABV, CFE

Brown \& Brown, LLP
Boston, Massachusetts
Carl F. Jenkins is director of management advisory services for the Boston-based accounting firm of Brown \& Brown, LLP. He also is responsible for the firm's valuation practice and has prepared valuations for businesses from startups to those with revenue of more than $\$ 100$ million. Jenkins has more than fifteen years of experience in providing forensic accounting services. He has been engaged by banks, insurance companies, political campaigns, unions, state agencies, and businesses in a wide range of industries to analyze transactions, calculate losses, and to identify and quantify fraud. He has testified in federal and state courts as an expert witness on accounting, financial, and valuation issues.

Jenkins is a CPA, ABV, a certified fraud examiner and a diplomat of the American Board of Forensic Accounting. He received his undergraduate degree in business administration, concentrating in accounting and finance, from Boston University and earned his master's degree in taxation from Bentley College.

Jenkins has written articles and has been quoted in a number of local and national publications, including the Wall Street Journal, INC. Magazine, and CFO Magazine. He is also a frequent speaker at insurance companies, banks, law firms, and professional organizations.

Philip K. Kleckner, CPA, CFE<br>Amper, Politziner \& Mattia, PA<br>Flemington, New Jersey

Philip K. Kleckner is a manager in Amper, Politziner \& Mattia's litigation and valuation group. He has nearly thirty years of experience in public accounting with emphasis in the specialized consulting needs of the legal, insurance, and financial industries. Before joining Amper, Politziner \& Mattia, Kleckner held executive positions with an international bank and was director of litigation support for a major accounting firm. He received his BS in accounting from the University of Dayton.

A certified fraud examiner, Kleckner has had extensive experience in forensic accounting and has testified as an expert witness in federal, state, and criminal court cases. His main area of focus has been in the area of commercial litigation. He has also performed investigations for
insurance companies on major fidelity bond and business interruption damage cases. While at a major financial institution, he was in charge of a fifteen-person fraud-investigation unit that performed international investigations and asset recovery. Kleckner has spoken before various businesses on various financial issues. He is the developer and lead instructor for a series of courses on fraud awareness and fraud detection and prevention.

John T. Lally, CPA, ABV

Rosenfield, Holland \& Raymon, PC
New Bedford, Massachusetts
John T. Lally is a partner in the firm of Rosenfield, Holland \& Raymon, P.C. The firm has offices in New Bedford and Vineyard Haven, Massachusetts. Lally is a certified public accountant, accredited in business valuation by the AICPA and a diplomate of the American Board of Forensic Accounting. He is a member of the Massachusetts Society of Certified Public Accountants' Valuation and Litigation Support Services Committee and a member of the Institute of Business Appraisers. Lally received a BS in accounting from the University of MassachusettsDartmouth in 1984.

Lally has performed valuations of closely held businesses for marital dissolution, gift tax, estate tax, stockholder buy-sell agreements, and other purposes in a wide variety of industries. These industries include manufacturing, wholesale, retail, construction, restaurant, service, agriculture, and transportation.

## Sharyn Maggio, CPA, PFS, ABV

RosenfarbWinters and Co.
Eatontown, New Jersey
Sharyn Maggio is a partner in the firm of RosenfarbWinters and Co., where she specializes in litigation support accounting. In addition, Maggio maintains a tax and financial planning practice. She is a member of the New Jersey Society of Certified Public Accountants (NJSCPA), where she is currently chairing the Matrimonial Accounting Public Seminars SubCommittee, and is actively involved in the Judicial College SubCommittee as well. Maggio is a director of the NJSCPA Monmouth/Ocean Chapter and is active in the Litigation Services Committee. She is also a member of the AICPA, and is a candidate for admission to the American Society of Appraisers. She is a published writer on issues of divorce, economic loss assessment, and tax and financial planning, and she has lectured on various matrimonial accounting topics to CPAs, attorneys, mediators, and judges.

## Carlton R. Marcyan, CPA, JD, CFP, DABFA

Schiller, Du Canto \& Fleck
Chicago, Illinois
Carlton R. Marcyan is a CPA, attorney, CFP, and diplomate of the American Board of Forensic Accounting. He is a trial attorney and partner in the Chicago law firm Schiller, Du Canto \& Fleck, the largest firm in the country specializing in matrimonial litigation, where he served as managing partner for several years. He was executive vice president of Securatex, a firm located in Hickory Hills, Illinois, providing investigative, security, and consulting services worldwide.

Marcyan graduated in 1976 from DePaul University, after having attended Kalamazoo College, with a BS in commerce, majoring in accountancy. At DePaul he was a member of Beta Alpha Psi, the national accounting fraternity. After graduating, he was a staff auditor with the firm formerly known as Coopers \& Lybrand. While matriculating through the John Marshall Law School, he was a researcher for the Internal Revenue Service. He graduated in 1980 from John Marshall with a Juris Doctor degree and returned to Coopers \& Lybrand as a tax specialist. Later, Marcyan joined the firm of Schiller, Du Canto \& Fleck as a litigation associate specializing in complex matrimonial matters. He became a partner six years later, and represents well-known professional athletes, elected officials, corporate executives, and spouses of upper-income-bracket individuals.

## Donald H. Minyard, Ph.D., CPA/ABV, CFE

Minyard \& Associates, PC
Birmingham, Alabama
Donald H. Minyard is the president of Minyard \& Associates, PC. He has a Ph.D. in accountancy from the University of Illinois at UrbanaChampaign. He received his MBA and his BS in accounting with high honors from Auburn University. Minyard is a certified public accountant accredited in business valuation as well as a certified fraud examiner.

From 1979 to 1995, Minyard taught accounting and finance at Northwest Missouri State University, the University of Illinois, Auburn University, and Samford University. In 1995, Minyard decided to leave academia and enter public accounting practice. He continues to teach CPA review courses and continuing education seminars. In early 1998, Minyard formed his own forensic accounting firm, Minyard \& Associates, PC, which specializes in business valuations and consulting, litigation support, and fraud examinations.

Minyard was the 1985 Tournament of Champions winner on NBC's "Scrabble" and was also a champion on "Wheel of Fortune" and "Card Sharks." He also has an avid interest in travel and amusement parks, especially roller coasters.

## Robert S. Peare, CPA

Peare \& Heller, PC
Hauppauge, New York
Robert S. Peare is shareholder/officer of Peare \& Heller, PC. He is a member of the AICPA and serves as president-elect of the New York State Society of CPAs' Suffolk Chapter. He is a past director of the Long Island Builders Institute.

Peare has served as a member of the Tax Committee of the New York State Society of CPAs. Peare holds professional licenses in New York and Florida.

David E. Politziner, CPA, ABV

Amper, Politziner \& Mattia, PA
Flemington, New Jersey
David E. Politziner is an officer in the accounting firm of Amper, Politziner \& Mattia, PA, which has offices in Flemington, Princeton, Wall Township, and Edison, New Jersey. He is the officer-in-charge of the firm's Flemington office and the director of the firm's Litigation and Valuation Group.

David received an MA in business administration from the University of Michigan in 1971 and a BA from Rutgers University in 1969. He is a certified public accountant in New York and New Jersey, and is a member of various professional associations.

Politziner has been called upon to render expert advice and testimony for both plaintiffs and defendants in such areas as business valuations, damage assessments, lost profit calculations, matrimonial matters, shareholder disputes, malpractice matters, and the sale or purchase of a business.

A frequent presenter for numerous professional and civic organizations, Politziner has spoken at the New Jersey State Bar Association's Mid-Year Meeting, the Annual Conference of the Family Law Section of the New Jersey State Bar Association, and at numerous other occasions.

## Robert N. Pulliam, CPA, ABV

Pulliam Financial Group, PLLC
Winston-Salem, North Carolina
Robert N. Pulliam is managing partner and founder of Pulliam Financial Group, PLLC. He has performed extensive consulting for all types of businesses in his thirty years as a certified public accountant. He has also performed more than two hundred business valuations in several industries for purposes of mergers and acquisitions, buy-sale agreements, shareholder disputes, equitable distribution, estate and gift tax planning, and patent infringement matters. Pulliam is often called on to testify in court or to serve as mediator. He has been involved in federal court matters and has testified in North Carolina, South Carolina, and Georgia. Pulliam was certified in 1967 as a CPA and has recently become
accredited in business valuations by the AICPA. He is a member of the AICPA, and the American Society of Appraisers.

Earl Salsman, CPA

Brown Smith Wallace, LLC
St. Louis, Missouri
Earl Salsman has been a licensed CPA since 1969 and also achieved the designation of certified valuation analyst in 1995. He received his BS in accountancy from the University of Illinois and an MS in commerce from Saint Louis University, with a major in accounting and a minor in finance, and served as a member of the accounting faculty at University of Missouri St. Louis for more than ten years, primarily teaching managerial accounting. He is a member of the AICPA and Missouri Society of Certified Public Accountants, and was a founding partner in the firm Baron Salsman \& Company, LLC in 1981. He has also been a frequent author and lecturer on the subjects of business valuations, peer review, and income taxes.

## Linda J. Schaeffer, CPA, CFE

Schaeffer, Lamont \& Associates, PC
Princeton, New Jersey
Linda J. Schaeffer is a founder of the certified public accounting firm of Schaeffer, Lamont \& Associates, PC, the former Princeton office of RD Hunter \& Company, LLP.

Schaeffer is a certified public accountant in the State of New Jersey and the Commonwealth of Pennsylvania. She is also a certified fraud examiner. She attended the masters program in taxation at Pace University, and holds an undergraduate degree in accounting (cum laude) from Seton Hall University. She is a member and former vice president of the New Jersey Society of Certified Public Accountants and the AICPA. She currently serves on the AICPA Litigation Sub-Committee.

Schaeffer has had a wide range of experience as a field agent for the Internal Revenue Service and in the tax departments of Deloitte, Haskins \& Sells (Deloitte Touche) and Laventhol \& Horwath.

Schaeffer is a frequent speaker at various meetings and seminars; and has been a guest on several radio stations throughout the Central Jersey and Philadelphia areas. She has been seen on Good Morning America, NJ Live, NJN News and CTN. Additionally, she has been a speaker at various national conferences and has been a recent speaker at the New Jersey Judicial College. She specializes in litigation support services and has been qualified as an expert in matters such as valuation issues, tax implications of divorce, and forensic accounting in a variety of courts.

## Holly Sharp, CPA, CFP, CFE <br> LaPorte, Sehrt, Romig \& Hand <br> Metairie, Louisiana

Holly Sharp is a certified public accountant admitted to practice in the State of Louisiana. She is a member of the AICPA and serves on the AICPA's Litigation and Dispute Resolution Services Subcommittee. Sharp is a shareholder and director in the CPA and consulting firm LaPorte, Sehrt, Romig \& Hand, located in Metairie, Louisiana. She received an MS in tax accounting from the University of New Orleans in 1981 and a BS in business management from Tulane University in 1979. She provides consulting services for individuals, corporations, and other entities in areas of taxation, financial planning, estate planning, and business succession planning. Her litigation experience includes testimony and forensic accounting services in accounting, financial, economic, and business issues. She also holds the designations certified financial planner and certified fraud examiner. She has written articles for such publications as the Practical Accountant, the Tax Adviser, and CPA Litigation Services Counselor. She has written a Practice Aid for the AICPA, Calculation of Damages From Personal Injury, Wrongful Death, and Employment Discrimination. She is a frequent lecturer on tax, estate planning, litigation, and forensic accounting topics before national, state, and local forums.

## Theresa M. Simonds, CPA, ABV

Amper, Politziner \& Mattia, PA
Flemington, New Jersey
Theresa M. Simonds is a partner in the Litigation and Valuation Group of Amper, Politziner \& Mattia, PA, an accounting firm specializing in business valuations and litigation support services. Simonds has her undergraduate degree in accounting from the University of Vermont and her MBA in finance from Rider College. She is a candidate member of the American Society of Business Appraisers, a member of the Institute of Business Appraisers, the AICPA, and the New Jersey Society of CPAs (NJSCPA). She has appeared in the following New Jersey courts and has been court appointed in many of them, as well: Hunterdon County, Somerset County, Morris County, Middlesex County, Union County, Mercer County, Warren County, and Monmouth County. Her business valuation and litigation support services have been rendered in connection with matrimonial actions, mergers, acquisitions, buy-sell agreements, damages, lost earnings, shareholder litigation, and breach of contract. She has been a speaker for the NJSCPA, the Institute of Continuing Legal Education, and the New Jersey Bar Association on litigation and valuation topics.

# Geoffrey P. Snodgrass, Esq. 

Snodgrass \& Associates
New Orleans, Louisiana
Geoffrey P. Snodgrass is engaged in a general civil trial practice that includes insurance defense and commercial litigation, with an emphasis in products liability, toxic torts, and automobile law. Snodgrass has written numerous law articles and is a frequent lecturer at continuing legal education and insurance industry seminars. He received his undergraduate and law degrees from Tulane University and was admitted to practice in Louisiana in 1980. Snodgrass is a member of the American, Louisiana State, and New Orleans bar associations, the Louisiana Association of Defense Counsel, and the Defense Research Institute.

Alan C. Winters, CPA, CFE, ABV<br>RosenfarbWinters and Co.<br>Eatontown, New Jersey

Alan C. Winters is a senior partner with RosenfarbWinters and Co. The firm specializes in litigation support and forensic accounting. Winters is an accredited member of the New Jersey Association of Professional Mediators, the Institute of Business Appraisers, the AICPA, and the New Jersey Society of CPAs, where he served for two years as chairman of the Matrimonial Accounting Committee, as well as a member of the Litigation Services Committee, the Alternative Dispute Resolution Committee, and the Insurance Sub-Committee of the Litigation Services Committee. Winters is an expert in all areas of investigative, forensic, and litigation accounting, which include matters dealing with divorce, business valuation, contractual disputes, and conservatorship, as well as damage calculations and personal injury. Winters frequently speaks at lectures and seminars presented to lawyers, accountants, judges, and mediators. He is a graduate of Rider College with a BS in commerce and a major in accounting.

## Richard M. Wise, FCA, ASA, CFE

Wise Blackman
Montreal, Quebec
Richard M. Wise is founding partner of Wise Blackman, one of Canada's leading business valuation and forensic accounting firms. Wise is a graduate of McGill University, Montreal. He is past president of the Canadian Institute of Chartered Business Valuators, fellow of the Institutes of Chartered Accountants of Quebec and Ontario, and former governor of the American Society of Appraisers (ASA). He is secretary of the ASA Business Valuation Committee and author of Financial Litigation-Quantifying Business Damages and Values and co-author of Investigative and Forensic Accounting Practice Issues (both published by the Canadian Institute of Chartered Accountants). Wise contributes extensively to professional publications and is a frequent speaker at conferences of lawyers, accountants, and business appraisers across North

America. He was visiting scholar at Francis Marion College, and lecturer at the McGill Faculty of Law. Wise has testified in more than 130 cases. He was formerly special assistant to the Canadian Minister of National Revenue.

## (x) $\operatorname{HWOSN}$


[^0]:    ${ }^{1}$ Interestingly, this case was argued for the petitioners by Sumner Redstone, who spent his early career as a Washington litigator and in 1954 (the year of this decision), joined his father's business, a chain of drive-in movie theaters. He presently controls Viacom, a multibillion dollar media empire.
    ${ }^{2}$ Three other cases were reviewed by the Supreme Court in 1954 in its consideration of net worth theory: U.S. v. Calderon, 348 U.S. 160 (1954); Smith v. U.S., 348 U.S. 147 (1954); and Friedberg v. U.S., 348 U.S. 142 (1954).

[^1]:    ${ }^{3}$ This method is also known as the sources and application of funds method.

[^2]:    'Source: Subpoenaed major oil company supplier records of monthly purchases by Sludge Oil Company, Inc.
    ${ }^{2}$ Average monthly purchase price corresponds reasonably to the "Tank Wagon Price" (New York) in the Journal of Commerce.

[^3]:    ${ }^{1}$ New England Economic Indicators, Federal Reserve Bank, monthly.
    ${ }^{2}$ Sales \& Marketing Management-Survey of Buying Power, Bill Publications, annual supplement.

[^4]:    ${ }^{1}$ John Stockdale, "Questions for Non-owning Spouse," Shannon Pratt's Business Valuation Update, http://www.bvupdate.com/whitepapers.

[^5]:    ${ }^{2}$ "Annual Industry Profile 1991," Body Shop Business, June 1991, 22.

[^6]:    ${ }^{1}$ Financial Accounting Standards Board (FASB) Statement of Standards No. 13, Accounting for Leases.

[^7]:    *Gross profit equals proceeds from vehicle sales less purchase costs of the vehicles and sales commissions.

[^8]:    *Gross profit equals proceeds from vehicle sales less purchase costs of the vehicles and sales commissions.

[^9]:    ${ }^{1} 1994$ Survey of Law Firm Economics, Altman Weil Pensa, Inc., Newton Square, Penn.

[^10]:    ${ }^{1}$ Notional income is the income capable of being received directly or indirectly from all sources, including profits, benefits, emoluments, cash proceeds, bartered goods, and expense payments, that may be viewed as being constructively received by or imputed to an accounting practice (or members thereof), or both.

[^11]:    ${ }^{2}$ Frequently, in such cases, work-in-process inventory is ultimately written off by the accounting practice in exchange for payments from the client in the form of cash or barter.

[^12]:    ${ }^{3}$ Association of Certified Fraud Examiners, Fraud Examiners Manual, rev. $2^{\text {nd }}$ ed., vol. 1 (Austin, Tex.: Association of Certified Fraud Examiners, 1994), 1.416.

[^13]:    ${ }^{4}$ A professional firm may elect to exclude unbilled chargeable time (work in process) from its calculation of net income for income tax purposes.

[^14]:    ${ }^{5}$ CPA stated during her out-of-court examination that the salaries reported as having been paid by the Practice to CPA's parents were never actually received by them, but were instead paid to CPA.

[^15]:    ${ }^{\overline{6}}$ These are firms with revenues from $\$ 139,000$ to $\$ 252,000$.
    ${ }^{7}$ Revenues vary from $\$ 252,000$ to $\$ 5,000,000$.
    ${ }^{8}$ These are firms with revenues ranging from $\$ 139,000$ to $\$ 5,000,000$.
    ${ }^{9}$ These are firms with revenues from $\$ 25,000$ to $\$ 5,000,000$.
    ${ }^{10}$ If the sample of such firms were very small, the results obtained therefrom might not be reliable for purposes of comparison to the Practice.
    ${ }^{11}$ For example, it is not apparent whether the firms analyzed in preparing the study reporting revenues were closer to the low boundary of $\$ 252,000$ or the high boundary of $\$ 5,000,000$.

[^16]:    ${ }^{12}$ One hundred percent minus 37 percent equals 63 percent.
    ${ }^{13}$ Adjusted for salaries paid to Spouse, CPA's parents, and Children, which we have assumed were not Practice-related.
    ${ }^{14}$ As this valuation is being prepared for matrimonial purposes, the indicated understated gross fees received by CPA from the Practice may also affect the quantification of CPA's notional income for purposes of establishing her capacity to pay alimony support to Spouse.

[^17]:    (1) Extracted from financial statements and analyses prepared by CPA

[^18]:    (1) For instance, 42 percent cost equals a relative markup of 2.38 .
    (2) It is assumed that manufactured pasta was sold at the retail store in the amount necessary to bring store revenues to approximately $\$ 470,000$, as mentioned above.

