



FINANCIAL ANALYSIS SPECIALIST CERTIFICATION

## **FINANCIAL ANALYSIS SPECIALIST CERTIFICATION (FASC)**

### **STUDY GUIDE**

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Please use this guide to assist in preparation for your Financial Analysis Specialist Certification (FASC) Certification examination.

The contents of this study guide are as follows:

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## **I. FINANCE TRAINING:**

**The Finance Training Society** is the leading online program for specialized niche business certification programs. The team behind The Finance Training Society is comprised of industry experts in niches including online marketing, project management, public relations, consulting, and many more.

This experience, combined with our advisory board's expertise in online education and training, is what makes it possible to provide the training and certification programs found on our website.

The Finance Training Society is a global training and certification organization that has provided practical industry-specific certification to over 1,000 clients from the United States, Europe, and more than 30 other countries around the world.

We provide high value training programs that provide function knowledge on very specific business topics such as public relations, online marketing, project management, international business, and consulting.

**The Finance Training Society's Mission:** To provide professionals with high impact business training and certifications in niche subject areas that are functional and immediately beneficial.

**The Finance Training Society** helps you to:

- Quickly gain specialized knowledge in highly valuable business niches.
- Enhance your credibility, resume, and overall value in the marketplace.
- Complete our training programs in 5 months from anywhere in the world.

Our programs accept participants year-round and are flexible to work with your current work schedule and academic constraints. You can complete one of our programs in 2 months or 2 years; the choice is yours.

**MASTER'S CERTIFICATE PROGRAMS:** The Finance Training Society is proud to offer several advanced Master's Certificates that require the completion of five programs from the Finance Training Society platform.

To learn more about these Master's Certificates and how to earn one, please see our website:  
[FinanceTraining.com/Masters-Certificate-Online](http://FinanceTraining.com/Masters-Certificate-Online)

## **II. FASC DETAILS ANDTIMELINE:**

### **PROGRAM DETAILS:**

The Financial Analysis Specialist Certification (FASC) program is unique in that it is modeled after many online courses offered at Ivy League institutions today, offering more value for a more cost-effective program. The FASC Program is a self-study program that includes educational multimedia resources in video form, a study guide, required readings, and a flexible online examination process, accessible around the world.

The online exam is structured so that in order to complete the exam within the 2-hour time frame one must read through all of the assigned materials and conceptually understand the majority of the material to score well enough to pass the exam.

Our goal is to offer the most challenging program in the industry while also providing all of the learning tools possible to ensure participants get the most out of the experience. By testing the knowledge depth and comprehension from the materials digested, the FASC certification prepares individuals for successful, real-world application.

The Financial Analysis Specialist Certification (FASC) program is offered by The Finance Training Society. This certification program is designed to show and certify that you have gained an in-depth understanding and high-level, specialized knowledge.

In addition to the benefits of gained knowledge, growing industry recognition, more knowledgeable career choices, and networking, our organization is also developing additional resources for FASC Participants. This includes video and MP3 recordings on Q&A or strategies and tactics, webinars, access to interviews with internet marketing professionals who have more than 10 years of experience in the industry, among many more benefits.

#### 4 STEP CERTIFICATION PROCESS



#### TIMELINE & EXAMINATION DATES:

Programs are offered through open enrollment, making our programs 100% flexible to accommodate your current work or academic schedule. After joining, you can select an examination date that works best for you. We hold examinations on the 1<sup>st</sup> Wednesday of the new month, providing you with 12 different options each year.

The Finance Training Society exams are administered 100% online. When you have completed the strategic project (outlined later in this study guide), please follow the project submission instructions. Once you have submitted your completed project and sent it in for grading, you are welcome to schedule your exam date.

**Please note that your exam date request and completed project must be received at least 2 weeks before the exam date.**

**To register for an examination date:**

- 1.) Email your completed FASC project (*explained in detail in this study guide*).
- 2.) Include your desired exam date in the email with your completed project.

**LEARNING OBJECTIVES OF THE FASC:**

- Understanding and Using Net Present Value, Pricing, Costing, Working Capital, Sensitivity Analysis and other tools and best practices as a financial analyst
- Understand how to Use, Interpret and Forecast Financial Statements (Balance Sheet, Income Statement, Cash Flow)
- To be able to Perform Financial Analysis with the help of Ratio Analysis and Contribution and Margin Analysis
- To be able to Understand and Apply the Basic Principles of Accounting touching on Revenue Recognition and Income Determination
- To gain expertise in the effective use of Excel as a tool for financial analysis

**BENEFITS OF THE FASC:**

- Add the Financial Analysis Specialist Certification (FASC) Designation to your resume and business cards, assuring employers that you are dedicated to working in the industry, passionate about learning more about and able to work more efficiently after being promoted or hired
- Speak the business language - Earning the Financial Analysis Specialist Certification (FASC) Designation assures that you can attend conferences, interviews and other networking events while being able to contribute to conversations and understand discussions about current events or trends within the industry. Our program will help you to understand the terms and implement the tactics and tools of leading financial analyst business professionals
- Advance your business or career by raising your level of international business knowledge and increasing your ability to work quickly and effectively
- Exclusive Access to tools and multimedia training resources found online within the Financial Analysis Specialist Certification (FASC) Program
- Gain valuable insight into financial analysis processes that you can implement now without the need of a costly seminar or conference

**III. REQUIRED READINGS:**

1. Analysis for Financial Management by Robert Higgins. 2011. McGraw-Hill/Irwin. ISBN-13: 978-0078034688
2. Business Analysis with Microsoft Excel (3<sup>rd</sup> Edition) by Conrad Carlberg. 2007. ISBN-13: 978-0789736642
3. Financial Statements: A Step-by-Step Guide to Understanding and Creating Financial Reports by Thomas R. Ittelson. 2009. Career Press. ISBN-13: 978-1601630230

#### **IV. FASC EXAMPREPARATION**

##### **1. EXAM COMPOSITION:**

There are a total of 100 points available to earn for the exam, 80 of which can be earned from the multiple choice or true/false questions that are worth 2 points each, and 20 of which can be earned from 2 short answer questions that are worth 10 points each. Please see below for the composition and distribution of the points in-depth.

<b><u>Topics and Weights</u></b>	
<b>Financial Statements Overall</b>	Multiple Choice Questions: 11 points
<b>Business Analysis with MS Excel</b>	Multiple Choice Questions: 18 points
<b>Net Present Value, Cash Flow, Risk</b>	Multiple Choice Questions: 10 points
<b>Accounting, Business Valuation, Financial Performance</b>	Multiple Choice Questions: 13 points
<b>Balance Sheet, Income Statement, Cash Flow, Ratio Analysis</b>	Multiple Choice Questions: 28 points
<b>Cash Flow, Net Present Value, Business Valuation, Financial Statements</b>	2 Essays: 20 points

You will have 2 hours to complete the exam. Those who have not made the effort to read the materials will have a hard time completing the exam within the allotted time, but for participants who have read the required readings, 2 hours will be sufficient. **Please note that your exam date request must be received at least 2 weeks before the exam date.**

##### **2. TERMS AND CONCEPTS TO KNOW:**

Below, please find the terms and concepts that you should be able to define after having read the required readings.

Please define the terms from the required readings rather than a dictionary. You will be tested on the definitions that authors have provided.

- Taxes
- Earnings
- Financial Ratios
- Pro-forma statements
- Sensitivity Analysis
- Scenario Analysis
- Simulating
- Cash Budget
- Discounted Cash Flow
- Present Value
- Net Present Value
- Internal Rate of Return
- Discounting, Compounding
- Sunk cost
- Tax shield
- Systematic and Unsystematic risk
- Terminal Value
- Economic Value Added (EVA)
- Cash Flow, Cash Flow Cycle
- Balance Sheet
- Income Statement
- Shareholder's Equity
- Depreciation
- Accrual Accounting

### 3. SAMPLE QUESTIONS

#### 1. Payables period equals to

- a. Accounts receivable / credit purchases per day
- b. Accounts payables / credit purchases per day
- c. Accounts receivable / credit sales per day
- d. Accounts payables / credit sales per day

#### 2. Opportunity cost of any investment is

- a. The return one could earn on the next best alternative
- b. The same as internal rate of return
- c. Equal to weighted average cost of capital
- d. Equal to the systematic risk of the company

#### 3. Benefit-cost ratio

- a. Equals to profitability index
- b. PV of cash inflows / PV of cash outflows
- c. Both a and b
- d. Is always under 1

#### 4. Which one is *NOT* an accounting principle?

- a. Accounting Entity
- b. Units of Measure
- c. Historical Cost
- d. Allocation
- e. Measurement

**5. A dollar received today and invested at 10% would be worth:**

- a. \$1.21 after two years
- b. \$0.83 after two years
- c. \$1.10 after two years
- d. None of the above

**V. BOOKSUMMARIES:**

**Business Analysis with Microsoft Excel (3<sup>rd</sup> Edition) by Conrad Carlberg**

**Chapter 1 Working with Income Statements**

Accounting has two purposes: Management Accounting and Financial Accounting. Management Accounting is used to help inside decision making; financial accounting is used to help outside decisions making. Excel has a significant role in providing accurate and complete information. Income statement is a powerful tool for decision making, keeping the rules of respective GAAP. The structure of the income statement may differ based on the main profile of the company; however, each has operating and non-operating segments. The format also differs based on the audience and your purpose.

*Excel knowledge*

Functions to know: Sum, SUM IF, array formulas

*Expressions to know*

Accrual Accounting, Matching principle, adjusting entries

**Chapter 2 Balance Sheet: Current Assets**

In contrast to the Income Statement, the Balance Sheet follows a rigid format: Assets, Liabilities and Owner's Equity. Current Assets provide a picture about the company's liquidity. With the help of 'aging' or 'percentage of sales' approach the uncollectible amount of credit sales can be estimated. Understanding inventory flow is vital and complicated, it is discussed in the next chapter.

*Excel knowledge*

Workbook-level names, home sheet, sheet-level names, MAX

*Expressions to know*

T-account, Debit, Credit

**Chapter 3 Valuing Inventories for the Balance Sheet**

Inventory has a strong influence on profitability, thus there are several methods available to value and categorize it. The basic principle of inventory valuation is that the value of a unit of inventory is its cost. There are three basic methods such as 1. specific identification 2. average cost 3. FIFO and LIFO. Inventory status can be examined with the help of turns ratios that measure how frequently inventory turns over.

*Excel knowledge*

Weighted average,



IPMT, *Expressions to*

*know*

LIFO, FIFO, average cost, perpetual inventory system, periodic inventory system, turns ratios, COGS

#### **Chapter 4 Summarizing Transactions: From the Journals to the Balance Sheet**

There are different transactions recorded in the journals, it needs to be catalogued in the ledgers and then summarized in the balance sheet.

*Excel knowledge*

CHAR, Dynamic Range Names, COUNT, OFFSET

*Expressions to know*

Journal, General Ledger, Cash Receipts Journal, Cash Payments Journal, Sales Journal, Purchases Journal, Subsidiary Ledgers, Posting Process

#### **Chapter 5 Working Capital and Cash Flow Analysis**

Accrual method of accounting is the most accurate way to match revenue and expenses to determine profit; it is a vague method to examine liquidity. To get a better picture, working capital needs to be defined to show the availability of funds.

*Excel knowledge*

SLN function

*Expressions to know*

Cash method, working capital, current assets, current liabilities, cash flow, capital expenditure, revenue expenditure

#### **Chapter 6 Statement Analysis**

Information in financial statements by statement analysis and ratio analysis is used to provide insight into the company's business operation for external stakeholders. It helps to understand the company's strategies and policies. It also provides a picture of the changes in the company's value. Basic techniques of statement analysis include common sizing and variance analysis.

*Excel knowledge*

Paste special, formula auditing toolbar,

*Expressions to know*

Common sized statements, variance analysis, headcount,

#### **Chapter 7 Ratio Analysis**

Ratio analysis is essential to understand how well a company operates. It helps to assess the company's status within the industry and understand trends. As mentioned earlier there are four main group of ratios such as 1. Profitability, 2. Liquidity, 3. Activity, 4 Leverage.

*Excel knowledge*

AVERAGE

*Expressions to know*

Profitability ratios, Liquidity ratios, Activity ratios, Leverage ratios, P/E, vertical and horizontal analysis, EPS, ROA, EBIT, Average Collection Period

### **Chapter 8 Financial Planning and Control**

Financial statements are also used for financial planning, budgeting and forecasting. Percentage of Sales approach uses the concept that many company activities are tied to sales.

*Excel knowledge*

F4 key to change reference style, ROUND

*Expressions to know*

Percentage of sales, pro-forma statements, operating budget, cash budget, capital budget

### **Chapter 9 Forecasting and Projections**

Forecasting takes places based on historical numbers and company strategies broken down to operational levels. It can be very tricky as the data to be handled is incredibly complex. In this chapter it is discussed how Excel may help to reduce complexity. Page 206 - 213 is just recommended reading.

*Excel knowledge*

Auto fill, Excel Add-Ins: moving average, SERIES, TREND, GROWTH, SQRT

*Expressions to know*

Baseline, time series, moving average forecast, linear forecast, regression forecast, smoothing

### **Chapter 10 Measuring Quality - Not Required.**

### **Chapter 11 Examining a Business Case: Investment**

Business case analysis is one of the most important tools for a financial analyst. Major investment decisions require in depth financial analysis. Many factors have to be considered such as invest size, growth potential, pricing, cost, profitability, distribution, market research. For this kind of analysis complex excel models are developed from scratch.

*Excel knowledge*

Use of range names

*Expressions to know*

EBITDA, Pro forma income statement, Pro forma cash flow statement

### **Chapter 12 Examining Decision Criteria for a Business Case**

Each investment project has different decision criteria. It is defined together with the management. The most common tools used to evaluate investments are: payback periods, net present value, and discounting

*Excel knowledge*

*Expressions to know*

Net Cash Flow, Payback period, Future Value, Present Value, Net Present Value

**Chapter 13 Creating Sensitivity Analysis for a Business Case**

There are many assumptions while constructing a business case analysis. For some of these assumptions sensitivity analysis is used to better understand how sensitive the outcome is to the inputs.

*Excel knowledge*

Scenario Manager (Tools / Scenarios), Worksheet protection, Goal Seek

*Expressions to know*

Scenario management, internal rate of return, profitability indexes, continuing value, discount rate

**Chapter 14 Planning Profits**

Companies use investment (from leverage) to increase shareholder's value, however, increasing leverage means increased risk. Investors aim to understand what is the risk associated with their investment; consequently, they are interested in the leverage position of the company.

*Excel knowledge*

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*Expressions to know*

Financial leverage, operating leverage, DOL, debt ratio, times interest earned

**Chapter 15 Making Investment Decisions Under Uncertain Conditions - Not Required.**

**Chapter 16 Fixed Assets**

Fixed Assets is one of the most important parts of the financial statements and it is also the main area of investment. It is always a question of what is the acquisition and the current value of fixed assets as it contributes to profitability significantly.

*Excel knowledge*

DB, SLN, DDB, VDB

*Expressions to know*

Original cost, actual cost, replacement cost, depreciation, straight line method, sum-of-years'-digits method, accelerated depreciation

**Chapter 17 Revenue Recognition and Income Determination**

- recommended reading

**Chapter 18 Importing Business Data into Excel - Not Required.**

**Chapter 19 Analyzing Contributions and Margins**

While making investment decisions and preparing financial analysis it is important to know how to analyze margins and contributions. It helps to understand factors affecting cost and sales.

### *Excel knowledge*

IF, MIN, Convert numeric values to text values

### *Expressions to know*

Contribution margin, unit contribution, operating income statement, break-even point, sales mix, worker productivity, segment margin

**Chapter 20 Pricing and Costing** – Not Required.

## **Analysis for Financial Management** by Robert Higgins.

### **Chapter 1 – Assessing the Financial Health of the Firm**

Financial statements are an important window on reality. There are three important financial statements such as the Cash Flow, Balance Sheet and Income Statements.

The Balance Sheet provides a point-in-time picture of the company's assets and liabilities. The Income Statement reports a certain period of time the company's sales, expenses and related earnings.

The Cash Flow statements eliminates the effect of accruals and provides a picture of the company's cash in and outflows from operating, investing and financing activities. Naturally cash flow cannot be mixed with earnings; every manager should keep this in mind. As the financial statements are transaction based for financial decision making, they should be used with care keeping in mind that the need for adjustment may arise.

#### *Review questions:*

- What are the most important financial statements? What time period do they cover?
- What are the parts of the Cash Flow Cycle?
- What is the accrual principle?
- What is the difference between the straight line and accelerated depreciation method?
- What are the main parts of a cash flow statement?
- What is the difference between market value and book value?
- What are the common types of cash flow?
- What is the difference between accounting and economic income?

### **Chapter 2 – Evaluating Financial Performance**

A very important tool in analyzing financial performance, and thus financial statements, is ratio analysis. A very popular financial measure is ROE (Return On Equity), it measures the efficiency of how effectively a company uses its capital. ROE can be influenced by three types of ratios: 1. Profit Margin (shows income statement performance) 2. Asset Turnover (describes how effectively the company uses its assets) and 3. Financial Leverage (disclose how the company finances its assets).

While ROE is a very telling financial measure it has its weaknesses. It does not provide information about how risky the company is, nor does it give information on the market value of the company.

*Review questions:*

- Explain what ROE is.
- How profit margin is calculated and what does it mean?
- How inventory turnover is expressed and what does it mean?
- How would you define collection period and how is it calculated?
- How would you define days' sales in cash and how is it calculated?
- What does fixed-asset turnover mean?
- How can you describe the financial leverage status of a company?
- What is the difference between ROE and market price as a method for measuring financial performance?

### **Chapter 3 – Financial Forecasting**

Forecasting is one of the most important financial processes of a company. There are several techniques how to perform a quality forecast. Preparing Pro-Forma statements is a very reliable technique to forecast the company's income statement and balance sheet. Another simple method is the so-called percent-of-sales technique where many items on the balance sheet and income statement are extrapolated as a percentage of sales.

Today, financial forecasting is computerized, information technology helps financial forecasters to run sensitivity analysis, simulations, scenario analysis and adjust for seasonality. Planning has three levels in larger corporations: 1. Strategic Planning on senior management level; 2. Operational Cycle translates strategic goals into tangible plans; and 3. Budgeting Cycle that creates the numbers going into the forecast plan.

*Review questions:*

- What is a pro-forma statement used for?
- What does the percent-of-sales forecasting method mean?
- What other means of analysis can be done while preparing financial forecasts?
- What is simulation used for?
- What is the most important thing to watch out for when preparing a cash budget?

**Chapters 4-6 are not required.**

### **Chapter 7 – Discounted Cash Flow Techniques**

Discounted Cash Flow Techniques can be used for deciding whether to do an investment or not. It starts with estimating the cash in/out flows, then defining what discount factor to use than decide about the investment based on the Net Present Value and the Internal Rate of Return.

There are other indicators while evaluating an investment such as payback period and accounting rate of return, however these do not consider the time value of money. The most important factors to consider while defining cash flow are working capital, depreciation, sunk cost and financing cost.

*Review questions:*

- What are the most important steps of financial evaluation?
- What is the payback period?

- What is the accounting rate of return and how it is calculated?
- What is the difference between compounding and discounting?
- How is present value calculated?
- What is the difference between the present value and the net present value?
- What does BCR stand for and what does it mean?
- What is IRR?
- What does the expression 'mutually exclusive alternatives' mean?
- What are the two most important principles to define relevant cashflows?
- What is the relationship between depreciation and tax shield?
- What is sunk cost?

## **Chapter 8 – Risk Analysis in Investment Decisions**

While investing it is a very important question to answer at what level of risk do we invest? An investment creates value when its expected return exceeds its cost of capital. Total risk of an investment consists of systematic risk reflecting the economy-wide events and unsystematic risk reflecting the investment-specific events.

In order to incorporate risk into the investment decisions, discount rates should be risk adjusted to reflect the assumed risk of the project. In the case of every investment, the opportunity cost of capital will help the analyst to define cost of capital.

Economic Value Added (EVA) extends the use of cost of capital imperative to performance appraisal. In simple words, it says a company creates value for owners when operating income exceeds cost of capital employed.

*Review questions:*

- What are the aspects to investment risk?
- What is the difference between systematic and unsystematic risk?
- What are the techniques for estimating investment risk?

## **Chapter 9 – Business Valuation and Corporate Restructuring**

Business Valuation is important while executing mergers or leveraged buyouts; also it is a tool to find undervalued stocks. Investment bankers also use the concept while pricing initial public offerings. Investment bankers make use of this method when new investment opportunities are evaluated.

The question is what to assess; assets or equity? A company can be valued while liquidation or at operating stage (going concern). The aim is to define the fair market value by using discounted cash flow valuation, at the same time the concept of terminal value needs to be considered.

There are five alternatives to define terminal value such as 1. Liquidation Value 2. Book Value 3. Warranted Price-to-Earnings Multiple 4. No-Growth Perpetuity and 5. Perpetual Growth. Other valuation methods that overcome the weaknesses of discounted cash flow valuation are comparable-trades approach and comparable transactions approach. The resulting value should be adjusted to reflect marketability status and the level of control the buyer is acquiring. There are possible benefits as a result of restructuring such as increased interest tax shields, enhanced management incentives and owner control of free cash flow.

*Review questions:*

- What are the most important questions to start with when valuing a business?
- How companies can generate value to owners?
- What is FMV?
- Which one is better minority interest or control?
- What are the weaknesses of discounted cash flow valuation?
- What is the terminal value?
- What are the methods to define terminal value?
- What is the difference between the comparable trades and comparable transactions method?
- What are the possible reasons for restructuring?
- What are the steps in venture capital method of valuation?
- How would you define the cost of capital?
- What is the difference between enterprise and equity perspective?
- What are the deficiencies of discounted cash flow technique in relation to risk?
- What is EVA and how is it calculated?

## **Financial Statements: A Step-by-Step Guide to Understanding and**

**Creating Financial Reports** by Thomas R. Ittelson

### **Chapter 1 – Twelve basic principles**

There are twelve basic principles that define what, when and how should be measured in accounting systems and financial statements. Having these in place, the ground rules are set for financial reporting. These are made by FASB (Financial Accounting Standards Board) and these are the basis of GAAP (Generally Accepted Accounting Principles).

*Review question:*

- List the twelve principles and explain what they mean.

### **Chapter 2 – The Balance Sheet**

This is one of the two most important financial statements. It provides a point in time picture of the company's assets and liabilities and equity. The basic accounting equation says assets equal to the liabilities plus the equity.

*Review questions:*

- What does the accounting equation mean?
- What time horizon does the balance sheet show?
- What are current assets?
- What are the parts of inventory?
- What are other assets?
- What is the current asset cycle?
- What are net fixed assets and how are they calculated?
- What are the parts of current liabilities?
- What are the examples for accrued expenses?
- What is working capital?

- What are the components of shareholders' equity?

### **Chapter 3 – The Income Statement**

This is one of the two most important financial statements. It provides picture over a certain period of time of the company's profitability. Specifically, income equals to sales minus costs and expenses.

*Review questions:*

- What is the difference between sales and orders?
- How would you define cost?
- What is cost of goods sold?
- What is the difference between cost and expense?
- What can be the sources of income?
- What is the difference between income and revenue?
- What is accrual basis and cashbasis?

### **Chapter 4 – The Cash Flow Statement**

The Cash Flow Statement reports the company's cash inflows and cash outflows for a certain period of time. Cash Flow Statement is affected by cash transactions only; in case of non-cash transactions the Income Statement and the Balance Sheet is affected.

*Review questions:*

- List 5 cash and non-cash transactions.
- What does a Cash Flow Statement show?
- How can you classify the sources and uses of cash?
- What is a cash receipt?
- What is a cash disbursement?
- What effect does the sale of stock have on the Cash Flow Statement?

### **Chapter 5 – Connections**

This chapter summarizes the connections between the Balance Sheet, Income Statement and Cash Flow. Each statement shows the financial situation of a company from a different perspective.

*Review questions:*

- In which two statements do you find ending cash?
- What is the connection between Net Income and Retained Earnings?
- What is the connection between Net Sales and Accounts Receivable?
- What is the connection between Inventory and Cost of Goods Sold?
- Which statements are effected and how if a company sells stock?
- If a company purchases any equipment which statements are effected and how?

### **Chapters 6 – 11: Not Required.**

These chapters contain a case study of 33 specific business transactions in a virtual company called 'Appleseed'. The case study shows how Appleseed constructs and maintains its books. These are recommended readings, not required for the Financial Analysis course.



## **Chapter 12 – Keeping Track with Journals and Ledgers**

In financial accounting, journals, ledgers and sub-ledgers are used to summarize and classify the transactions.

*Review questions:*

- What is a journal?
- What is a ledger?

## **Chapter 13 – Ratio Analysis**

Ratio analysis is very important in understanding the financial statements of a company. Ratios are useful to perform year-to-year comparison, examine trends and compare companies to each other and to industry averages. Ratios can be grouped into four main categories such as

1. Liquidity
2. Asset Management
3. Profitability
4. Leverage

*Review questions:*

- What are the common size statements?
- List one ratio from every group, show how it is calculated and what does it mean?

## **Chapter 14 – Alternative Accounting Policies and Procedures**

While performing financial analysis the analyst should be aware if the company in question uses any alternative accounting policies and procedures. The selection of any alternative policy is a management decision; however, the financial books may look different upon the decision.

*Review questions:*

- What is the aggressive application of depreciation?
- What is the conservative application of revenue recognition?
- Is FIFO a conservative method?
- What is the aggressive application of showing advertising and marketing expenses?

## **Chapter 15 – Cooking the Books**

Most companies present their financial statements in accordance with the required GAAP and basic principles. However, there may be cases when management 'cooks the books'. This chapter lists the most important points to look for when analyzing financial statements.

*Review questions:*

- How many set of books should a company have?
- What are the required conditions to report revenue correctly?

## **Chapter 16 – Mission, Vision, Goals, Strategies, Actions, Tactics - recommended reading**

## **Chapter 17 – Risk and Uncertainty**

## **Chapter 18 – Making Decisions About Appleseed's Future**

- Decision tree analysis is an important tool for financial analysts. This chapter demonstrates via the case how it can be used.

*Review questions:*

- What is a strategic alternatives table?
- What is a decision tree?

### **Chapter 19 – Sources and Cost of Capital**

Besides deciding whether to invest or not, it is also very important to choose financing. Each financing option has different cost and most companies have both debt and equity in their capital structure.

*Review questions:*

- What is WACC?
- What does dilution mean?
- What is a line of credit?

### **Chapter 20 – The Time Value of Money**

For investment analysis and capital budgeting decisions, it is important to understand and analyze cash flows. The value of money changes over time; this is the basic concept for Net Present Value calculations.

*Review questions:*

- What are the main reasons for difference in the value of money over time?
- What is Present Value?
- What is discounting?

### **Chapter 21 – Net Present Value**

Net Present Value analysis is the basic tool for capital budgeting decisions. This is usually the basis of management decisions.

*Review questions:*

- How Net Present Value is calculated?
- What is IRR?
- What is the difference between NPV and IRR?
- What is sensitivity analysis?
- What is cash flow forecasting?

### **Chapter 22 – Making Good Capital Investment Decisions**

In order to make good capital investment decisions management has to decide between many alternatives. For each possible project a cash flow forecast needs to be prepared including projected sales, capital spending, and working capital changes.

*Review questions:*

- What are the main factors influencing management's decision?
- What does terminal value mean?

## **VI. FINANCIAL ANALYSIS SPECIALIST CERTIFICATION (FASC) STRATEGIC PROJECT:**

The **Financial Analysis Specialist Certification (FASC)** Program requires participants to complete a project in order to complete the program and earn the FASC designation. This project is worth 100 points and accounts for 50% of the total grade within the program. As such, non-submission of this project will result in an automatic failing grade for the FASC program. Please use the information provided in this study guide to complete the project.

**Once you have completed this project**, please send it and your request to take your desired exam date at least 2 weeks before the scheduled exam date. To schedule yourself for an exam date, this project must be received, completed, at least 2 weeks before the exam date. For example, to take the October 10<sup>th</sup> exam date, this project must be received (as well as a request to take the exam) no later than September 26<sup>th</sup>.

Please send it to FASC@BusinessTraining.com. After you have submitted your completed project, you will be able to schedule your exam.

### **IMAGINARY, LIMITED**

#### **Case Study**

George Brown opened his own local store 5 years ago in a small city in the US. He has worked more than 10 years in the same industry, namely brewing. He knows all about beer, how to make it, how to advertise it, how to sell it. He opened a wholesaler store as has very good contacts with many manufacturers. As George had the necessary expertise to select the proper brands for the market, he more than doubled his business by the third year.

All the predicted industry trends were encouraging, so George expected his sales to increase or at minimum keep the current level. However, he had bad feelings about his cash flow situation. He knew he has to take a closer look, especially as he planned to get some external funding to fuel further growth. He also saw his financial statements and realized that in 2008 and 2009 the net income was negative. He knew he had to act immediately before his customers and suppliers found out.

He decided to hire an intern as financial analyst to analyze the situation and make recommendations on how to improve it and how to get the desired bank loan. He quickly found an agile lady: Sarah.

See below the financial statements of Imaginary Limited for the last five years:

**BALANCE SHEET**

	2005	2006	2007	2008	2009
Cash and marketable securities	\$190,650	\$380,192	\$93,416	\$35,456	\$22,663
Accounts receivable	12,300	14,760	24,600	95,513	110,796
Inventory	307,500	332,100	615,000	639,600	688,800
<b>CURRENT ASSETS</b>	<b>\$510,450</b>	<b>\$727,052</b>	<b>\$733,016</b>	<b>\$770,569</b>	<b>\$822,259</b>
Land, buildings, plant, and equipment	\$307,500	\$307,500	\$615,000	\$615,000	\$615,000
Accumulated depreciation	-30,750	-61,500	-123,000	-184,500	-246,000
<b>Net fixed assets</b>	<b>\$276,750</b>	<b>\$246,000</b>	<b>\$492,000</b>	<b>\$430,500</b>	<b>\$369,000</b>
<b>Total assets</b>	<b>\$787,200</b>	<b>\$973,052</b>	<b>\$1,225,016</b>	<b>\$1,201,069</b>	<b>\$1,191,259</b>
<b>LIABILITIES AND EQUITIES</b>					
Short-term bank loans	\$61,500	\$178,350	\$172,200	\$182,040	\$182,040
Accounts payable	12,300	12,922	24,598	19,674	20,658
Accruals	6,150	6,273	9,017	11,440	14,300
<b>Current liabilities</b>	<b>\$79,950</b>	<b>\$197,545</b>	<b>\$205,815</b>	<b>\$213,154</b>	<b>\$216,998</b>
Long-term bank loans	\$77,940	\$120,540	\$241,080	\$233,700	\$225,090
Mortgage	215,250	212,790	333,330	329,640	324,720
Long-term debt	\$293,190	\$333,330	\$574,410	\$563,340	\$549,810
<b>Total liabilities</b>	<b>\$373,140</b>	<b>\$530,875</b>	<b>\$780,225</b>	<b>\$776,494</b>	<b>\$766,808</b>
Common stock (1, shares)	\$393,600	\$393,600	\$393,600	\$393,600	\$393,600
Retained earnings	20,460	48,576	51,191	30,976	30,851
<b>Total equity</b>	<b>\$414,060</b>	<b>\$442,176</b>	<b>\$444,791</b>	<b>\$424,576</b>	<b>\$424,451</b>
<b>Total liabilities and equity</b>	<b>\$787,200</b>	<b>\$973,052</b>	<b>\$1,225,016</b>	<b>\$1,201,070</b>	<b>\$1,191,259</b>

### INCOME STATEMENT

	2005	2006	2007	2008	2009
Net sales	\$738,000	\$805,650	\$959,400	\$1,074,528	\$1,246,452
Cost of goods sold	\$590,400	\$660,633	\$805,896	\$913,349	\$1,059,485
<b>Gross profit</b>	<b>\$147,600</b>	<b>\$145,017</b>	<b>\$153,504</b>	<b>\$161,179</b>	<b>\$186,967</b>
Admin and selling expense	\$36,900	\$18,874	\$20,764	\$53,726	\$49,858
Depreciation	\$30,750	\$30,750	\$61,500	\$61,500	\$61,500
Miscellaneous expenses	\$2,493	\$4,375	\$7,042	\$21,491	\$18,697
<b>Total operating expense</b>	<b>\$70,143</b>	<b>\$53,999</b>	<b>\$89,305</b>	<b>\$136,717</b>	<b>\$130,055</b>
<b>EBIT</b>	<b>\$77,457</b>	<b>\$91,018</b>	<b>\$64,199</b>	<b>\$24,462</b>	<b>\$56,912</b>
Interest on Short Term loans	\$18,450	\$19,619	\$17,220	\$16,384	\$16,384
Interest on Long Term loans	\$9,840	\$9,643	\$19,286	\$18,696	\$18,007
Interest on mortgage	\$15,068	\$14,895	\$23,333	\$23,075	\$22,730
<b>Total interest</b>	<b>\$43,358</b>	<b>\$44,157</b>	<b>\$59,840</b>	<b>\$58,154</b>	<b>\$57,121</b>
Before-tax earnings	\$34,099	\$46,861	\$4,359	(\$33,692)	(\$209)
Taxes	\$13,639	\$18,744	\$1,744	(\$13,477)	(\$84)
<b>Net income</b>	<b>\$20,460</b>	<b>\$28,117</b>	<b>\$2,615</b>	<b>(\$20,215)</b>	<b>(\$125)</b>
Dividends on stock	\$0	\$0	\$0	\$0	\$0
Additions to retained earnings	\$20,460	\$28,117	\$2,615	(\$20,215)	(\$125)
EPS (1, shares)	\$0	\$0	\$0	(\$0)	\$0

## CASE STUDY QUESTIONS

1. Which financial statements should Sarah present and which should she build so as to develop a fair assessment of the firm's financial condition? Explain why?
  2. What calculations should Sarah do in order to get a good picture of Imaginary's performance?
  3. Sarah knows that she should compare Imaginary's condition with an appropriate benchmark. How should she obtain the necessary comparison data?
  4. Besides comparison with the benchmark what other types of analyses could Sarah perform to best analyze the firm's condition?
  5. Perform the suggested analyses and comment on your findings.
  6. Comment on Imaginary's liquidity, asset utilization, long-term solvency, and profitability ratios. What arguments would have to be made to convince the bank that they should grant Imaginary the loan?
  7. If you were the commercial loan officer and were approached by George for a short-term loan of \$20,000, what would your decision be?
  8. What recommendations should Sarah make for improvement, if any?
  9. What kinds of problems do you think Sarah would have to handle when doing financial statement analysis of Imaginary Limited? What are the limitations of financial statement analysis in general?
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1. **B.** Reason being: Payables period is calculated from accounts payables and credit purchases per day. Payables period uses credit purchases, because they are what generate accounts payable. Answer can be found in *Analysis for Financial Management*.
  2. By definition, the opportunity cost of any investment is the return one could earn on the next best alternative. Answer can be found in *Analysis for Financial Management*.
  3. **BCR** - benefit-cost ratio is also known as profitability index. It is calculated as the present value of cash inflows per present value of cash outflows. If it exceeds 1 the investment is attractive, if it stays under 1 it is unattractive. Answer can be found in *Analysis for Financial Management*.
  4. **H.** Allocation is not an accounting principle; it is a management accounting method to allocate cost not specifically associated with a product. Answer can be found in *Financial Statements*.
  5. **A.** Future value equals to  $\$1 \times 1.1 \times 1.1 = \$1.21$  Answer can be found in *Business Analysis with Microsoft Exce*



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### VII. FAQ (FREQUENTLY ASKED QUESTIONS):

**Have more questions or need more information?** Please see our constantly updated FAQ (Frequently Asked Questions) section on the Finance Training Society website here at [FinanceTraining.com/Questions](http://FinanceTraining.com/Questions)

You can also get in touch with the Finance Training Society team over email at [Team@FinanceTraining.com](mailto:Team@FinanceTraining.com), by phone at 305-503-9050, and through our ClickAndChat tool, accessible from our homepage: [FinanceTraining.com](http://FinanceTraining.com)

Thanks for joining The Finance Training Society! Please let us know if you have any questions.

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