



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

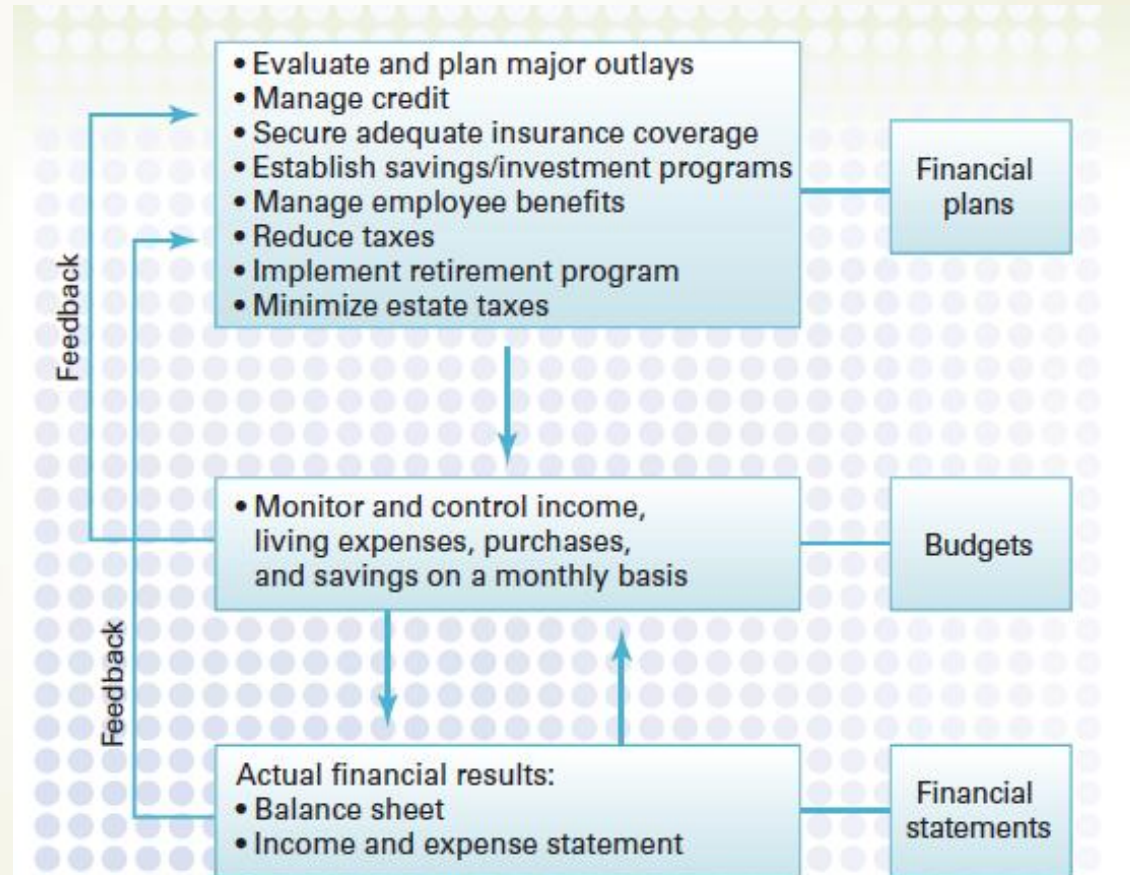
- Whereas the balance sheet summarizes your financial condition at a given point in time, the income and expense statement reports on your financial performance over time.
- Because financial statements are used to record actual results, they're really not that important in personal financial planning.
- A leased 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 Net 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 Liabilities	
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 card balances	190.00
Investments		Travel and entertainment card balances	
Stocks	\$ 3,000.00	Gas and other credit balances	
Bonds	500.00		
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 mortgage	
Real Property		Autos loans	3,000.00
Primary residence	\$68,000.00	Appliance/furniture loans	500.00
Second home		Home improvement loans	
Other		Single-payment loans	
Total Real Property	\$68,000.00	Education loans	
Personal Property		Margin loans used to purchase securities	
Autos	\$ 9,775.00	Other long-term liabilities	
Autos			
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		Net Worth	\$ 27,295.00
Total Personal Property	\$11,725.00		
		Total Liabilities and Net Worth	\$ 84,095.00
Total Assets	\$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

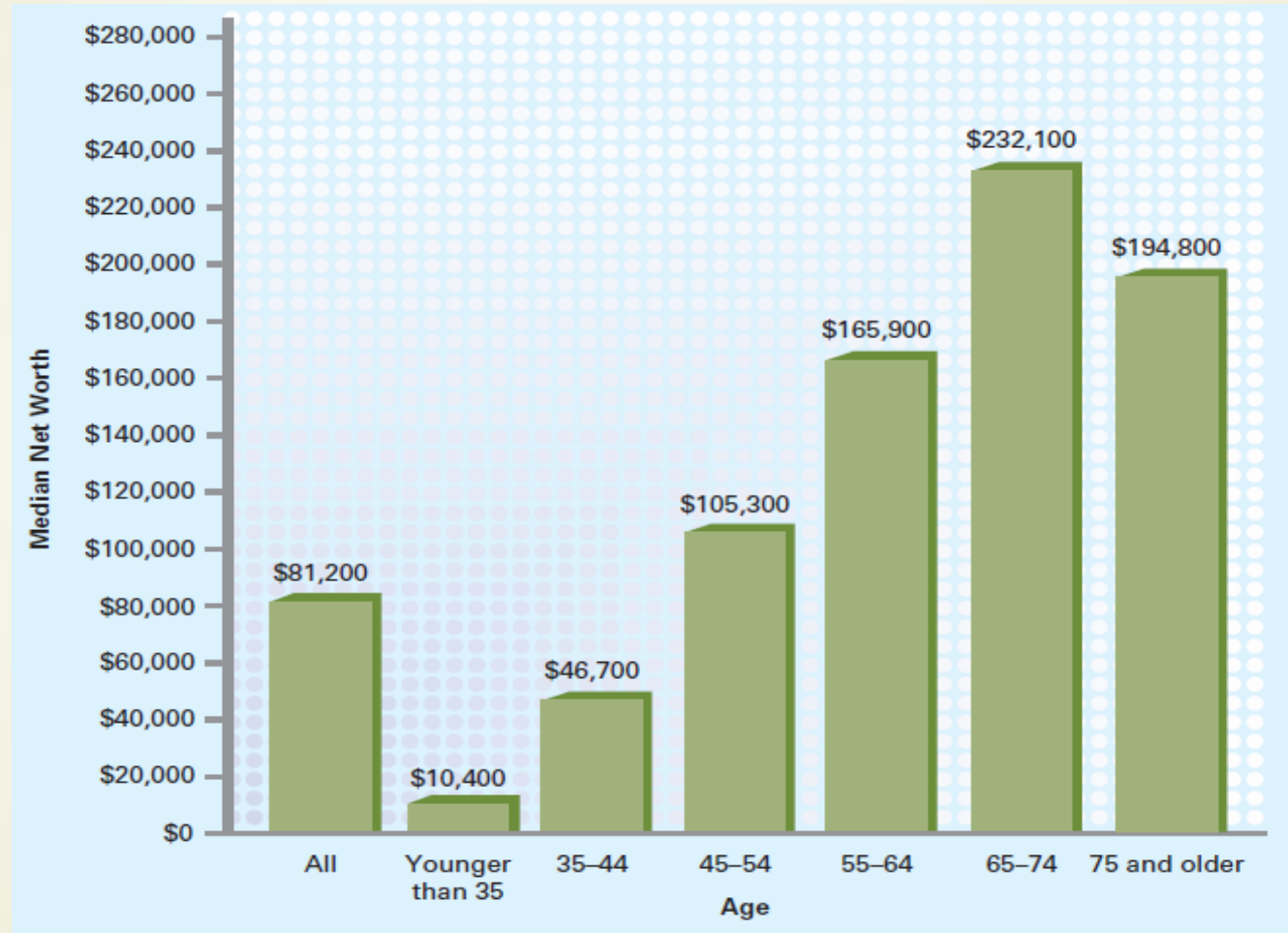
Amount you can buy the asset for, the Replacement Cost



Solvency

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

There is hope for yet!



© 2017 Cengage Learning®. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part, except for use as permitted in a license distributed with a certain product or service or otherwise on a password-protected website or school-approved learning management system for classroom use.



Income Statement

What you Earn and Where it Goes

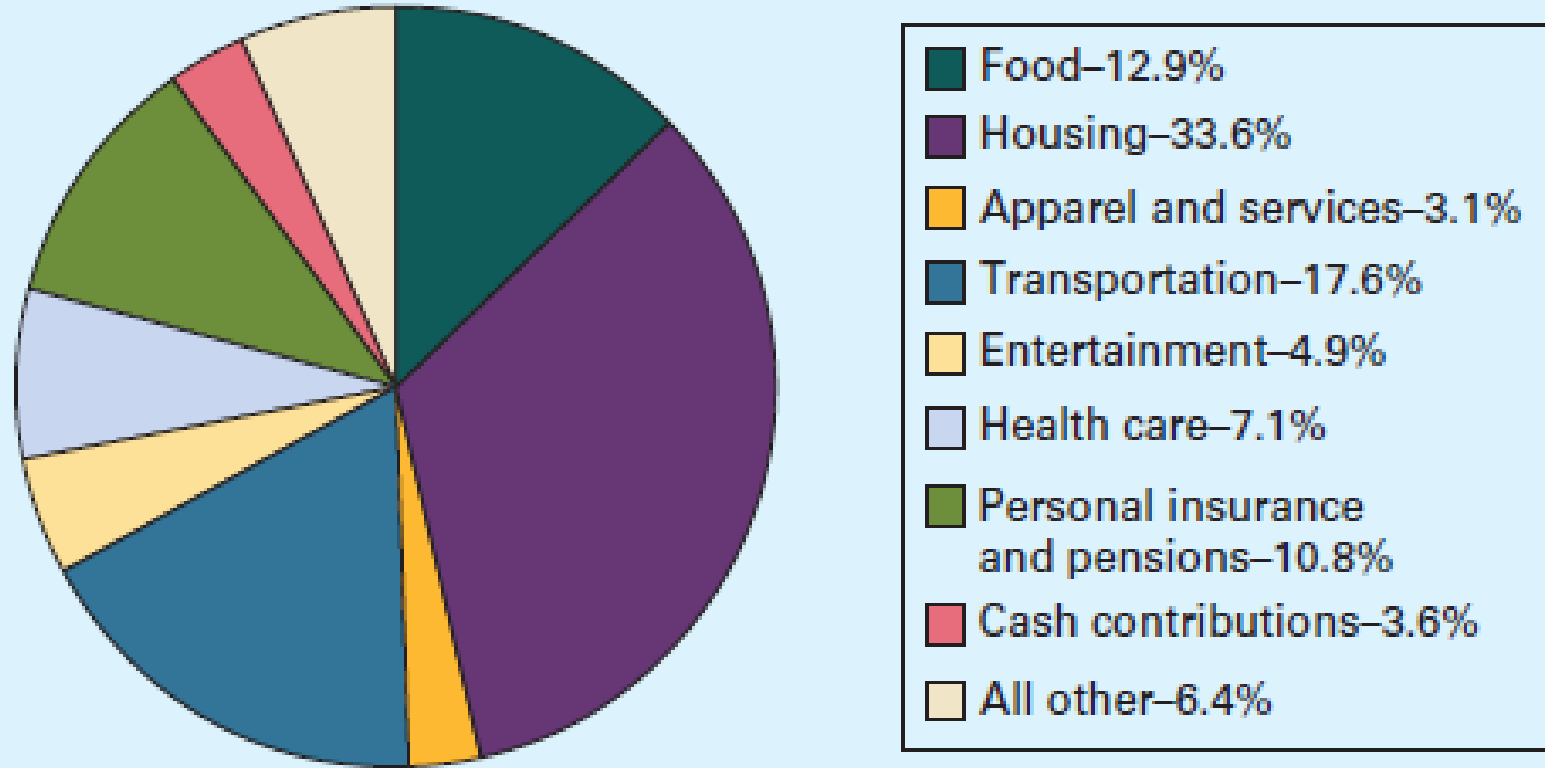
- ▶ Personal Income Statements are prepared on the **Cash Basis**
- ▶ A method of preparing financial statements in which only transactions involving actual cash receipts or actual cash outlays are recorded.
- ▶ **Cash Surplus** is an excess amount of income over expenses that results in *increased* 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, $PV = FV \text{ times PV Factor from Appendix C}$
- For an annuity, annual withdrawal = $PV \text{ divided PV annuity factor, Appendix D}$