

BOOK REPORT FOR:

**Finance & Accounting for Nonfinancial Managers**, by Finkler, Steven A., 2011, CCH,  
Chicago

Prepared by

***AHMED I ALHUSSAINA***

**Finance & Accounting for Non-Financial Managers** by Steven A. Finkler, Ph.D., CPA

## Table of Contents

Chapter One – An Introduction to Financial Management	p. 4
Financial Management – Definition	4
Goals of Financial Management	4
Chapter Two – Excel Basics	5
Spreadsheets	5
Chapter Three – Accounting Concepts	6
Introduction	6
The Accounting Equation	6
Chapter Four – An Introduction to the Key Financial Statements	7
The Balance Sheet	7
The Income Statement	7
The Statement of Cash Flows	7
Cash Versus Accrual Accounting	7
Chapter Five – Where Does the Organization’s money Come From	8
Capital Structure	8
Chapter Six – Strategic Planning and Budgeting	9
Strategic Plan	9
Long-Range Plan	9
Budgets	9
Chapter Seven – Business Plans	10
Business Plans	10
Tips for Success	10
Chapter Eight – Cost Accounting	12
Average vs. Marginal Costs	12
Inventory Process	12
Costs	12
Chapter Nine – Leverage	13

Financial Leverage	13
Operating Leverage	14
Chapter Ten – Dealing with Uncertainty	15
The Expected Value Technique	15
Network Cost budgeting	15
Chapter Eleven – Capital Budgeting	16
The Payback Method	16
The Time Value of Money	16
Net Present Value	17
Internal Rate of Return	17
Chapter 12 – Earned Value Management	18
Quantifying Planned Value (PV) and Earned Value (EV)	18
EVM Method	18
Chapter 13 – Depreciation: Having Your Cake and Eating it Too!	19
Depreciation	19
Depreciation Methods	20
Modified Accelerated Cost Recovery System (MACRS)	20
Chapter 14 – Long-Term Financing	20
Chapter 15 - Working Capital Management and Banking Relationships	22
Working Capital Management	22
Short-Term Resources	22
Short-Term Obligations	23
Banking Relationships	24
Chapter 16 – Inventory Costing: The Accountant’s World of Make – Believe	24
Periodic vs. Perpetual Inventory Methods	24
Cost-Flow Assumptions	25
LIFO and FIFO	25
LIFO and IFRS	25
Chapter 17 – Variance Analysis: Using Budgets for Control	25
Static Budgets	26
Flexible Budgeting	26

Chapter 18 – Fraud	26
Preventing Fraud	26
Chapter 19 – The Role of the Outside Auditor	27
Generally Accepted Accounting Principles (GAAP)	28
International Financial Reporting Standards	28
The Audit	28
Chapter 20 – Recording and Reporting Financial Information	29
Double Entry and the Accounting Equation	29
Debits and Credits	29
Ledgers	29
Chapter 21 – Valuation of Assets, Liabilities and Stockholder’s Equity	30
Asset Valuation	30
Valuation of Liabilities	31
Valuation of Stockholder’s Equity	31
Chapter 22 – A Closer Look at Financial Statements	32
The Balance Sheet	32
The Income Statement	32
The Statement of Cash Flows	33
Chapter 23 - Notes to the Financial Statements	33
Significant Accounting Policies	33
Other Notes	34
Summary	34
Chapter 24 – Ratio Analysis	34
Benchmarks for Comparison	34
Ratios	35
Chapter 25 – A Primer on Taxes	36
Personal vs. Corporate Taxes	36
The Tax Rate and the Tax Base	36
Chapter 26 – Summary and Conclusion	37

## **Chapter 1: An Introduction to Financial Management**

### **Financial Management – Definition**

Financial management uses accounting and finance practices to record a firm's financial history and predict its future. Accounting practices are made up of financial accounting and managerial accounting. Financial accounting follows accepted principles to record the financial history of the firm. Financial accountants prepare the firm's financial quarterly and annual statements for their stakeholders. Managerial accountants use these statements to forecast future performance and help senior management with their strategic decisions.

### **Goals of Financial Management**

Effective financial management adds to the profitability and viability of the organization. This is a balance of risk and liquidity. The maximization of profit depends on the risk level the organization is willing to take. In general, the higher the risk involved in the investment, the higher the expected return. The financial manager cannot however, invest in the projects with the highest risk. Enough assets must be liquid to cover operational costs and keep the firm viable.

It doesn't matter how profitable a firm is if it is not viable. Viability is comprised of two elements; liquidity and solvency. An organization must maintain sufficient liquidity to meet their short-term funding requirements for the next year. Solvency is the long-term measure of the organization's financial health. An organization should have three, five, and ten year cash management plans to meet the solvency requirements of the firm. The author provides a strong example on how a firm may be profitable but without a plan for short and long – term cash needs, its viability is threatened. Organizations must use financial management to plan for their short-term and long-term financial needs so that excess cash can be invested profitably.

## **Chapter 2: Excel Basics**

Excel spreadsheets are an essential tool of most areas of the organizations. It is part of the Microsoft Office suite of software programs that are installed on nearly every computer station in the business world. It is very user friendly and allows users to complete their computations in a number of ways. The author provides excel templates for Excel beginners to practice the techniques discussed in the chapter. Those that are familiar with Excel are suggested to skip this chapter.

### **Spreadsheets**

Before computers, spreadsheets, accountants tracked financial statements on spreadsheet paper. This paper had gridlines to track the financial data neatly. Excel is the dominant computer form of this grid format. It takes the reports from the paper format, completed with calculators, and puts all of the data on the computer.

The program goes far beyond organizing the data neatly. They can also do computations like addition, averages, sorting, and a number of other functions. It is very useful to many areas of an organization, from operations, inventory management, payroll, and, of course, financial management.

The book provides many clear examples of the Excel screens and functions that are most commonly used in financial management. They provide examples of using Excel to calculate salary and benefits and projected human capital costs. Excel is also typically used to produce the organization's financial statements. The chapter also discussed how cells of the spreadsheet are linked together and how updates to one cell can impact formulas in other parts of the spreadsheet and how users can take advantage of cut and paste.

## **Chapter 3: Accounting Concepts**

### **Introduction**

Accounting is the set of principles and calculations that are used to document the firm's financial history and forecast its financial future. Accountants prepare documents for and do calculations on a specific business entity. They must all be created under a single currency, or monetary denominator. This can be the entire enterprise or a geographical or product line segment. For financial communications, it is important the business entity is clear.

An organization's finances are categorized as assets, liabilities and owner's equity. Assets include the organization's cash, equipment, securities, property and copyrights. These are tangible assets. A firm can also have intangible assets. Intangible assets are goodwill gained in a merger or acquisition of another firm when the purchase price is higher than the value of the firm's assets. Its customers and brand, for example, may warrant a value above the firm's book value. Together, these assets are what the firm owns. Liabilities include accounts payable, lines of credit, loans, and bonds. Liabilities are what the firm owes. Lastly, owner's equity is the value of the firm to owners. It is also called stockholder's equity. The author compares it to a homeowner's equity.

### **The Accounting Equation**

The relationship between assets, liabilities, and owners' equity is described in financial accounting as:

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNERS' EQUITY}$$

The left side of this equation represents the firm's resources, and the right side of the equation represents the source, or funding of these resources. The right side is made up of credit and owners investment.

## **Chapter 4: An Introduction to the Key Financial Statements**

There are three primary financial statements organizations use to communicate their financial position to their stakeholders; the balance sheet, income statement, and the statement of cash flows.

### **The Balance Sheet**

The balance sheet reports a firm's financial position on a specific date; typically quarter end or year end. A firm may choose to report on a fiscal year instead of a calendar year. It is a representation of the basic accounting equation  $\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$ . It lists the current and fixed assets of the organization as well as investments and intangibles.

### **The Income Statement**

The income statement documents the firm's revenues and expenses and reports the firm's net income. This is the ultimate profit of the firm. The income statement doesn't report a single day, like the balance sheet, rather, it represents a period of time like a quarter or a fiscal year. It is the income statement that can paint the positive growth rate of the firm; comparing revenues and net incomes from year to year. "Since maximizing the wealth of the stockholders of the firm is a key goal of the firm, it is important to convey to the stockholders the changes in the amount of the firm's income that is being retained for use by the firm," (Finkler, p. 35). The income statement clearly shows the revenues of the firm as well as retained earnings.

### **The Statement of Cash Flows**

The statement of cash flows reports the liquidity of the firm; detailing the cash inflows and outflows over the reporting period. This gives a more complete view of current assets than the balance sheet can.

### **Cash Versus Accrual Accounting**

The difference between cash and accrual accounting explains the difference between the income and cash flow statements. Revenues can either be reported only when it is collected, a

cash accrual system, or it can be counted at the time of sale to better match with expenses matched to the same period. The accrual method is thought of as more accurate than the simple cash method.

## **Chapter 5: Where Does the Organization's Money Come From? Capital Structure**

### **Capital Structure**

Starting a firm takes capital. Sometimes this is the private investment of an owner. This can be a single owner, a partnership of two or more private owners, or a private or public corporation. Often this equity financing is supplemented with debt financing. The balance between the equity ownership and debt financing is the firm's capital structure. Each firm has a capital structure that is unique to them. This is slightly different for a not-for-profit organization who don't have owners and where funding is made up of donations and loans rather than equity.

For most firms, the financing provided by equity ownership is not sufficient to finance all of a firm's goals. Most firms' capital structures, therefore, are a combination of common stock, preferred stock, and debt. Other sources include stock options and stock rights. Each of these sources has their costs. Debt leads to principle and interest payments that can impact future cash flows, even when profits are low. Equity sources, on the other hands only pay dividends when excess profits have been earned. The mix of these sources and their associated costs are an important one for the firm. Their goal of the organization is find the mix that keeps their cost of capital low.

New firms have a few options for initial funding. They may seek venture capital; investors who invest in start-ups, hoping their initial venture capital will lead to an initial public offering and huge returns for themselves. Similarly, firms can seek private placement where they sell shares to a small number of large investors who have to meet specific requirements for income and net worth. For established firms, an IPO may be an option. This issues stock to the

public so it is highly regulated and costly to undertake. On the debt side, firms can issue bonds. Bonds and promises to pay the principle at some future date and making interest payments during this period. Bondholders will be paid before any shareholders if the firm declares bankruptcy. Lastly, firms can sign leases for the property and equipment they need. Since the rent payment is similar to a loan payment, it is considered debt financing.

## **Chapter 6 – Strategic Planning and Budgeting**

### **Strategic Plan**

Every business needs a mission; why the business exists and what it hopes to accomplish. A strategic plan states how the firm is going to get there. The author used an example of a food kitchen and the different approaches they could take to achieve their goal of feeding the homeless. They could lobby for the government to provide these services, or they could provide the food directly. If they chose to serve the meals, the strategic plan would lay out the organizations goals for growth in reaching more people in need each year.

### **Long-Range Plan**

The long-range plan would include more details on how the organization will grow over the next several years. In the chapter example, the long-range plan detailed how the soup kitchen would increase the percentage of their target population it could serve from 20% to 60%. This plan determines how much financing the firm will require to meet these objectives.

### **Budgets**

A business must prepare several annual budgets; operating budget, cash budget, and capital budget. The operating budget is a projected income statement. Cash inflows and outflows are projected on the cash budget. A capital budget will be prepared for any capital asset acquisitions. Budgets detail how the firm move toward its goals over the year. It is used as both a decision-making tool and as a communication tool.

The next step is to create an environmental statement outlining industry trends, changes in the customer base, technological changes and other factors that could impact its position or budget. There should also be a statement of objectives and policies as well a list of assumptions that will be used in the budget. Lastly, the firm should have goals for the year like in sales or revenue growth.

Forecasting is also used in the budgeting preparation process to explore how the firm would be affected by a variety of alternative scenarios. Typically, historical patterns are used to develop forecasts; computers make recognizing these patterns much easier.

All of these pieces of data will help departments create their own budgets detailing their specific expenses and revenue sources. They may opt to use a flexible budget if workload levels are likely to be varied.

Lastly, the chapter discusses zero-based budgeting. ZBB is a different approach to budgeting where each budget starts at zero and every department must justify their costs. The author contrasts it with incremental budgeting where expenses are projected to increase at set rates over the previous year.

## **Chapter 7 – Business Plan**

### **Business Plans**

A business plan can be developed for either new business or a new project for an existing business. It lays out the details of the new venture that will be needed to evaluate the merits and potential for the idea. If the business plan is good, it can be an important tool to help the department or organization get approval or financing. Additionally, it can serve as a roadmap for the firm to make the project a success.

There are a number of questions that a business plan should answer:

- What is the business or project being considered?

- Why should the organization pursue the venture?
- Who is the target market?
- How large is this market?
- What share of the market could the organization capture?
- What price could be charged for the product or service?
- Where will it be located?
- How will it be financed?

The business plan must clearly answer these questions as well as providing more operational details as well as projected financial statements. If a firm wants to get financing for a venture it must make its case that it has a plan to be successful.

Business plans typically include a standard set of elements. These include a Cover Memo, Title Page, Table of Contents, Executive Summary, Description of the Initiative, Organizational Structure, Market Analysis, Marketing Plan, Financial/Resource Requirement Plan, Financial Feasibility Analysis, Implementation/Operating plan, Key Performance Measures, and Summary of Strengths and Weaknesses, Including Risks.

### **Tips for Success**

A successful business plan sure assure its reader that the venture is financially viable, the market will support it, and the management team can be successful. If all of these cannot be answered in the affirmative, the project should not move forward. These can be answered successful by being concise and to the point yet provide all of the data needed to make a decision. Successful business plans also clearly define the idea and presents the strengths and weaknesses of that idea and the business behind it. It must show that the firm has though of all aspects of the venture and that they believe strongly in its success.

## **Chapter 8 – Cost Accounting**

### **Average vs. Marginal Costs**

Chapter Eight focuses on how to document a firm's costs. It starts with a discussion of average and marginal costs and the difference between fixed and variable costs. Average cost represents the cost per unit while marginal costs represent how much it costs to make one more unit. The difference is how they treat fixed costs. Fixed costs are those costs that the firm is responsible for no matter the level of production. Variable costs, on the other hand, are based on the volume of production. The author gives a manufacturing example to demonstrate the significance of marginal costs. The example shows how it can be profitable to price a product at a loss if the marginal costs are less than its revenue.

### **Inventory Process**

From an accounting perspective, there is a distinct difference between costs and expenses. Costs represent what was paid to acquire an item. Expenses represent the resources used to obtain the item. Costs can only be recorded as expenses in the fiscal year in which the matching revenues are recorded. Until then it is treated as an asset. To illustrate this process and the accounting problems it creates, the author uses the example of a clay statue manufacturer and how the cost of the clay is moved from a cost in raw materials, through work – in – progress, to the finished goods inventory and recorded as an expense in the cost – of – goods sold.

### **Costs**

Another categorization of costs is period costs versus product costs which encompass far more than only production costs. Production costs are represented by product costs in this categorization, and all non production costs are period costs.

Cost accounting seeks to assign a cost to each unit acquired or produced. For this, they use process or job-order actual costing. These systems use cost data to assign costs directly to

inventory units. The process costing system uses cost per unit based on total costs on either a batch basis or on a continual monthly basis. Job-order costing, on the other hand, looks at each cost individually as it assigns them to units produced. This is a more costly accounting method, however, it is more accurate when costs between materials or labor can vary greatly and thus cannot just be assigned on an average basis.

Firms also have a decision to make when it comes to cost allocation. Costs can be either direct or indirect. Direct costs are easy to tie to specific units. Indirect costs are less clear. One method of allocating direct and indirect costs is Activity-Based Costing (ABC). This method examines drivers of overhead costs in its allocation of them. The chapter ends with an example of ABC.

## **Chapter 9 – Leverage**

Leverage is a measure of risk that the firm has incurred. There are two types of leverage; financial leverage and operating leverage. Financial leverage represents the firm's debt commitments. Operating leverage represents the firm's commitment to capital assets or non-financial commitments.

### **Financial Leverage**

Financial leverage refers to the level of debt in the firm's capital structure. A firm is highly leveraged when its debt level is high relative to its equity. A high debt level is risky because the firm is committed to future interest and principle payments and the firm must consider these financial responsibility fixed costs. High levels of fixed costs are risky since payments are due even in tough economic times. This causes liquidity issues for the firm.

The author provided an example of why a firm must balance its level of financial leverage. The interest payments cut into the profits of the firm's investment, however, leverage allows the firm to potentially invest in multiple projects. Investing in multiple projects is

obviously more risky. Firms balance this risk by following the idea of OPM, other people's money. In short, this is a rule that borrowed funds must be invested in a project where the rate of return is higher than the interest rate. This creates an income without any investment of the firm's own money.

The level of leverage a firm is comfortable with will depend on many factors. One is obviously the interest rate on credit and the expected returns of potential investments. Another is the stability of earnings of the firm. If the organization's cash flow is steady and predictable, it can handle a greater level of risk. On the other hand, a business with seasonal revenues could create liquidity issues if it becomes too highly leveraged. "The key is to accumulate no more interest and principal repayment obligations than can reasonable by met in bad times as well as good," (Finkler, p. 93).

### **Operating Leverage**

Capital needs are equally important in the firm's liquidity projections. Purchasing or leasing property and equipment or acquiring another firm, are major commitments for a firm. They are fixed costs the firm is responsible for in good times and bad. These investments should be made with the input of the production managers impacted by these investments. The author used technology as the perfect example. Technology ages quickly so it is sometimes hard to justify the investment in the "latest" technology.

When management evaluates potential capital projects and the level of production, they will perform a break-even analysis. Break-even analysis is stated as:

$$\text{Break-Even Quantity} = \text{Fixed Costs} / \text{Price} - \text{Variable Cost}$$

This equation states how many units the business will have to produce and sell to cover all costs and the point at which all future marginal revenues will represent profit. The author uses the example of a copy center considering which copy machine to purchase.

## **Chapter 10 – Dealing with Uncertainty**

Managers must use projected data for revenues and expenses for projected budgets and financial statements. These projections are critical for strategic decision making. The chapter discusses two approaches to making these projections; expected value and network cost budgeting.

### **The Expected Value Technique**

The expected value technique uses the probability of certain events occurring. The author uses an example of a firm considering the purchase of new equipment. If demand stays the same, it would be a good investment. Should competition cut demand in half, however, the investment will not be profitable. There are more possible scenarios as well. The firm could decide not to buy the new equipment and the competition does anyway. A manager must decide which demand estimate they should use. The expected value technique will find a middle ground using weighted average. The expected value analysis must look at all of these options. This method multiplies the probability of the event by the event's payoff. The author points out one flaw of this approach; that investors are risk-neutral. This assumes that investors are willing to lose on some projects if they think they are going to win on the next one. In reality, most people are somewhat risk-averse. To take risk, they demand a risk premium.

### **Network Cost budgeting**

Network Cost budgeting uses network analysis to determine the relative costs of two or more decision options. Network analysis can help find congestion points in the network and

calculate the costs and benefits of alleviating that congestion. This network analysis has some important elements. The critical path is the route through the necessary tasks to complete an activity. It is the total number of days it takes to move through all of these tasks. This is the minimum number of days to complete the network. The firms will have to decide how important speed of completion is when compared to costs.

The chapter details how a firm should calculate the network cost. Each activity is reviewed to find the most economical way to shorten the process by one day. Then they must calculate the benefit of shortening of the process.

## **Chapter 11 – Capital Budgeting**

An organization can only invest in so many projects within one fiscal year. The process of analyzing the options and planning the long-term projects the firm will invest in is called capital budgeting. This chapter describes how managers identify potential investments and compare them using the payback method, net present value, and the internal rate of return. With each of these methods, managers will use data from the expected cash flows.

### **The Payback Method**

The payback method is an easy tool to use to quickly evaluate an investment. It looks at cash flows to determine how quickly the investment will pay for itself. While this is useful information, it is not the only criteria that needs to be considered when evaluating investments. This method ignores cash flows beyond they payback period, the timing of the cash flows, and the time value of money.

### **The Time Value of Money**

The time value of money is the idea that we prefer to receive payment now and if payment is going to be at some point in the future, we expect to be paid more. To understand the

concept of the time value of money, the author first discusses the difference between simple interest and compounded interest. The time value of money formula:

$$FV = PV (1+i)^n$$

is based on annual compounding. The author provides several examples of its use. The author also presents the time value of money formula involving annuity payments.

$$FV = PMT [(1+i)^n - 1/i]$$

Today, these calculations are typically done in an Excel spreadsheet and the author provides several examples on how.

### **Net Present Value**

The net present value is a method used by managers to determine if a potential investment will earn a return higher than the firm's hurdle rate. The hurdle rate is the required rate of return for a project to be deemed acceptable. This rate is determined by the organization and should incorporate both profit and risk. Using the hurdle rate, managers can use the net present value method to compare the present value of the project's cash inflows and the project's cash outflows. If the inflows are greater than outflows, the hurdle rate has been met and the project has an acceptable level of profitability.

### **Internal Rate of Return**

The internal rate of return method eliminates the hurdle rate. Using the formula in Excel, managers can simply calculate the rate of return of the project directly. This allows for better comparison between multiple potential investments. Managers can use the Internal Rate of Return to rank acceptable projects.

## **Chapter 12 – Earned Value Management**

The Earned Value Management (EVM) is a technique managers can use to manage the unique complexities and uncertainties inherent in projects. Effective use of EVM can help keep a project on time and on budget by calling attention to problems before they spiral out of control like Boston's Big Dig highway project that the author used as an example. There are four critical elements to EVM: a plan for the project, Planned Value or Budgeted Cost of Work Scheduled, metrics, and ongoing monitoring of progress.

### **Quantifying Planned Value (PV) and Earned Value (EV)**

Planned Value is essentially a budget for the project if every part of the project was completed on time and on budget. If a firm can quantify the amount of work actually completed, then managers would be able to compare where the project is to where it is supposed to be. Computing a dollar quantification for each element of the projected completed gives the cumulative EV for the project. The difference between Planned Value and Earned Value is called Scheduled Variance. The author presents several charts to depict these concepts.

### **EVM Method**

The chapter then explains each of the critical elements of EVM. The project obviously has to start with a plan. This includes breaking down the project into individual elements of work. EVM requires measurable activities. Next, these elements must be assigned a Planned Value. The sum of these PVs is the budget for the project. Metrics must then be created to measure the completion of the project. This is not a one-time endeavor but an ongoing monitoring of the progress on each activity.

One limitation of EVM is it only looks at the cost and duration of the project to measure success, not quality of the work. EVM does have its benefits though. It creates better planned projects, reduces risk, improves communications, and provides a method of accountability.

## **Chapter 13 – Depreciation: Having Your Cake and Eating it Too!**

### **Depreciation**

Depreciation allocates capital costs over the useful life of it. The actual spreading out of costs over this time period is called amortization. Depreciation, a type of amortization, represents the wearing down of the asset over time. When the asset depletes rather than wears out, such as natural resources, it is referred to amortization, not depreciation. If the equipment or other capital purchase was not depreciated, expenses would be skewed negatively in the first year of the acquisition and profits skewed positively in subsequent years. Depreciation balances this out.

To calculate depreciation, we need to know the asset valuation, how much of that valuation is depreciable, and the useful life of the asset. The asset valuation is the cost of the asset and costs associated with putting the asset into service. Not all of these costs will we want to depreciate. The asset valuation minus the amount of the asset that will not be consumed is called the depreciable base. This may, for example, factor in the salvage value of the asset. The last data point required is the asset life. Depreciation is based on how long the asset can be expected to last. This can be hard to estimate and most assets end up lasting longer than their recorded useful life.

## **Depreciation Methods**

### **Straight-Line vs. Accelerated Depreciation**

Straight-line depreciation divides the costs equally over the asset life. But not all assets are going to wear down equally each year. Alternatively, depreciation can be based on units of production or units of activity; measuring how much the asset is actually used. Certain assets, like cars, decline in value much greater in the first few years of ownership than at the end of their useful life. The author then offers an extensive example of each method of depreciation on the purchase of a machine; comparing straight-line, double declining balance, and sum-of-the-years-digits.

### **Modified Accelerated Cost Recovery System (MACRS)**

Accounting rules allow firms to change the method of depreciation used depending on the audience of the financial statements. Straight-line can be used for the reports shown the shareholders and accelerated methods can be used for tax advantages. MACRS cannot decrease the amount of taxes owed in the long-run, but it can delay tax payments, giving the organization an interest-free loan. As equipment is replaced, it creates a permanent interest – free loan. “A bit of accounting magic,” (Finkler, p. 147).

## **Chapter 14 – Long-Term Financing**

Long-term debt is borrowings with a payback period of over one year. They are the primary funding source of funding for a firm’s operations. There are several options in this category: long-term notes, mortgages, bonds and leases.

## **Long-Term Notes**

Long-term notes are typically unsecured loans, though some lenders may ask for collateral. The company can then put up a piece of equipment, securities, or other asset to secure the loan.

## **Mortgages**

Loans that are secured by real property are call mortgages. The collateral can be land and anything attached to it. They can be structured in several ways. Some mortgages can be set up with balloon payments where they whole principle and interest is due in one large balloon payment. Some can be your typical mortgage where principal and interest is paid each month. The proportion of the payment that goes to interest will decrease over time as the principal on which it is due decreases. The Excel formula for this is:

=PMT(rate, nper, pv, fv, type)

The chapter also provides a table of a typical mortgage repayment schedule.

## **Bonds**

Bonds are also promises to repay a loan at a stated future day, called a maturity date, but bonds are used for much larger sums of money. Bonds are issued to hundreds or thousands of individual or institutional bond holders who are each paid an interest payment on the face value of their bond until the maturity date. Bonds are transferable so they may be bought and sold. The price paid for these bonds can be either higher or lower than the face value of then bond based on what the PV of the bond is given its interest rate and where current interest rates are at in relation. Organizations can repay or refinance their bonds by making them callable, allowing them to pay the bond off before the maturity date.

## **Leases**

Under a lease agreement, an organization would pay the owner of an asset for the use of that asset for a set period of time. In exchange, the organization would make monthly lease payments. There are two types of leases: operating leases and capital leases. The asset that is being leased in an operating lease is treated as a rental and the asset is not carried on the firm's balance sheet. On the other hand, the asset leased under capital leases is considered owned and does appear on the balance sheet with an offsetting liability. Leases provide greater flexibility but usually cost more than mortgages. There are also tax considerations with leases where the benefit of depreciation can be transferred to the party in the higher tax bracket.

## **Chapter 15 - Working Capital Management and Banking Relationships**

### **Working Capital Management**

Working capital is the difference between a firm's current assets and its current liabilities. Working capital management maximizes "the benefit of short-term resources and minimize the cost of short-term obligations," (Finkler, p. 161).

### **Short-Term Resources**

Short-term resources refers to current assets like cash, marketable securities, accounts receivable, and inventory. Cash includes currency on hand as well as what is available for withdrawal from bank accounts. Despite the low return on cash, a firm must keep some cash on hand to cover daily transactions, as a safety net for unexpected expenses, or to take advantage of unexpected opportunities.

There are short-term investments that pay higher returns than cash or cash equivalents but that are very liquid and can be converted into cash quickly. These can include CD's, Treasury bills, commercial paper, repurchase agreements or derivatives.

Accounts receivable are moneys due from the organization's customers. Firms should always attempt to collect these receivables in the shortest amount of time possible. The firm should have clear credit policies and established billing processes. Firms often age their account receivables to help them identify trouble customers.

The last short-term resource is the firm's inventory. It represents future sales but should be managed carefully to save money by not carrying more inventory than what is necessary. Firms can use economic order quantity to determine its ideal inventory levels.

The chapter also mentions just-in-time inventory management approach where almost no inventory is kept and raw materials are scheduled to be delivered just as they are needed for production.

### **Short-Term Obligations**

On the other side, organizations have several obligations that are short-term, coming due within a year. These will include accounts payable, payroll payable, notes payable, and taxes payable.

Accounts payable is the lines of credit the firm has with its suppliers or vendors. Many of these arrangements are interest free, so long as the account remains current. Some may offer discounts for paying early. To determine if taking this discount is worth it, managers can use the following formula:

$$\text{Implicit Interest Rate} = \text{Discount} / \text{Discounted Price} \times 365 \text{ Days} / \text{Days Sooner} \times 100\%$$

Payroll payable is obvious salaries due to the organization's employees. Organizations must develop policies for a wide range of payroll issues. The amount of payroll due is affected by how many vacation and sick days the firm offers its employees and whether they can be accumulated if unused from one year to the next. Firms also have to decide if they are going to

pay their employees weekly, biweekly, or monthly. They also have to determine which fringe benefits to offer like healthcare, pensions, and childcare.

Lastly notes payable represents short-term loans the firm has taken and taxes payable represents taxes owed to local, state, and federal governments.

### **Banking Relationships**

Financing an organization requires strong relationships with banks. Loans are only one product the firm should take advantage of. The organization should establish broad relationships with the bank giving them some of their deposit and investment business. They may then offer the organization a variable rate commercial loan tied to the prime rate. Many organizations will concentrate their business to just one or more institutions.

### **Chapter 16 – Inventory Costing: The Accountant’s World of Make – Believe**

Inventories are the quantity of goods or raw materials waiting to be sold or used in production. There are several types of inventories. Merchandise inventory are finished products purchased by retailers and wholesalers. Raw materials are purchased by manufactures to be used in their finished products. As the raw materials move through the enterprise’s processes, they move through work in process to finished goods that are waiting to be sold. The equation for inventory is as follows:

$$\text{Beginning Inventory} + \text{Units purchased} - \text{Units Sold} = \text{Ending Inventory}$$

#### **Periodic vs. Perpetual Inventory Methods**

The periodic method of inventory does not track each item sold throughout the year. It only compares last year’s ending inventory, which is this year’s beginning inventory with this year’s ending inventory. The inventory equation will calculate how much of each item was sold.

The perpetual method of inventory, on the other hand, does track each unit sold throughout the year.

### **Cost-Flow Assumptions**

Inflation and other price changes can change the cost of raw materials over the course of a fiscal year. For accounting purposes, we must be able to identify the cost associated with which units were sold. There are three primary methods for assigning these units: First – in, First – Out (FIFO), Weighted Average (WA), and Last – in, First – Out (LIFO).

### **LIFO and FIFO**

Under inflationary environments, FIFO can distort the financial statements. Profit on the income statement can look inflated as the current cost of the item is not being reflected. This problem is alleviated with the LIFO method as the current cost of the unit is used. LIFO offers several tax advantages.

### **LIFO and IFRS**

LIFO may not be an acceptable inventory method for long if the U.S. adopts the International Financial Reporting Standards (IFRS). This will also disallow the tax advantages of LIFO.

## **Chapter 17 – Variance Analysis: Using Budgets for Control**

Actual spending within a department or organization is rarely exactly what was budgeted. The difference between what was budgeted and actual spending is called a variance. Managers will have to account for variances on their budgets and large variances, substantial variances, will be investigated. Some variances are unavoidable.

## **Static Budgets**

Static budgets are our typical operating budgets and compares expected results to actual results. Variances can be investigated by digging into the data for each department or process. Managers need to be able to determine where and why variances are occurring so they can fix negative variances or duplicate positive variances.

## **Flexible Budgeting**

Flexible budgeting allows managers to prorate the actual costs to production when comparing it to budgeted costs. At first glance, coming under budget may look like a positive variance, but the reason for this variance could be a lower production number. The author provides an example of how this can be a negative variance due to low production. Variance analysis allows managers to determine price and quantity variance. It helps managers to find and correct inefficiencies.

## **Chapter 18 – Fraud**

Fraud is result of intentional deception for financial gain. It can happen through embezzlements, bribes, and bad checks. The internet has made fraud easier. Businesses are not immune to fraud. Leaders can overstate revenue, understate expenses, or other accounting manipulations.

Fraud is considered a white – collar crime where prison time is usually short and relatively comfy. It also tends to be glamorized in entertainment. It may also be committed for revenge against the organization.

## **Preventing Fraud**

Preventing fraud is very important and can be approached from several angles. Firms can use ethics to prevent fraud. Most organizations have some statement about ethical behavior for

its employees and sometimes for its clients. They will be taken more seriously at some firms than at others. “Being ethical may seem to be clear-cut in the abstract, but in practice it often becomes hard to draw the line between the clearly acceptable and the clearly unacceptable. Things that; are within the letter of the law may not be in the spirit of the law. Things that may be correct in principle may not be legal,” (Finkler, p. 201).

The United States has also sought to reduce fraud through legislation. Fraud is both a crime and a violation of civil law. Federal legislators, in 2002, passed Sarbanes-Oxley to monitor businesses for fraud. It outlines specific criminal penalties for different acts of fraud. It also strengthens reporting requirements for financial managers and financial statements must be certified by the CEO and CFO.

Most importantly, firms must put in place control systems to prevent fraud. These processes and internal controls, as part of the firm’s management control system, make it more difficult to commit fraud and get away with it. Some of these controls can include establishing audit trails, separations of functions, and designing processes to require proper authorization and adequate documentation, performance audits, rotation of duties, and coverage during vacations. Spelling out all of these procedures, in detail, will make it more difficult for anyone to operate outside of these procedures without being discovered. Some businesses will also want physical safeguards, like safes and data backups. Some may also require their employees to be bonded.

## **Chapter 19 – The Role of the Outside Auditor**

Firms are required by the SEC to have their annual financial statements audited by an outside CPA. They also require that those statements be in compliance with the Generally Accepted Accounting Principles (GAAP).

## **Generally Accepted Accounting Principles (GAAP)**

The GAAP is a uniform set of accounting firms for all firms to follow. There are some instances when firms can deviate from GAAP. The author provided an example using an oil exploration firm. An important concept in the GAAP is the going concern. This means that the auditors are confident that the business will continue to operate for the foreseeable future. Financial statements are also typically prepared conservatively; firms would rather get caught under-reporting income than over-stating income. Other GAAP rules include that expenses should be matched to revenues and a firm's financials should be based on actual transactions for which there is a record. When determining if a correction needs to be made, the GAAP states that the correction must be material, meaning of large enough size to impact the statements. One would not redo financial statements for a \$9 transcription.

These rules are created by two organizations: the Financial Accounting Standards Board (FASB) and the Governmental Accounting Standards Board (GASB).

## **International Financial Reporting Standards**

There is not yet an international set of accounting standards that are consistent worldwide, however, the International Financial Reporting Standards and the International Accounting Standards Board (IASB) are moving business toward that point. This is important for multinationals who have to produce multiple sets of financial statements to comply with the standards of multiple jurisdictions. IFRS may replace the GAAP as the world moves to one set of standards.

## **The Audit**

During the audit, the CPA will be reviewing documents and spot-checking for mathematical errors. They will use sampling rather than examine every transaction. The audit

ends with the standard auditor's report which states that the financial statements offer a fair picture of the firm's finances.

## **Chapter 20 – Recording and Reporting Financial Information**

This chapter reviews some of the basic concepts used to record financial transactions and information.

### **Double Entry and the Accounting Equation**

Accountants make journal entries to record the financial transactions of the firm and to balance the accounting equation, these must be shown in double-entry bookkeeping. The author provides an example on how this accounting equation much remain in balance.

### **Debits and Credits**

Debits and credits are accounting tools and on their own have no underlying basis. They can often be counterintuitive on how they relate to the accounting equation. Even though we think of a credit as an addition, in accounting terms, an addition to the cash asset is actually a debit.

### **Ledgers**

The collection and summarization of all of a firm's debits and credits and journal entries is done via the ledger. The ledger is simply a book of accounts. Ledgers are typically computerized now. The ledger allows us the read a real-time depiction of the firm's accounts. Ledgers also give a more complete picture of the firm, showing the beginning account balances at the start of the year, the journal entries that have occurred throughout the year, and each account's ending balance at the close of the year. The ledger's accounts are typically given codes to organize them by. The ledger will provide a legend, or chart of accounts to read these codes.

The chapter also includes an extensive appendix, showing examples of several financial events and how to record them.

## **Chapter 21 – Valuation of Assets, Liabilities and Stockholder’s Equity**

The valuation of assets, as the author points out in the beginning of the chapter, can be very complicated. There are general guidelines on how assets, liabilities, and stockholder’s equity should be valued.

### **Asset Valuation**

Assets are generally valued at their historical or acquisition cost. This valuation has the most evidence to support it and it is objective. It is not, however, the most accurate reflection of the asset’s current worth. An asset could have appreciated in value since the firm first acquired it. This is not adjusted for as depreciation for an asset that is wearing out.

Some assets have been allowed, under GAAP, to move away from historical pricing. Financial assets, for example, can be reported at their current fair value. The value of the asset is updated to the current price through a process called mark-to-market. The GAAP have created a hierarchy of fair values, based on the similarity of comparative assets, to be referred to in audited financial statements. Even if the information the value is based on is not perfect, the value is still likely to be more accurate than historical cost.

The author did provide the subprime crisis as a good example of when the reliability of this valuation data was very important. Without it, investors become scared and markets dropped. The GAAP changed mark-to-market fair valuations restrictions by allowing MBS securities to be priced based on cash flow which is a better estimate of their true value.

Assets like land and buildings can not use mark-to-mark to adjust the asset’s value. One proposal to address this is to allow for constant dollar valuation which can adjust an asset’s value

for inflation. An alternate proposal is to use net realizable value, or the liquidation value, net selling costs, of the asset. Other valuation ideas include the future profits it can generate or its replacement costs.

None of these methods are perfect and ideally, many of them would be used based on the type of asset and the audience of the valuation. Financial statements, however, must conform with the GAAP and use the historical cost.

### **Valuation of Liabilities**

The valuation of liabilities is much less complicated. The amount of liabilities recorded will be the amount a firm owes its creditors. The chapter points out a few examples of when the valuation is not so straight-forward. Interest, for example, accumulates over time and is not added to the initial valuation. A firm can repay the loan early and not owe the full amount of interest. Another example is when the liability is not due to be paid in cash; delivery of product, for instance. If the firm has been prepaid for the products, the valuation will be the amount the firm was prepaid.

### **Valuation of Stockholder's Equity**

Determining the valuation of stockholder's equity is just a matter of solving the accounting equation. Once the firm knows the valuation of their assets and liabilities, the difference between them is the stockholder's equity.

$$\text{Stockholder's Equity} = \text{Assets} - \text{Liabilities}$$

This does not, typically, equal the market value of the enterprise. Many assets are undervalued on the financial statements.

## **Chapter 22 – A Closer Look at Financial Statements**

Financial statements provide a lot of important data. This data can be important to analyzing the firm's own performance as well as the performance of its competitors or firms they may wish to acquire, invest in, or loan money to. Examining the financial statements and their notes and calculating a variety of ratios, can help the firm make better decisions. This chapter focuses on the first step, examining the financial statements.

### **The Balance Sheet**

This section examines the balance sheet for Pacioli Wholesales Corporation for 2011 and 2012. Numbers in financial statements, particularly of large companies, are often rounded. This example rounds to the nearest thousand dollars.

The author then discusses each entry on the balance sheet, starting with current assets. Current assets are listed in order of liquidity. All other assets appear under the long-term asset category. They will include fixed assets, investments, and goodwill.

Liabilities that are due in the next operating cycle, typically a year, are listed as current assets and include wages, accounts payable, and taxes. Long-term liabilities are due in more than one year.

The stockholder's equity portion of the balance sheet will list contributed capital and retained earnings as well as list all classes of stock. It will also spell out, for liability purposes, shares at par value and those at excess over par. Retained earnings represents the reinvestment of profits back into the firm in the form of assets.

### **The Income Statement**

Income statements can be either single-step or multiple-step. Multiple-step income statements provide more detail than single-step, detailing cost of goods sold and operating

expenses. “The single-step approach cannot be used if it would mask information that the auditor believes is necessary for a fair representation of the firm’s position and results of operation,” (Finkler, p. 262). The income statement also states the net income and income per share of common stock as required by GAAP and the balancing of retained earnings.

### **The Statement of Cash Flows**

The statement of cash flows focuses on the financial side of the firm rather than the operating aspects. It shows whether or not the firm has enough cash flows to meet its short-term and long-term obligations. It starts with cash flows from operating activities which would be the revenue stream of the organization. The cash flows from operating activities begins with net income and is adjusted for expenses that don’t require cash, like depreciation. The report also includes cash flows from investing activities and financing activities. Together these cash flows capture the net increase or decrease in the firm’s cash position over the year. Managers will want to aim toward consistency in each year’s ending cash position.

### **Chapter 23 - Notes to the Financial Statements**

The notes to the financial statements outlines the firm’s significant accounting policies and provides additional disclosures and details to what is shown in the statements. The chapter shows a note from the Pacioli Wholesale financial statements and discusses each note.

#### **Significant Accounting Policies**

The statement of significant accounting policies is typically at the beginning of the notes section. This is where the firm outlines which accounting choices they have made within GAAP. For example, when do they record sales and which inventory method do they use? In the example of Pacioli Wholesale, sales were recorded when the product is shipped as this is when

title transfer typically occurs. They use LIFO as their inventory method and inventories are stated at cost unless the current market value is lower.

### **Other Notes**

Additional notes may be provided, particularly in the annual report, to help provide a better representation of the firm's financial position. These notes may explain deferred taxes or alternate inventory methods. These notes should also show a breakdown of performance between individual segments helping stakeholders understand each piece of the enterprises businesses.

### **Summary**

The chapter ends with an admission that the discussion of the notes to the financial statements is not complete. The notes can be a long, dense section of the annual report, but there is important information buried in there.

### **Chapter 24 – Ratio Analysis**

Ratios are essential for financial analysis. They are a comparison of two numbers on the financial statement. For example, the current ratio compares current assets to current liabilities and is a useful measure of liquidity.

### **Benchmarks for Comparison**

Ratios are more relevant and useful when the firm can compare their ratios to others in their industry. If a firm has a current ratio of 2, what does that mean? “We can only assess the appropriateness of our ratios on the basis of some benchmark or other basis for comparison,” (Finkler, p. 275). There are three primary sources for benchmarks: the firm's own history, one of its competitors, and industry averages. Each of these benchmarks can tell the firm important information. Historical benchmarks can help the firm spot trends or spot sudden trouble spots.

Comparison to the industry average gives the firm an objective measurement of its strength compared to its competitors. Data on other firms and industry averages is becoming easy to find. The SEC requires the publication of financial statements in XBRL formula, allowing for the easy calculation of ratios and firms like Dun and Bradstreet collect financial data and publish industry averages.

## **Ratios**

Ratios are more useful when the size the firms are compared as well. This is called common-size. The author provides an example of looking at cash in relationship to assets to put the level of cash into perspective. To common-size the balance sheet, each asset is given as a ratio of total assets. On the income statement, everything is given in relation to sales.

Another important category of ratios are liquidity ratios. This includes the current ratio discussed previously and helps managers find balance between liquidity and return on investments. The quick ratio measures very short-term liquidity looking at only cash, marketable securities, and receivables against current liabilities.

The next set of ratios measure how efficiently the firm operates. The receivables turnover ratio measures how quickly a firm collects on its receivables by stating how many times in a year receivables are generated and collected. Similarly, the inventory turnover ratio can be used to find out the average age of the firm's inventory. Finally, there is the total asset turnover ratio which compares sales and total assets to see how efficiently the firm is using its assets.

Solvency ratios examine a firm's riskiness. They assess the firm's long-term financial strength. The interest coverage ratio measures whether or not the firm pay its interest payments. The debt to equity measures the leverage of the firm.

Lastly, profitability ratios measure the results of the firm. Margin ratios compare gross, operating, and profit margins as a percentage of sales. Many industries operate on very thin margins so these ratios are watched closely. Return on assets (ROA) compares net income to assets and return on equity compares net income to stockholders' equity. Both state the efficiency of the firm; how much they make off a given level of assets or equity investment.

## **Chapter 25 – A Primer on Taxes**

The U.S. tax code is a complex web of tax breaks aimed to meet policy goals or please special interest groups. This chapter is not meant to be an extensive lesson on taxes, but rather an introduction to taxes and how the decisions of managers can affect them.

### **Personal vs. Corporate Taxes**

Personal income taxes are paid by U.S. citizens and residents. Corporate income taxes are paid by organizations that have incorporated in the U.S. This distinction influences which form of business and organization elects to take: sole proprietorship, partnership, limited liability company, and corporation. Sole proprietorships and partnerships pay taxes on their profits through the owners' income taxes. Corporations have double taxation as they pay taxes based on their profit and their owners get taxed on their dividend payments. LLCs avoid the double taxation by treating it like a partnership.

### **The Tax Rate and the Tax Base**

The tax base determines the income to apply the tax rate to. Some taxes, like our income taxes are progressive meaning the rate increases as the tax base increases. A flat tax would be a proportional tax; all tax bases are taxed the same. Sales taxes and FICO taxes would be examples of regressive taxes.

Progressive income taxes are calculated on a tier basis with not all levels of income being charged the same rate. Different tax brackets have increasing rates. This allows for a marginal tax rate, average tax rate, and effective tax rate. The marginal tax rate is the rate the firm will pay on additional income. The average tax rate is the total tax due compared to the tax base. If you include the income that is not included in the tax base you have the effective tax rate.

An individual or entity's income tax is a complicated calculation of incomes, deductions, tax credits, and exceptions. This eventually leads to a taxable income to which the tax rates for each tax bracket are applied.

Corporations are additionally allowed to carry losses over from the previous year to offset this year's profits.

## **Chapter 26 – Summary and Conclusion**

Chapter 26 offers a brief summary of what the reader should have learned from the book including the balance of risk and reward and the importance of liquidity. It cautions the reader from thinking they now know everything they need to about accounting; this book was only an introduction to the topic.

### Reference

Finkler, Steven A., 2011, Finance & Accounting for Nonfinancial Managers, CCH, Chicago