

Analysis for Financial Management

Tenth Edition

ROBERT C. HIGGINS

Marguerite Reimers

Professor of Finance

The University of Washington

Contents

Preface xi

PART ONE

ASSESSING THE FINANCIAL HEALTH OF THE FIRM 1

Chapter 1

Interpreting Financial Statements 3

The Cash Flow Cycle 3

The Balance Sheet 6

Current Assets and Liabilities 9

Shareholders' Equity 11

The Income Statement 11

Measuring Earnings 12

Sources and Uses Statements 16

The Two-Finger Approach 18

The Cash Flow Statement 18

Financial Statements and the Value Problem 23

Market Value vs. Book Value 23

Economic Income vs. Accounting Income 27

Imputed Costs 28

Summary 30

Additional Resources 31

Problems 32

Chapter 2

Evaluating Financial Performance 37

The Levers of Financial Performance 37

Return on Equity 38

The Three Determinants of ROE 38

The Profit Margin 40

Asset Turnover 42

Financial Leverage 47

Is ROE a Reliable Financial Yardstick? 53

The Timing Problem 53

The Risk Problem 54

The Value Problem 56

ROE or Market Price? 57

Ratio Analysis 60

Using Ratios Effectively 60

Ratio Analysis of Sensient Technologies

Corporation 62

Appendix

International Differences in Financial Structure 71

Comparisons among Foreign Companies Trading on U.S. Markets 71

Public Companies 73

The Move Toward International Accounting Standards 77

Summary 79

Additional Resources 80

Problems 82

PART TWO

PLANNING FUTURE FINANCIAL PERFORMANCE 87

Chapter 3

Financial Forecasting 89

Pro Forma Statements 89

Percent-of-Sales Forecasting 90

Interest Expense 96

Seasonality 97

Pro Forma Statements and Financial Planning 97

Computer-Based Forecasting 98

Coping with Uncertainty 102

Sensitivity Analysis 102

Scenario Analysis 103

Simulation 104

Cash Flow Forecasts 106

Cash Budgets 107

The Techniques Compared 110

Planning in Large Companies 111

Summary 113

Additional Resources 114

Problems 116

Chapter 4**Managing Growth 123**

- Sustainable Growth 124
 - The Sustainable Growth Equation* 124
- Too Much Growth 127
 - Balanced Growth* 127
 - Medifast's Sustainable Growth Rate* 129
 - "What If" Questions* 130
- What to Do When Actual Growth Exceeds Sustainable Growth 131
 - Sell New Equity* 131
 - Increase Leverage* 133
 - Reduce the Payout Ratio* 133
 - Profitable Pruning* 134
 - Outsourcing* 135
 - Pricing* 135
 - Is Merger the Answer?* 136
- Too Little Growth 136
- What to Do When Sustainable Growth Exceeds Actual Growth 137
 - Ignore the Problem* 138
 - Return the Money to Shareholders* 139
 - Buy Growth* 139
 - Sustainable Growth and Inflation* 140
- Sustainable Growth and Pro Forma Forecasts 141
- New Equity Financing 142
 - Why Don't U.S. Corporations Issue More Equity?* 144
- Summary 146
- Problems 147

PART THREE**FINANCING OPERATIONS 151****Chapter 5****Financial Instruments and Markets 153**

- Financial Instruments 154
 - Bonds* 155
 - Common Stock* 162
 - Preferred Stock* 166

- Financial Markets 168
 - Private Equity Financing* 168
 - Initial Public Offerings* 170
 - Seasoned Issues* 172
 - Issue Costs* 177

- Efficient Markets 178
 - What Is an Efficient Market?* 179
 - Implications of Efficiency* 181

Appendix**Using Financial Instruments to Manage Risks 183**

- Forward Markets* 184
- Hedging in Money and Capital Markets* 189
- Hedging with Options* 189
- Limitations of Financial Market Hedging* 192
- Valuing Options* 194
- Summary 197
- Additional Resources 198
- Problems 200

Chapter 6**The Financing Decision 203**

- Financial Leverage 205
- Measuring the Effects of Leverage on a Business 209
 - Leverage and Risk* 211
 - Leverage and Earnings* 213
- How Much to Borrow 216
 - Irrelevance* 217
 - Tax Benefits* 219
 - Distress Costs* 219
 - Flexibility* 223
 - Market Signaling* 226
 - Management Incentives* 229
 - The Financing Decision and Growth* 229
- Selecting a Maturity Structure 232
 - Inflation and Financing Strategy* 233
- Appendix**
- The Irrelevance Proposition 233**
 - No Taxes* 234
 - Taxes* 236
- Summary 238
- Additional Resources 239
- Problems 240

PART FOUR

EVALUATING INVESTMENT OPPORTUNITIES 245

Chapter 7

Discounted Cash Flow Techniques 247

Figures of Merit 248

The Payback Period and the Accounting Rate of Return 249

The Time Value of Money 250

Equivalence 254

The Net Present Value 255

The Benefit–Cost Ratio 257

The Internal Rate of Return 257

A Few Applications and Extensions 261

Mutually Exclusive Alternatives and Capital Rationing 264

The IRR in Perspective 265

Determining the Relevant Cash Flows 266

Depreciation 268

Working Capital and Spontaneous Sources 270

Sunk Costs 271

Allocated Costs 272

Cannibalization 273

Excess Capacity 274

Financing Costs 276

Appendix

Mutually Exclusive Alternatives and Capital Rationing 278

What Happened to the Other \$578,000? 279

Unequal Lives 280

Capital Rationing 282

The Problem of Future Opportunities 284

A Decision Tree 284

Summary 285

Additional Resources 287

Problems 287

Chapter 8

Risk Analysis in Investment Decisions 295

Risk Defined 297

Risk and Diversification 299

Estimating Investment Risk 301

Three Techniques for Estimating Investment Risk 302

Including Risk in Investment Evaluation 303

Risk-Adjusted Discount Rates 303

The Cost of Capital 304

The Cost of Capital Defined 305

Cost of Capital for Sensient Technologies Corporation 307

The Cost of Capital in Investment Appraisal 314

Multiple Hurdle Rates 315

Four Pitfalls in the Use of Discounted Cash Flow Techniques 317

The Enterprise Perspective versus the Equity Perspective 318

Inflation 320

Real Options 321

Excessive Risk Adjustment 329

Economic Value Added 330

EVA and Investment Analysis 331

EVA's Appeal 333

A Cautionary Note 334

Appendix

Asset Beta and Adjusted Present Value 334

Beta and Financial Leverage 335

Using Asset Beta to Estimate Equity Beta 336

Asset Beta and Adjusted Present Value 337

Summary 340

Additional Resources 341

Problems 343

Chapter 9

Business Valuation and Corporate Restructuring 349

Valuing a Business 351

Assets or Equity? 352

Dead or Alive? 352

Minority Interest or Control? 354

Discounted Cash Flow Valuation 355

Free Cash Flow 356

The Terminal Value 357

A Numerical Example 360
*Problems with Present Value Approaches
to Valuation* 363
Valuation Based on Comparable Trades 363
Lack of Marketability 367
The Market for Control 368
The Premium for Control 368
Financial Reasons for Restructuring 370
The Empirical Evidence 378
The Cadbury Buyout 379
Appendix
**The Venture Capital Method of
Valuation 382**
*The Venture Capital Method—One
Financing Round* 382
*The Venture Capital Method—Multiple
Financing Rounds* 385

*Why Do Venture Capitalists Demand
Such High Returns?* 387
Summary 389
Additional Resources 390
Problems 391

**Appendix A Present
Value of \$1 397**

**Appendix B Present Value of
an Annuity of \$1 399**

Glossary 401

**Suggested Answers to
Odd-Numbered Problems 413**

Index 443