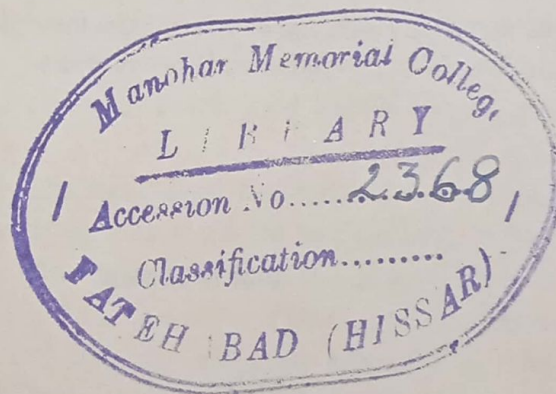


# PRACTICAL FINANCIAL STATEMENT ANALYSIS

ROY A. FOULKE

President and Director (retired), Dun and Bradstreet, Inc.; Author of  
*Commercial Paper Market, Behind the Scenes of Business,*  
*News of American Commerce,* and *Practical Bank Credit* (coauthor)



SIXTH EDITION



TATA MCGRAW-HILL PUBLISHING COMPANY LTD.  
Bombay — New Delhi

## Contents

PREFACE . . . . .	v
SCHEDULES . . . . .	xv
FORMS . . . . .	xix

### PART I

#### BACKGROUND OF ANALYSIS

I. IMPORTANCE OF ARABIC FIGURES IN THE BUSINESS WORLD . . . . .	3
Early Scarcity of Financial Statements, 4. Credit References and Recommendations, 5. Early Bank Credit without Financial Statements, 6. Figures in Early Credit Reports, 9. Evolution of Unsecured Bank Loans, 12. Changes in Mercantile Terms of Sale, 12. Rise of Single-name Paper, 13. Early Days of Accountancy, 21. Expansion in Use of Financial Statements, 23. Growth in Number of Business Enterprises, 24. Influence of the New York Stock Exchange, 25. Securities and Exchange Commission, 27. The Importance of Arabic Figures, 29. Unaudited Financial Statements, 29. Philosophy of Numbers, 30. Theory and Problems, 30.	
II. VIEWPOINTS TOWARD ANALYSES . . . . .	32
Analysis of the Mercantile Credit Manager, 32. Basis of Line of Credit, 33. Review of Current Figures, 33. Desirability of Supplementary Information, 34. Analysis by the Commercial Banker, 35. Analysis in the Light of Supplementary Information, 36. Analysis by the Stockholder, 39. Interest Concentrated on Earnings, 39. Absence of Analysis of Financial Statements, 40. Analysis by the Treasurer, 41. Fixed Assets Heavy, 42. Funded Debt Heavy, 43. Net Working Capital Light, 43. Alternative Policies for the Management, 43. Recapitulation, 44. Theory and Problems, 46.	
III. DESIRABILITY OF SUPPLEMENTARY INFORMATION . . . . .	48
Antecedent Information, 51. A Situation with Unfavorable Antecedent Information, 51. Antecedent Information Important in Large	



Corporations, 53. Investigational Information, 54. Bank Investigation, 54. Implication of Secured Bank Loan, 55. Trade Investigation, 56. Implication of Slow Trade Payments, 57. Financial Information, 58. Corporate Structure, 59. Consolidated Financial Statements, 59. Individual Financial Statements, 62. Theory and Problems, 64.

#### IV. CLASSIFICATION OF BALANCE SHEET ITEMS

Development of the Balance Sheet, 66. Colonial Business Records, 68. Divisions of the Balance Sheet, 69. Assets, 70. Current Assets, 70. Cash on Hand and in a Bank or Banks, 73. United States Government, Federal Agencies, State, and Municipal Securities, 75. Accounts Receivable for the Sale of Merchandise, 78. Notes Receivable for the Sale of Merchandise, 80. Trade Acceptances for the Sale of Merchandise, 81. Merchandise—Finished, in Process, and Raw Materials, 82. Advances on Merchandise, 84. Readily Marketable Securities, 84. Fixed Assets, 85. Miscellaneous Assets, 88. Cash Surrender Value of Life Insurance, 88. Due from Officers, Directors, and Employees, 89. Investments, 89. Investments in and Advances to Subsidiaries and Affiliates, 91. Deferred Charges and Prepaid Expenses, 93. Intangible Assets, 94. Liabilities, 95. Current Liabilities, 96. Notes Payable to Banks, 97. Notes Payable and Trade Acceptances for Merchandise or Equipment, 100. Accounts Payable, 101. Loans Payable, 101. Accruals, 106. Deposits, 106. Advance Payments, 107. Reserves for Taxes, 107. Dividends Declared but Not Paid, 107. Reserves for Contingencies against Possible Losses, 108. Current Maturity of a Funded Debt, 108. Deferred Liabilities, 109. Long-term Liabilities, 109. Valuation Reserves, 111. Reserve for Contingencies When a General Reserve and Not for a Specific Purpose, 111. Unearned Income, 112. Net Worth, 113. Preferred, Common, and Alphabet Stock, 113. Capital Surplus, 116. Retained Earnings, 117. Undivided Profits, 117. Contingent Liabilities, 117. Sale and Lease-back Obligations, 117. Classification of Balance Sheet Items, 134. Typical Financial Statement Forms, 135. Specialized Financial Statement Blanks, 137. Posting a Comparative Statement Blank, 137. Theory and Problems, 142.

### PART II

#### ANALYSIS OF SMALL BUSINESS ENTERPRISES

V. ANALYSIS OF SMALL BUSINESS ENTERPRISES 15  
 Characteristics of Small Business, 154. Contrast between Small and Large Business, 155. Technique of Sales Analysis, 155. Elements of Net Sales, 156. Typical Retail Operating Experience, 158. Illustrations of Sales Analyses, 160. Haberdashery Shop, 160. Sales Analysis of Year B Figures, 160. Sales Analysis of Year A Figures, 162. Ladies Specialty Shop, 163. Wholesaler of Woolen and Worsted Piece Goods, 166. Manufacturer of Blankbooks, 167. Qualifications to Sales Analysis, 169. Supplementary Sources of Elements of Sales, 171. Theory and Problems, 171.

### PART III

#### INTERNAL ANALYSES OF BALANCE SHEETS

VI. CURRENT ASSETS TO CURRENT LIABILITIES 178  
 Evolution of Current Figures, 180. Public Corporations, 180. Accounting Firms, 189. Credit and Investment Services, 190. Evolution in the Use of Current Ratio, 191. Illustrations of Relationships, 192. Commercial Printer, 193. Condensed Analysis, 195. Manufacturer of Furniture, 196. Condensed Analysis, 198. Manufacturer of Paints and Varnishes, 198. Condensed Analysis, 201. Typical Ratios of Current Assets to Current Liabilities, 201. Maxim, 204. Theory and Problems, 204.

VII. CURRENT LIABILITIES TO TANGIBLE NET WORTH 207  
 Seasonal Operations and Current Liabilities, 209. Manufacturers of Fur Coats, 209. Department Stores, 209. Manufacturers of Furniture, 210. Natural Business Year, 210. Inventory, 213. Annual Closing of Accounts and Preparation of Financial Statements, 214. Analysis on Natural Business Year Basis, 214. Suggested Closing Dates, 217. Illustrations of Relationships, 217. Manufacturer and Retailer of Men's Clothing, 217. Condensed Analysis, 220. Wholesaler of Liquor, 221. Condensed Analysis, 223. Builder of Yachts and Launches, 223. Condensed Analysis, 225. Typical Ratios of Current Liabilities to Tangible Net Worth, 226. Maxim, 229. Theory and Problems, 229.

VIII. TOTAL LIABILITIES TO TANGIBLE NET WORTH 232  
 Evolution of Long-term Obligations, 232. Long-term Liabilities during the Colonial Era, 232. Early Long-term Railroad Securities, 235. Early Industrial and Public Utility Bonds, 237. Illustrations of Relationships, 237. Department Store, 238. Condensed Analysis, 241. Manufacturer of Electrical Products, 242. Condensed Analysis, 245. Manufacturer of Boilers, 246. Condensed Analysis, 249. Typical Ratios of Total Liabilities to Tangible Net Worth, 250. Maxim, 253. Theory and Problems, 253.

IX. FUNDED DEBT TO NET WORKING CAPITAL 257  
 Important Features of Long-term Securities, 257. Illustrations and Relationships, 259. Manufacturer of Kitchen Equipment, 260. Condensed Analysis, 262. Finisher of Piece Goods, 264. Condensed Analysis, 266. Manufacturer of Pipe Fittings, 268. Condensed Analysis, 270. Typical Ratios of Funded Debt to Net Working Capital, 271. Maxim, 275. Theory and Problems, 275.

X. FIXED ASSETS TO TANGIBLE NET WORTH 257  
 Evolution of the Factory System, 280. Value of Fixed Assets, 281. Cost Less Depreciation, 281. Market, 282. Replacement Less Depreciation, 282. Liquidation, 282. Comparative Relationship of Fixed Assets, 283. Illustrations of Relationships, 284. Wholesaler of Fuel and Oil, 284.



CONTENTS

x  
*Condensed Analysis*, 286. Department Store, 287. *Condensed Analysis*, 290. Wholesaler of Lumber, 290. *Condensed Analysis*, 293. Typical Ratios of Fixed Assets to Tangible Net Worth, 293. Desirability of Low Ratio, 294. Maxim, 297. Theory and Problems, 297.

XI. NET SALES TO INVENTORY.

Cost or Market, Whichever Is Lower, 302. First-in First-out, 304. Last-in First-out, 306. Average Cost, 307. Standard Cost, 308. Basis of Inventory, 309. Retail Method, 308. Need for Inventory Control, 310. Losses from Falling Prices, 310. Losses from Obsolescence, 311. Aging of Inventory, 311. Inventory Partially a Purchasing Problem, 314. Illustrations of Relationships, 314. Retail Men's Clothing Store, 314. *Condensed Analysis*, 316. Manufacturers of Men's Clothing, 317. *Condensed Analysis*, 320. Manufacturer of Heavy Chemicals, 322. *Condensed Analysis*, 324. Typical Ratios of Net Sales to Inventory, 325. Turnover of Inventory, 327. Maxim, 328. Theory and Problems, 331.

XII. INVENTORY TO NET WORKING CAPITAL.

Responsibility for Inventory Valuation, 335. Service Element in Modern Business, 337. Need for a Supplementary Inventory Relationship, 338. Ratio of Inventory to Net Working Capital, 339. Illustrations of Relationships, 341. Cotton Goods Converter, 341. *Condensed Analysis*, 343. Chain Drug Stores, 345. *Condensed Analysis*, 347. Canner of Fruits and Vegetables, 348. *Condensed Analysis*, 351. Typical Ratios of Inventory to Net Working Capital, 352. Maxim, 352. Theory and Problems, 355.

XIII. AVERAGE COLLECTION PERIOD.

Need of Selling Terms, 358. Computation of Average Collection Period, 359. Illustration 1, 360. Illustration 2, 360. Illustration 3, 361. Use of Collection Table, 370. Illustrations of Relationships, 371. Wholesaler of Electrical Supplies, 372. *Condensed Analysis*, 375. Wholesaler of Toys, 376. *Condensed Analysis*, 379. Manufacturers of Plumber's Specialties, 380. *Condensed Analysis*, 382. Typical Average Collection Periods, 383. Maxim, 386. Theory and Problems, 386.

XIV. NET SALES TO TANGIBLE NET WORTH.

Overtrading and Undertrading, 390. Volume of Net Sales, 391. Size of Tangible Net Worth, 391. Illustrations of Relationships, 392. Manufacturer of Women's Coats, 392. *Condensed Analysis*, 395. Manufacturer of Commercial Trucks, 397. *Condensed Analysis*, 401. *Analysis of Adjusted Figures*, 403. Converters of Specialty Cotton Cloth, 406. *Condensed Analysis*, 409. Typical Ratios of Net Sales to Tangible Net Worth, 411. Maxim, 412. Theory and Problems, 415.

XV. NET SALES TO NET WORKING CAPITAL.

Illustrations of Relationships, 418. Wholesaler of Wines and Liquors, 419. *Condensed Analysis*, 421. Manufacturer of Men's Shirts, 423. *Condensed Analysis*, 423. Manufacturer of Woolen Cloth, 430. *Con-*

CONTENTS

*densed Analysis*, 433. Typical Ratios of Net Sales to Net Working Capital, 434. Maxim, 435. Theory and Problems, 438.

PART IV

COMPARATIVE ANALYSIS OF BALANCE SHEETS

445  
 VI. COMPARATIVE ANALYSIS OF BALANCE SHEETS  
 Importance of Balance Sheet Date, 447. Desirability of Consecutive Yearly Figures, 448. Differences in Dollar Amounts, 449. Manufacturer of Controlled Mechanism, 449. Cash, 450. Receivables, 450. Inventory, 452. Current Assets, 452. Fixed Assets, 452. Leasehold Improvements, 452. Due from Officers, 452. Prepaid Items, 453. Miscellaneous Receivables, 452. Development Expenses, 453. Accruals, 453. Total, 453. Due to Banks, 453. Accounts Payable, 454. Current Liabilities, 454. Serial Notes Payable, 454. Due to Officers, 454. Current Liabilities, 455. Common Stock, 455. Capital Surplus, 455. Retained Earnings, 455. Total, 455. Net Working Capital, 455. Current Ratio, 456. Tangible Net Worth, 456. Net Sales, 456. Net Profit, 456. Dividends, 457. Explanation of Changes, 457. Manufacturer and Retailer of Candy, 458. Cash, 459. Accounts Receivable, 460. Inventory, 460. Current Assets, 461. Fixed Assets, 461. Investments, 462. Miscellaneous Receivables, 463. Deferred Charges, 463. Good Will, 464. Total, 464. Accounts Payable, 464. Accruals, 464. Reserve for Taxes, 464. Dividends Payable, 464. Mortgage Maturities, 464. Current Liabilities, 464. Real Estate Mortgages, 465. Total Liabilities, 465. Common Stock, 465. Paid-in Surplus, 465. Retained Earnings, 465. Total, 465. Net Working Capital, 465. Current Ratio, 466. Tangible Net Worth, 466. Net Sales, 466. Net Profits, 466. Dividends, 467. Theory and Problems, 467.

VII. STATEMENT OF SOURCES AND APPLICATIONS OF FUNDS.

473  
 Sources of Funds, 474. Net Profits, 475. Increase in Liabilities, 475. Decrease in Assets, 476. Contribution of Funds, 477. Applications of Funds, 477. Net Losses, 477. Decrease in Liabilities, 477. Increase in Assets, 478. Decrease in Capital Funds, 478. Change in Net Working Capital, 478. Illustrations of Funds Statements, 478. Information from Comparative Balance Sheets, 479. Retail Furniture Store, 480. Information from Balance Sheets and Income Statements, 485. Cold Storage Warehouse, 486. Theory and Problems, 491.

PART V

INCOME STATEMENTS

497  
 VIII. EXPLANATION OF INCOME STATEMENTS  
 Principal Items in Income Statements, 499. Gross Profit Section, 501. Gross Sales, 501. Returns and Allowances, 502. Net Sales, 503. Cost of Goods Sold, 503. Gross Margin, 504. Operating Profit Section, 505.

Provision for Bad Debts, 500. Interest on Profit  
 Loss Section, 508. Cash Discounts Earned and Given, 508. Interest, 508.  
 Net Profit or Loss before Extraordinary Charges, 508. Extraordinary  
 Charges, 509. Federal and State Income Taxes, 511. Net Profit or Loss  
 512. Net Profit or Loss after Adjustments by Carry-back or Carry-for-  
 ward Tax Privilege, 513. Theory and Problems, 514.

PART VII

SYNTHESIS

**XIX. ANALYSES OF INCOME STATEMENTS**

Manipulation of Profit Figures, 517. Charges to Surplus, 518. Charging  
 Reserves to Surplus, 518. Subtle Effect of Downward Appraisal  
 519. Effect of Writing Off and Writing Up Depreciable Assets, 520.  
 Overstatements and Understatements, 520. Net Profits after  
 Charges, 522. Consolidated Income Account, 523. Internal Analysis  
 524. Retail Men's Furnishing Shop, 525. Standard Operating Ratio  
 528. Comparative Analysis, 529. Department Store, 529. Internal  
 Analysis for Year B, 530. Comparative Analysis for Year B and Year  
 A, 531. Percentage of Net Sales, 532. Adjustment of an Income State-  
 ment, 533. Theory and Problems, 535.

**XX. BREAK-EVEN POINT.**

Examples of Break-even Charts, 539. Simple Break-even Chart, 540.  
 Conventional Break-even Chart, 547. Practical Modifications to Con-  
 ventional Break-even Charts, 552. Detailed Conventional Break-even  
 Chart, 554. The Profitgraph, 555. Theory and Problems, 557.

**XXI. NET PROFIT TO TANGIBLE NET WORTH**

Profits Attract Funds, 561. Measures of Net Profit, 562. Incentive  
 Profit to New Management, 563. Incentive of Profit to Management  
 564. Typical Net Profit on Tangible Net Worth, 565. Theory and  
 Problems, 567.

**XXII. NET PROFIT TO NET SALES**

Increased Net Sales, 572. Typical Net Profit to Net Sales, 573.  
 Theory and Problems, 576.

PART VI

SURPLUS ACCOUNTS

**XXIII. ANALYSES OF RETAINED EARNINGS**

Explanation of Capital Surplus, 584. How Capital Surplus Arises, 584.  
 Capital Surplus Should Be a Separate Item, 585. Reconciliation of  
 Surplus Accounts, 586. Net Profits of Small Concerns, 586. Net Profit  
 of Large Corporations, 587. Tendency toward Making All Charges  
 Income, 588. Adjustments to Reported Net Profits, 593. Anal-  
 ysis of Miscellaneous Charges, 594. Dividend Disbursements, 594.  
 Theory and Problems, 596.

**XIV. RECENT EVOLUTION IN ACCOUNTANCY THEORY AND PRACTICE**

Relativity of Financial Statements, 601. Recorded Facts, 603.  
 Accounting Problems Created by Fluctuating Price Levels, 604. Cost  
 Represents Initial Value, 606. Suggested Modifications in Accounting  
 to Overcome Effects of Changing Price Levels, 607. Accounting Conven-  
 tions, 612. Personal Judgments, 614. Valuation of Inventory, 616.  
 Reserve for Bad Debts, 617. Depreciation, 617. Evolution in Accounting  
 Principles, 617. Sources of Influence on Accountancy, 618. New York  
 Stock Exchange, 619. Board of Governors of the Federal Reserve System,  
 620. American Institute of Certified Public Accountants, 622. American  
 Accounting Association, 624. Securities and Exchange Commission, 626.  
 Authoritative Studies, 627. Verification of Financial Statements, 629.  
 Examination of Financial Statements by Independent Public Account-  
 ants, 630. A Statement of Accounting Principles, 630. An Introduction  
 to Corporate Accounting Standards, 632. The Fund Theory of Accounting  
 and Its Implications for Financial Reports, 634. Inventory of Generally  
 Accepted Accounting Principles for Business Enterprises, 637. The  
 Immediate Future, 639. Theory and Problems, 640.

601

APPENDIX . . . . . 643

INDEX . . . . . 659