Using Financial Statements and Budgets

Chapter 2

How Will This Affect Me?

- Americans do not prepare a detailed household budget and about 75 percent do not have enough savings to cover 6 months of expenses. These are scary numbers . . . and this chapter shows what you can do to avoid being part of these alarming statistics.
- Everyone knows that it's hard to get where you need to go if you don't know where you are. Financial goals describe your destination, and financial statements and budgets are the tools that help you determine exactly where you are in the journey. This chapter helps you define your financial goals and explains how to gauge your progress carefully over time.

Learning Goals

LG1 Understand the relationship between financial plans and statements.

LG2 Prepare a personal balance sheet.

LG3 Generate a personal income and expense statement.

LG4 Develop a good record-keeping system and use ratios to evaluate personal financial statements.

LG5 Construct a cash budget and use it to monitor and control spending.

LG6 Apply time value of money concepts to put a monetary value on financial goals.

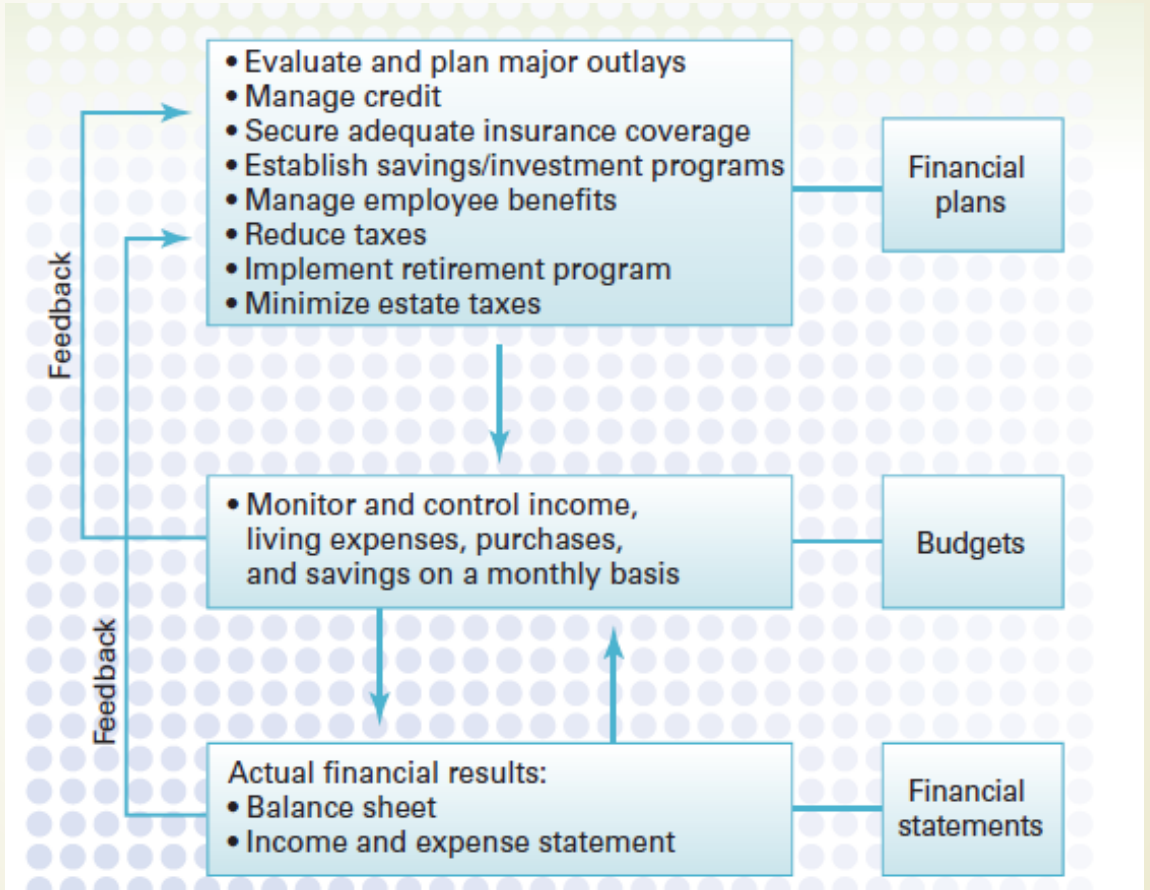
Facts or Fantasies

- Whereas the balance sheet summarizes your financial condition at a given point in time, the income and expense statement reports on your financial performance over time.
- Because financial statements are used to record actual results, they're really not that important in personal financial planning.
- A lased car should be listed as an asset on your personal balance sheet.
- Only the principal portion of a loan should be recorded on the liability side of a balance sheet.
- Generating a cash surplus is desirable, because it adds to your net worth.
- When evaluating your income and expenses statement, primary attention should be given to the top line: income received.

A True Statement

- "it's hard to get where you need to go if you don't know where you are"
- Financial Statements tell you where you are
- Balance Sheet reports your Assets, Liabilities, and New Worth as of a specified date
- Income Statement reports how you did over a period of time, month or year

Relationship between Financial Plans and Financial Statements



Balance Sheet – Tells you where you are

Problem 3 -- Worksheet 2.1							
Balance Sheet							
Names(s) Denise Fisher				Date	30-Jun-16		
Assets				**Liabilities and Net Worth**			
Liquid Assets:				Current Libaiblities			
Cash on hand	$ 70.00			Utilities	$ 90.00		
Cash in checking	150.00			Rent			
Savings accounts				Insurance premiums	220.00		
				Taxes	400.00		
Money market funds and deposits	650.00			Medical/dental bills			
Certificates of deposit <1 yr to maturity				Repair bills			
Total Liquid Assets		$ 870.00		Bank credit card balances	400.00		
				Department store credit			
Investments				card balances	190.00		
				Travel and entertainment			
Stocks	$ 3,000.00			card balances			
				Gas and other credit			
Bonds	500.00			balances			
Certificates of deposit <1 yr to maturity				Bank line of credit balances			
Mutual funds				Other current liabilities			
Real estate				**Total Current Liabilities**		$ 1,300.00	
Retirement funds, IRA				Long-term Liabilities			
Other				Primary residence mortgage	$52,000.00		
Total Investments		$ 3,500.00		Real estate investment			
Real Property				mortgage			
Primary residence	$68,000.00			Autos loans	3,000.00		
Second home				Applicance/furniture loans	500.00		
Other				Home improvement loans			
Total Real Property		$68,000.00		Single-payment loans			
Personal Property				Education loans			
Autos	$ 9,775.00			Margin loans used to purchse securities			
Autos				Other long-term liabilities			
Recreational vehicles							
Household furnishings	1,050.00			**Total Long-Term Liabilities**		$ 55,500.00	
Jewelry and artwork							
Other	900.00			**Total Liabilities**		$ 56,800.00	
Other							
Total Personal Property		$11,725.00		**Net Worth**		$ 27,295.00	
Total Assets		$84,095.00		**Total Liabilities and Net Worth**		$ 84,095.00	

Balance Sheet – Major Headings

- Assets:
- Total Liquid Assets
- Total Investments
- Total Real Property
- Total Personal Property

- Total Assets

- Liabilities and Net Worth
- Total Current Liabilities
- Total Long-term Liabilities
- Total Liabilities
- Net Worth

- Total Liabilities and Net Worth

Net Worth

- Assets: The fair market value of what you own
- Liabilities:
  - Current – Amount you owe that is due within one year
  - Long-term – Amount you owe that is due more than one year from date

Net Worth: Assets – Liabilities = Net Worth

What is Fair Market Value?

What you can sell an asset for, that is the Net Realizable Value

Amount you can buy the asset for, the Replacement Cost

Solvency

- You are Solvent when your Net Worth is positive
- You are Insolvent when your Net Worth is Negative

Income Statement
What you Earn and Where it Goes

- Personal Income Statements are prepared on the Cash Basis
- A method of preparing financial statements in which only transactions involving actual cash receipts or actual cash outlays are recorded.
- Cash Surplus is an excess amount of income over expenses that results in *increased* net worth.
- Income is Earnings received as wages, salaries, bonuses, commissions, interest and dividends, or proceeds from the sale of assets.
- Expenses are Money spent on living costs and to pay taxes, purchase assets, or repay debt.

Income Statement – Major Headings

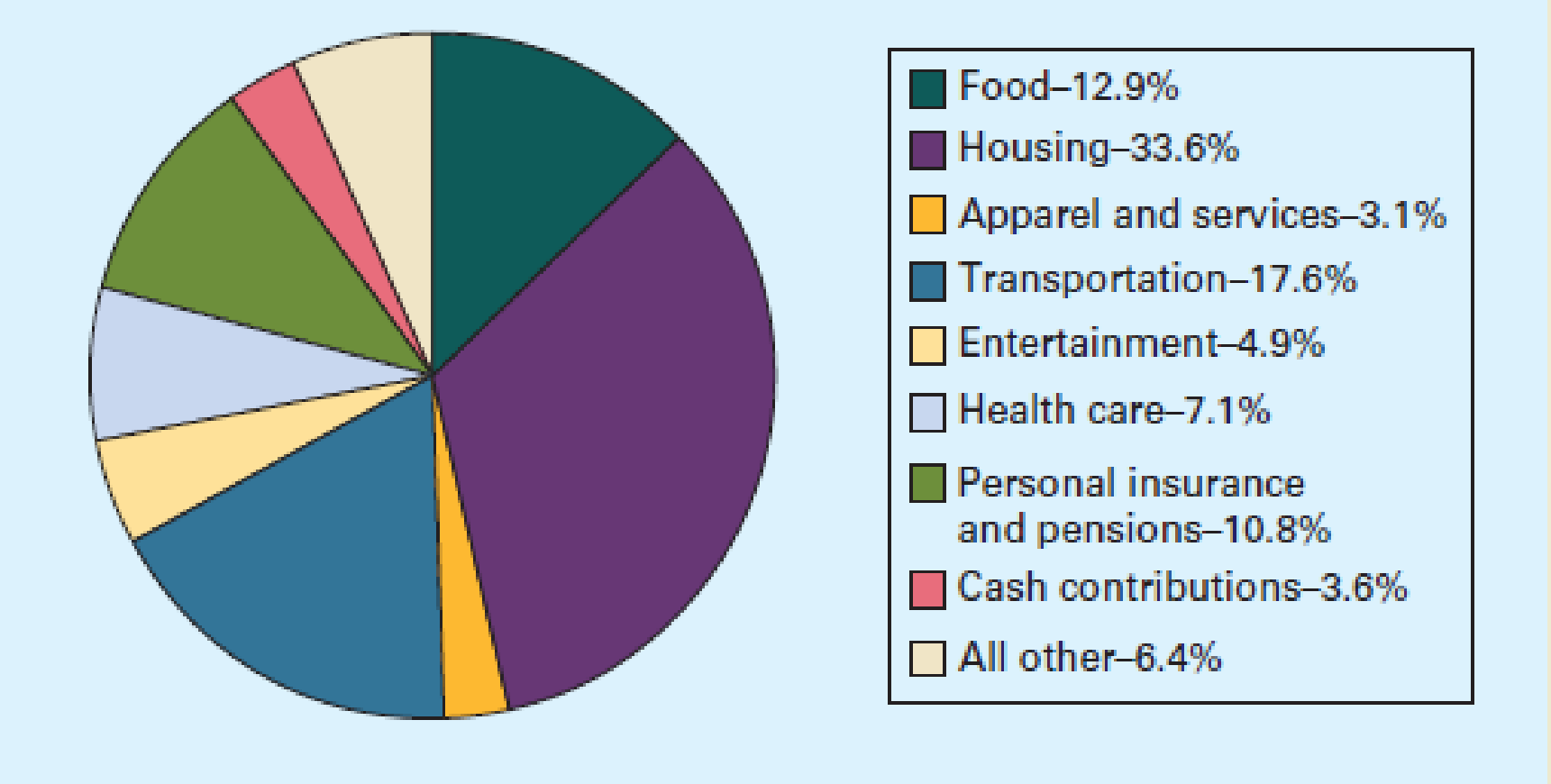
Worksheet 2.2

- Income:
- Wages and Salaries
- Self-employed income
- Bonuses and Commissions
- Investment income
- Pensions
- Other income

- Total Income

- Expenses:
- Housing and Utilities
- Food
- Transportation
- Medical
- Clothing and Personal Care
- Insurance and Taxes
- Appliances, furniture
- Recreation
- Other
- Total Expenses

How We Spend Our Income



Balance Sheet Ratios

Solvency Ratio Total Net Worth divided by Total Assets

Solvency ratio measures how much cushion you have before insolvency

If you move from a Solvency ratio of 40 to a ratio of 30, Good or Bad?

Liquidity Ratio Total Liquid Assets divided by Total Current debt (liabilities)

Liquid assets include Cash, Savings Accounts, Money Market accounts, and Certificates of deposit.

Liquidity ratio shows how long you could continue to pay current debts with existing liquid assets

If you liquidity ratio moves from 15 to 30, Good or Bad?

Balance Sheet/Income Statement Ratios

- Savings ratio Relates cash surplus from Balance Sheet to net income from the Income Statement.
  - Savings ratio = Cash surplus divided by Net Income
  - If Savings ratio moves from 15 to 20, Good or Bad?

Debt Service Ratio provides a measure of the ability to pay debts promptly.

Debt Service ratio = Total monthly loan payments divided by monthly gross income

If Debt Service ratio moves from 15 to 30, Good or Bad?

Budgets

- Cash budget reports the forecasted or estimated cash receipts and the forecasted or estimated cash expenses for the year. By reporting the cash budget by month, you can identify the month that you may have a problem such as short of cash.
- By comparing the actual cash receipts and expenses to the budget, you can control your spending. The difference is called a variance. If actual is greater than budgeted, you have a positive variance; otherwise, a negative variance.

Handling a budget Deficit

- Liquidate enough savings and investments or borrow enough to meet the total budget shortfall for the year
- Cut low-priority expenses from budget
- Increase Income

Time Value of Money

- A dollar today is worth more than a dollar received in the future. Relies on Compounding which is when interest earned each year is left in an account and becomes part of the balance on which interest is earned in subsequent years.
- Future Value The value to which an amount today will grow if it earns a specific rate of interest over a given period.
- Example: What will $1,000 amount to in two years if earns 10%?
- $1,000 * 1.1 * 1.1 = $1,210; Table of Future Values in Appendix A, gives a factor of 1.21 for 10% over 2 years.

Future Value of an Annuity

- Annuity: A fixed sum of money that occurs annually
- Example: What will at the end of year 3 if you invest $1,000 now and $1,000 at beginning of next 2 years, assuming a 10% return?
- Factor for future value of annuity, at 10% for three years from Appendix B, is 3.310 = 1+[1*(1.1)^1]+[1*(1.1)^2]
- Annuity of $1,000 per year, 3 years, 10% = $1,000 * 3.310 = $3,310

- If you want to build an account to $3,310 in three years, what amount will you have to save if you earn 10%?
- Future value divided by factor (3 years, 10%) = $3,310/3.310 = $1,000.

Rule of 72

- Number of years to double money = 72 divided by annual compound interest rate
- Example: Have $1,000, how long to double money if earn 10%
- 72 / 10 = 7.2 years

- Check: Future Value factor, 10%, 7.2 years = (1.1)^7.2 = 1.986 times $1,000 = $1,986

Present Value

- Present Value: The value today of an amount to be received in the future. It is the amount that would have to be invested today at a given rate over a specified time period to accumulate the future amount.
- Example: Present value of $1,210, to be received in 2 years, at 10% return = $1,210 * [1/(1.1)^2 = $1,210 * 0.826 = $1,000

- Stated alternatively, PV = FV times PV Factor from Appendix C
- For an annuity, annual withdrawal = PV divided PV annuity factor, Appendix D