

FINANCIAL
ACCOUNTING
AND
CORPORATE
REPORTING
A Casebook

KENNETH R. FERRIS

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A CASEBOOK

KENNETH R. FERRIS

Southern Methodist University

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*This book is dedicated
to my wife,
Marilyn, and my children,
Matthew Thomas
and Katherine Miller*

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PREFACE

Tell me, I'll forget;
Show me, I may remember;
Involve me, I'll understand.

An old proverb
(source unknown)

Most accounting academicians, including myself, were educated in the classic classroom style of lecture and problem review. This approach was, and still is, extremely effective given a specific set of academic objectives. Those objectives—the understanding of a preferred or generally accepted set of accounting principles and an understanding of how to apply those principles—seem to be most clearly associated with undergraduate accounting education. It is only at the advanced undergraduate level, and most obviously at the graduate level, that the focus of the educational process in accounting moves from one of conceptualization and preparation to one of analysis and utilization. When the focus of learning shifts in this way, it is no longer clear that the classic lecture/problem-solving approach is pedagogically superior.

Having taught accounting to both graduate and undergraduate students, using both the traditional and the case method, it has been my experience that the effectiveness of the pedagogical style is indeed a function of the educational objectives. I have found the lecture approach to be extremely successful with undergraduate students, particularly because of their need to avoid as much uncertainty as possible. At the advanced undergraduate level, for selected courses, and at the graduate level, in general, I have found the case method to be a superior approach. Thus, this book of cases was prepared with that particular set of students in mind.

The book contains over 50 cases written by instructors who teach, or who have taught, predominantly at the graduate level. The content covers a full array of financial accounting and corporate reporting topics, and hence, given the large number of cases and the wide topical coverage, the book may be effectively used either in a one- or two-semester (or quarter) course sequence. The case materials have been organized in a structure that parallels that of most accounting textbooks; thus, the casebook may be conveniently used in conjunction with one or more conventional financial accounting textbooks as the primary text, or together with selected readings in a contemporary topics course.

The cases included in this book have been used in classrooms at Dartmouth College, Harvard University, Lehigh University, The University of Miami, The Naval Postgraduate School, The Ohio State University, Southern Methodist University, Texas Christian University, and The University of South Carolina. The cases include current case settings, such as the 1982 bankruptcy of Penn Square Bank or the 1984 near-

bankruptcy of Middle South Utilities, as well as a number of popular older cases that are still widely used—for example, the Chrysler Corporation case and the Stirling Homex Corporation case.

The case settings are for the most part real, although to achieve certain educational goals it has been necessary to construct a number of artificial case settings as well. Most of the “live” case settings have remained undisguised; however, in several instances, where confidential data was made available, company names, dates, and places have been altered. Finally, given that considerable diversity exists between instructors about the actual implementation of the case method, an attempt was made to provide flexibility in the use of the case materials. Cases were selected that varied in length, as well as in the level of analytical rigor demanded from the student. Where possible, an attempt also was made to provide two or more case studies for each individual topic. Hopefully, the availability of multiple cases of varying length and rigor will provide the user with greater flexibility in course structure and design.

Because many students will have had little or even no prior experience with the case method, an introductory piece, Questions and Answers about Case Learning, has been included in the Appendix to the book. Instructors may find this a useful departure point, as I do, for their classes.

The contributors to this casebook are, individually, noted academics with significant prior writing experience. Several have widely adopted textbooks or casebooks currently on the market. The identification and location of good case materials is difficult, and thus I am particularly indebted to the contributors to this book, without whom the project would not have been possible.

Kenneth R. Ferris

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PART ONE

The Fundamentals of Accounting

The Accounting System and Financial Statement Preparation

CASE 1.1

Solartronics, Inc.*

Solartronics, Inc., a small Texas-based manufacturer and distributor of solar energy panels, was in its first year of operation. The company was conceived and controlled by two retired executives. John Holden, an engineer by profession, developed the basic patent for the solar panels. He lacked adequate resources to finance the venture. Pete Blocker's chosen field of endeavor was real estate. He, too, possessed few liquid assets. However, as the result of earlier investments, he owned a small, unoccupied building that could easily be converted into a plant for the manufacture of solar panels. An independent appraisal valued the lot at \$40,000 and the building at \$26,000. Sorely missing the challenging life of the executive suite, the two men decided to create Solartronics, Inc., with (no par) stock issued in the amount of \$100,000.

Convinced that there existed excellent market opportunities for the solar panels, Holden approached a local bank in order to obtain the necessary capital. The loan officer admitted that Solartronics appeared to be a profitable and timely venture. He claimed, however, that the bank was in no position to commit funds unless certain essential financial statements were submitted. He informed Holden that the bank's policy would require the following information to be presented:

- A statement of financial position (balance sheet) classifying Solartronic's assets and equities as they would appear in the preproduction stage.
- An income statement for the first year of normal operations.
- A projected balance sheet as it would appear at the close of the first operating year.

* This case was prepared by Charles T. Sharpless and M. Edgar Barrett. Copyright © 1977 by M. Edgar Barrett. All rights reserved to the authors.

Finding the banker's demands more than reasonable, the two executives acquiesced. Aided by some additional guidelines set forth by the bank, they identified the following categories of financial data related to transactions occurring during Solartronics' organizational stage:

1. Holden would receive 34,000 shares of common stock in exchange for rights to the patent. Blocker, on the other hand, would receive the 66,000 shares of common stock in exchange for the lot and building.
2. Incorporation fees, attorney's fees, and officers' salaries during the organizational stage would amount to \$11,500.
3. Costs of purchasing specially tooled machinery, including consulting fees and overhead, were estimated at \$25,000. Raw material purchases during that stage were estimated at \$3,000.
4. Solartronics would borrow \$50,000 from the bank. Interest, at the rate of 5 percent, would be payable annually, with the principal to be repaid in five annual installments.

Using the preceding information, Holden and Blocker derived a projected balance sheet (see Exhibit 1).

In order to comply with the remaining requirements, the executives estimated that the following transactions would occur during the first year of operations:

1. Revenue derived from the sales of finished goods during the first calendar year, \$160,000. All sales during this first year of operations would be on a cash basis.
2. Supplemental purchases of supplies and raw materials estimated for that year, paid for by the close of the year, would amount to \$50,000.
3. Payment of accrued interest on bank loan, \$2,500. Repayment of principal on bank loan, \$10,000.
4. Payroll expenses for direct labor involved in production would amount to \$45,000. Selling and administrative expenses incurred during said year would amount to \$10,000.
5. Projected cash outlays for the purchase of new equipment and machinery, \$5,000.
6. Closing inventory of raw materials expected to amount to \$10,000.
7. Accumulated depreciation was calculated as follows: machinery, with an estimated useful life of 10 years, \$3,000; building, with an estimated useful life of 20 years, \$1,300.
8. The following costs incurred during the developmental stage were to be charged against income earned in current year: incorporation fees, attorney's fees, and officers' salaries.
9. Solar panels were to be produced to fill firm orders paid for in cash. All solar panels produced during the operating year were to be purchased by consumers, leaving no closing inventory of finished goods.
10. The cost of the patent would be amortized over its legal life of 17 years.
11. Income taxes would be calculated at \$8,340. Solartronics would pay 60 percent of its tax bill by the end of the year.
12. Dividends paid to shareholders would amount to \$20,000.

EXHIBIT 1

SOLARTRONICS, INC.
Projected Preproduction Balance Sheet

Assets		Equities	
Cash	\$ 10,500	Notes payable	\$ 50,000
Raw material inventory. . . .	3,000		
Machinery	25,000		
Building	26,000		
Land	40,000		
Organizational costs	11,500	Common stock	100,000
Patent	34,000	Retained earnings. . . .	-0-
Total assets.	<u>\$150,000</u>		<u>\$150,000</u>

Clearly, the above events would be interrelated and would occur throughout the year. For example, the initial cash balance provided funds for production, and, as the finished goods were sold, the funds received were used to pay for cash expenses and continuing operations.

QUESTIONS

1. Starting with the opening balance sheet shown as Exhibit 1, determine the net effect of *each* of the above summary transactions on that financial statement. For purposes of this question, you should imagine that the firm's *only* financial statement was a balance sheet.
2. Prepare the following financial statements, per the request of the loan officer: an income statement for the first year of operations and a closing balance sheet for that same year.

Smith & Son Printing, Inc.*

At the age of 40, Mr. Smith had worked 25 years for a small general-jobbing printing firm in his home town, a medium-sized community in southern Massachusetts. In 1975, he had been appointed works manager of the company and subsequently acquired considerable experience with the production technology of printing, along with experience in the methods and problems of administering a printing works. Increasingly of late, he had become involved in the marketing and sales aspects of the business, and in the coordination of sales with production. Through this exposure, he had realized that a growing part of the market for print was not being catered to by companies in the local area—namely, the demand for low-quality, low-priced materials for retail promotion, price tickets, and the like. This type of printing called for high-volume production, with relatively little concern for the quality of the actual print or absolute trueness of color. Most of the local printing firms had either developed a particular specialty or else were general jobbing printers, with an emphasis on high-quality bespoke (custom-made) products; these latter firms were not cost-competitive for high-volume, low-quality work, which was in the main placed with printing firms in Boston. However, Mr. Smith believed that a local firm could be more competitive on price in supplying local demand and could give a higher level of service at the same time.

Accordingly, Mr. Smith began to form plans to set up a company to supply the particular market demand he had identified. During 1984, he made initial contact with a number of prospective customers, as a result of which he was considerably encouraged that a satisfactory level of orders would be forthcoming and maintained. He ascertained that a suitable machine, a KORD, could be obtained secondhand in New York, and that he could acquire modest, but adequate premises, with room for subsequent expansion in a new industrial development on the outskirts of town. Finally, he put together his plans and was successful in getting the interest and support of a group of local investors for his proposal.

At the beginning of 1985, Mr. Smith left his employment with his present company to devote his full-time effort to the new venture.

ORGANIZATION AND INITIAL FINANCING OF THE COMPANY

A company was formed under the name of Smith & Son Printing, Inc. Twenty thousand shares of common stock were authorized and issued, and these were purchased

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for \$20,000 by Mr. Smith and the group of investors. A bank loan of \$20,000 was also arranged with a local bank and drawn down in total. This loan was secured by a lien on the production equipment to be purchased, had a five-year term with equal annual prepayments of \$4,000, carried an interest rate of 2 percent above the New York commercial rate, payable quarterly in arrears, and required the deposit by Smith & Son of 10 percent of the outstanding balance of the loan with the bank. In addition, the bank agreed to make available to Smith & Son a line of credit of up to \$15,000, a limit which would be reviewed at the end of the first year of operations.

A board of directors, comprising most of the investor group, was formed, and Mr. Smith was appointed president and chief executive of the company. The board authorized Mr. Smith to make an immediate payment to himself of \$4,000 from the company's funds in recognition of the work he had already put into the conception of the venture; Mr. Smith used this money to purchase his portion of the company's share capital. A further \$1,000 was spent on legal fees and other costs of forming the company.

FIRST YEAR OF OPERATIONS

At the end of the first year of operations, Mr. Smith was naturally anxious to discover how well the firm had done. He collected all of the source documents relating to the company's operations—sales invoices, payroll records, material purchase invoices, and so on—and began the task of preparing the accounts.

During the year, Smith & Son had purchased premises and installed the necessary production and handling machinery, along with fixtures and fittings for a small office. At year-end, \$60,000 worth of plant and equipment had been acquired; \$50,000 had been paid for and \$10,000 still awaited payment. It was estimated by Mr. Smith that Smith & Son would qualify for a total of \$4,000 of investment tax credit with respect to the acquisition of these assets.

As the factory was acquired and fitted out for production, insurance contracts were negotiated on the assets, and the company became liable for other payments, such as property tax. During the year, various occupancy costs (insurance, property tax, etc.) in the amount of \$4,000 were incurred and paid.

Smith & Son had gained immediate acceptance from a number of customers, and demand quickly exceeded production capacity. While capacity was being built up, Mr. Smith kept prices relatively low to discourage some potential customers from switching their current suppliers, and he also carefully selected customers with reputations for prompt and reliable payment. During the first year, Smith & Son had invoiced sales of \$120,000, and at year-end \$20,000 was still to be collected from customers. One customer had contracted, and paid in advance, for \$4,000 worth of goods; at year-end, half of these goods and services had been supplied and were included in the figure of \$120,000, while the other half were still to be delivered.

During the year, Smith & Son had purchased materials with an invoice amount of \$60,000. At year-end, \$28,000 was still owed to suppliers on these purchases. Manufacturing wages and expenses of \$24,000 were incurred during the year; at year-end, \$1,000 was still owed to the workers.

Selling and administrative expenses of \$20,000 had been incurred, and, at year-end, \$2,000 of this remained to be paid. Interest expense of \$2,000 had been paid, and a further \$500 was due.

Although the line of credit had been used during the year, at year-end Smith &

Son owed no money on this debt. The \$4,000 due on the bank loan was scheduled for payment during the first week of January 1986, the week following the year-end cutoff. A call to the bank revealed a year-end cash balance of \$8,000.

Mr. Smith now turned to examine the fixed assets to estimate the amount of depreciation expense which should be recognized to reflect the usage of these assets. He required the assistance of several employees to judge the economic, or technical, life of each asset, particularly of the production assets, and any residual value which they might have at the end of their useful lives, in order to arrive at an estimate of the appropriate depreciation expense. Eventually, \$4,000 was established as a reasonable and prudent amount.

Mr. Smith then examined prepaid expenses. He determined, for example, that several of the insurance contracts for which premiums had already been paid had expired by year-end. Of the total prepaid expenses, on average three quarters of their service potential had expired.

The next task was to determine the value of the inventory on hand at year-end. Smith & Son had no cost accounting system, and so Mr. Smith had to rely on a process of deduction, which went as follows.

He first decided that depreciation should be considered as part of the value added by production, and that this expense should be charged to work-in-process rather than being charged straight to the income account.

Then he checked the physical quantities of paper, ink, and other supplies in the storeroom and matched these up with purchase invoices to establish a value for purchased materials still on hand and not yet issued into production. He calculated a purchase value of \$5,000 for these inventories. Since \$60,000 was the amount of total materials purchased during the year, he deduced that \$55,000 worth had been issued to production.

He then had to estimate the value of work still in the factory and of jobs awaiting packing and shipping to customers. This was a very rough procedure since Smith & Son had not yet installed a job-cost system. However, rough prior estimates were made of the work and cost required for a job to assist with production scheduling and pricing. The company had about a two-week throughput time on average between initiating a job into production and shipping the completed work to a customer. Mr. Smith, therefore, assumed that factory wages and expenses for two weeks pertained to jobs in process; moreover, he prorated an amount of depreciation to work-in-process. Finally, by the same process as described previously, he valued the material content of work in the factory and in dispatch. His work sheet showed the following:

Materials in work-in-process	\$3,000
Two weeks of factory wages and expenses. . . .	2,000
Depreciation expense prorated to work-in-process	400
Ending work-in-process.	<u>\$5,400</u>

The Board's Reaction

When Mr. Smith explained to the board the results of the first year of operations, there was a general reaction of some jubilation. Sufficient cash was available to support a dividend, and it was felt that the profitable operations justified such an action. Thus, a 10 percent dividend was declared and minuted; Mr. Smith left the meeting