THE CHAPTERS IN THIS PART INTRODUCE THE KEY TOOLS used to make financial planning decisions. Chapter 2 describes the personal financial statements that help you to monitor your spending and guide your budgeting decisions. Chapter 3 illustrates how you can use time value of money concepts to make decisions about saving. Chapter 4 explains how to use tax concepts to assess and minimize your tax liability. Your budget, saving, and tax plans all influence your cash flows and wealth.
Planning with Personal Financial Statements

Where does it all go? It seems like the last paycheck is gone before the next one comes in. Money seems to burn a hole in your pocket, yet you don’t believe that you are living extravagantly. Last month you made a pledge to yourself to spend less than the month before. Somehow, though, you are in the same position as you were last month. Your money is gone. Is there any way to plug the hole in your pocket?

What are your expenses? For many people, the first obstacle is to correctly assess their true expenses. Each expense seems harmless and worthwhile. But combined they can be like a pack of piranhas that quickly gobble up your modest income. What can you do to gain control of your personal finances?

Just read on in this chapter and you will see how to take control of your finances. However, your task is not easy because it takes self-discipline and there may be no immediate reward. The result is often like a diet: easy to get started, but hard to carry through.

Your tools are the personal balance statement, the personal cash flow statement, and a budget. These three personal financial statements show you where you are, predict where you will be after three months or a year, and help you control expenses. The potential benefits are reduced spending, increased savings and investments, and peace of mind from knowing that you are in control.

MyFinanceLab helps you master the topics in this chapter and study more efficiently. Visit www.myfinancelab.com for more details.
Stephanie Spratt tried to limit her spending in college but never created a personal cash flow statement. Now that she has begun her career and is earning a salary, she wants to monitor her spending on a monthly basis. She decides to create a personal cash flow statement for the last month.

**Stephanie’s Monthly Cash Inflows.** Stephanie’s present salary is about $3,170 per month ($38,000 annually) before taxes. For budgeting purposes, she is interested in the cash inflow she receives from her employer after taxes.
FACTORS THAT AFFECT CASH FLOWS

To enhance your wealth, you want to maximize your (or your household’s) cash inflows and minimize cash outflows. Your cash inflows and outflows depend on various factors, as will be described next.

Factors Affecting Cash Inflows

Cash inflows are highly influenced by factors that affect your income level. The key factors to consider are the stage in your career path and your job skills.

Stage in Your Career Path. The stage you have reached in your career path influences cash inflows because it affects your income level. Cash inflows are relatively low for

---

**About $670 per month of her salary goes to taxes, so her disposable (after-tax) income is:**

<table>
<thead>
<tr>
<th>Monthly Salary</th>
<th>$3,170</th>
</tr>
</thead>
<tbody>
<tr>
<td>− Monthly Taxes</td>
<td>− $670</td>
</tr>
</tbody>
</table>

**Monthly Cash Inflow** $2,500

Then Stephanie considers other potential sources of cash inflows. She does not receive any dividend income from stocks and she does not have any money deposited in an account that pays interest. Thus, her entire monthly cash inflows come from her paycheck. She inserts the monthly cash inflow of $2,500 at the top of her personal cash flow statement.

**Stephanie’s Monthly Cash Outflows.** Stephanie looks in her checkbook register to see how she spent her money last month. Her household payments for the month were as follows:

- $600 for rent
- $50 for cable TV
- $60 for electricity and water
- $60 for telephone expenses
- $300 for groceries
- $130 for a health care plan provided by her employer (this expense is deducted directly from her pay)

Next Stephanie reviews several credit card bills to estimate her other typical expenses on a monthly basis:

- About $100 for clothing
- About $200 for car expenses (insurance, maintenance, and gas)
- About $600 for recreation (including restaurants and a health club membership)

Stephanie uses this cash outflow information to complete her personal cash flow statement, as shown in Exhibit 2.1. Her total cash outflows were $2,100 last month.

**Stephanie’s Net Cash Flows.** Monthly cash inflows and outflows can be compared by estimating net cash flows, which are equal to the cash inflows minus the cash outflows. Stephanie estimates her net cash flows to determine how easily she covers her expenses and how much excess cash she has to allocate to savings or other purposes. Her net cash flows during the last month were:

\[
\text{Net Cash Flows} = \text{Cash Inflows} - \text{Cash Outflows} = $2,500 - $2,100 = $400
\]

Stephanie enters this information at the bottom of her personal cash flow statement.
people who are in college or just starting a career (like Stephanie Spratt). They tend to increase as you gain job experience and progress within your chosen career.

Your career stage is closely related to your place in the life cycle. Younger people tend to be at early stages in their respective careers, whereas older people tend to have more work experience and are thus further along the career path. It follows that cash inflows tend to be lower for younger individuals and much higher for individuals in their 50s.

There are many exceptions to this trend, however. Some older people switch careers and therefore may be set back on their career path. Other individuals who switch careers from a low-demand industry to a high-demand industry may actually earn higher incomes. Many women put their careers on hold for several years to raise children and then resume their professional lives.

The final stage in the life cycle that we will consider is retirement. The cash flows that come from a salary are discontinued at the time of retirement. After retirement, individuals rely on Social Security payments and interest or dividends earned on investments as sources of income. Consequently, retired individuals' cash inflows tend to be smaller than when they were working. Your retirement cash inflows will come from income from your investments and from your retirement plan. The manner in which age commonly affects cash inflows is summarized in Exhibit 2.2. Notice that there are three distinct phases.

**Type of Job.** Income also varies by job type. Jobs that require specialized skills tend to pay much higher salaries than those that require skills that can be obtained very quickly and easily. The income level associated with specific skills is also affected by the demand for those skills. The demand for people with a nursing license has been very high in recent years, so hospitals have been forced to pay high salaries to outbid other hospitals for nurses. Conversely, the demand for people with a history or an English literature degree is low because the number of students who major in these areas outnumber available jobs.
Number of Income Earners in Your Household. If you are the sole income earner, your household’s cash inflows will typically be less than if there is a second income earner. Many households now have two income earners, a trend that has substantially increased the cash flows to these households.

Factors Affecting Cash Outflows
The key factors that affect cash outflows are a person’s family status, age, and personal consumption behavior.

Size of Family. A person who is supporting a family will normally incur more expenses than a single person without dependents. The more family members, the greater the amount of spending, and the greater the cash outflows. Expenses for food, clothing, day care, and school tuition are higher for families with many dependents.

Age. As people get older, they tend to spend more money on expensive houses, cars, and vacations. This adjustment in spending may result from the increase in their income (cash inflows) over time as they progress along their career path.

Personal Consumption Behavior. People’s consumption behavior varies substantially. At one extreme are people who spend their entire paycheck within a few days of receiving it, regardless of the size of the paycheck. Although this behavior is understandable for people who have low incomes, it is also a common practice for some people who have very large incomes, perhaps because they do not understand the importance of saving for the future. At the other extreme are “big savers” who minimize their spending and focus on saving for the future. Most people’s consumption behavior is affected by their income. For example, a two-income household tends to spend more money when both income earners are working full-time.

Creating a Budget
The next step in the budgeting process is an extension of the personal cash flow statement. You can forecast net cash flows by forecasting the cash inflows and outflows for each item on the personal cash flow statement. We refer to a cash flow statement that is based on forecasted cash flows for a future time period as a budget. For example, you may develop...
Stephanie Spratt wants to determine whether she will have sufficient cash inflows this month. She uses the personal cash flow statement she developed last month to forecast this month’s cash flows. However, she adjusts that statement for the following additional anticipated expenses:

1. Total health care expenses will be $430 this month, due to a minor health care procedure she had done recently that is not covered by her insurance.
2. Car maintenance expenses will be $500 this month, mainly due to the need to purchase new tires for her car.

Stephanie revises her personal cash flow statement from last month to reflect the expected changes this month, as shown in Exhibit 2.3. The numbers in boldface type show the revised cash flows as a result of the unusual circumstances for this month.

The main effects of the unusual circumstances on Stephanie’s expected cash flows for this month are summarized in Exhibit 2.4. Notice that the expected cash outflows for this month are $2,700, or $600 higher than the cash outflows in a typical month. In this month, the expected net cash flows are:

\[
\text{Expected Net Cash Flows} = \text{Expected Cash Inflows} - \text{Expected Cash Outflows} = \$2,500 - \$2,700 = -\$200
\]

The budgeting process has alerted Stephanie to this $200 cash shortage.

**Example**

Stephanie Spratt wants to determine whether she will have sufficient cash inflows this month. She uses the personal cash flow statement she developed last month to forecast this month’s cash flows. However, she adjusts that statement for the following additional anticipated expenses:

1. Total health care expenses will be $430 this month, due to a minor health care procedure she had done recently that is not covered by her insurance.
2. Car maintenance expenses will be $500 this month, mainly due to the need to purchase new tires for her car.

Stephanie revises her personal cash flow statement from last month to reflect the expected changes this month, as shown in Exhibit 2.3. The numbers in boldface type show the revised cash flows as a result of the unusual circumstances for this month.

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\[
\text{Expected Net Cash Flows} = \text{Expected Cash Inflows} - \text{Expected Cash Outflows} = \$2,500 - \$2,700 = -\$200
\]

The budgeting process has alerted Stephanie to this $200 cash shortage.

**Exhibit 2.3  Stephanie Spratt’s Revised Personal Cash Flow Statement**

<table>
<thead>
<tr>
<th>Cash Inflows</th>
<th>Actual Amounts Last Month</th>
<th>Expected Amounts This Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable (after-tax) income</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>Interest on deposits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dividend payments</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Cash Inflows</strong></td>
<td><strong>$2,500</strong></td>
<td><strong>$2,500</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Outflows</th>
<th>Actual Amounts Last Month</th>
<th>Expected Amounts This Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$600</td>
<td>$600</td>
</tr>
<tr>
<td>Cable TV</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Telephone</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Groceries</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Health care insurance and expenses</td>
<td>130</td>
<td>430</td>
</tr>
<tr>
<td>Clothing</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Car expenses (insurance, maintenance, and gas)</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>Recreation</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td><strong>Total Cash Outflows</strong></td>
<td><strong>$2,100</strong></td>
<td><strong>$2,700</strong></td>
</tr>
<tr>
<td><strong>Net Cash Flows</strong></td>
<td><strong>+$400</strong></td>
<td><strong>–$200</strong></td>
</tr>
</tbody>
</table>
Recall that Stephanie Spratt forecasted cash flows to create a budget for this coming month. Now it is the end of the month, so she can assess whether her forecasts were accurate. Her forecasted cash flows are shown in the second column of Exhibit 2.5. She compares the actual cash flows (third column) to her forecast and calculates the difference between them (shown in the fourth column). This difference between columns two and three is referred to as the forecasting error. A positive difference means that the actual cash flow level was less than forecasted, while a negative difference means that the actual cash flow level exceeded the forecast.

Reviewing the fourth column of Exhibit 2.5, Stephanie notices that total cash outflows were $100 more than expected. Her net cash flows were –$300 (a deficiency of $300), which is worse than the expected level of –$200. Stephanie assesses the individual cash outflows to determine where she underestimated. Although grocery expenses were slightly lower than expected, her clothing and recreation expenses were higher than she anticipated. She decides that the expenses were abnormally high in this month only, so she believes that her budgeted cash flows should be reasonably accurate in most months.

### Anticipating Cash Shortages

In a month with a large amount of unexpected expenses, you may not have sufficient cash inflows to cover your expected cash outflows. If the cash shortage is small, you would likely withdraw funds from your checking account to make up the difference. If you expect a major deficiency for a future month, however, you might not have sufficient funds available to cover it. The budget can warn you of such a problem well in advance so that you can determine how to cover the deficiency. You should set aside funds in a savings account that can serve as an emergency fund in the event that you experience a cash shortage.

### Assessing the Accuracy of the Budget

Periodically compare your actual cash flows over a recent period (such as last month) to the forecasted cash flows in your budget to determine whether your forecasts are on target. Many individuals tend to be overly optimistic about their cash flow forecasts. They overestimate their cash inflows and underestimate their cash outflows; as a result, their net cash flows are lower than expected. By detecting such forecasting errors, you can take steps to improve your budgeting. You may decide to limit your spending to stay within your budgeted cash outflows. Or you may choose not to adjust your spending habits, but to increase your forecast of cash outflows to reflect reality. By budgeting accurately, you are more likely to detect any future cash flow shortages and therefore can prepare in advance for any deficiencies.

### Forecasting Net Cash Flows over Several Months

To forecast your cash flows for several months ahead, you can follow the same process as for forecasting one month ahead. Whenever particular types of cash flows are

<table>
<thead>
<tr>
<th></th>
<th>Last Month’s Cash Flow Situation</th>
<th>Unusual Cash Flows Expected This Month</th>
<th>This Month’s Cash Flow Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash inflows</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
</tr>
<tr>
<td>Cash outflows</td>
<td>$2,100</td>
<td>$600</td>
<td>$2,700</td>
</tr>
<tr>
<td>Net cash flows</td>
<td>$400</td>
<td>$600</td>
<td>$200</td>
</tr>
</tbody>
</table>
Stephanie Spratt believes her budget for last month (except for the unusual health care
and car expenses) is typical for her. She wants to extend it to forecast the amount of
money that she might be able to save over the next year. Her cash inflows are pre-

dictable because she already knows her salary for the year. Some of the monthly cash
outflows (such as rent and the cable bill) in her monthly budget are also constant from

Stephanie Spratt believes her budget for last month (except for the unusual health care
and car expenses) is typical for her. She wants to extend it to forecast the amount of
money that she might be able to save over the next year. Her cash inflows are pre-

dictable because she already knows her salary for the year. Some of the monthly cash
outflows (such as rent and the cable bill) in her monthly budget are also constant from

expected to be normal, they can be forecasted from previous months when the levels
were normal. You can make adjustments to account for any cash flows that you expect
to be unusual in a specific month in the future. (For example, around the winter holi-
days you can expect to spend more on gifts and recreation.)

Expenses such as health care, car repairs, and household repairs often occur unexpected-
ly. Although such expenses are not always predictable, you should budget for them
periodically. You should assume that you will likely incur some unexpected expenses for
health care as well as for repairs on a car or on household items over the course of sev-
eral months. Thus, your budget may not be perfectly accurate in any specific month, but
it will be reasonably accurate over time. If you do not account for such possible expenses
over time, you will likely experience lower net cash flows than expected over time.

Creating an Annual Budget

If you are curious about how much money you may be able to save in the next year, you
can extend your budget out for longer periods. You should first create an annual budget
and then adjust it to reflect anticipated large changes in your cash flows.

EXAMPLE

Stephanie Spratt believes her budget for last month (except for the unusual health care
and car expenses) is typical for her. She wants to extend it to forecast the amount of
money that she might be able to save over the next year. Her cash inflows are pre-
dictable because she already knows her salary for the year. Some of the monthly cash
outflows (such as rent and the cable bill) in her monthly budget are also constant from

### Exhibit 2.5  Comparison of Stephanie Spratt’s Budgeted and Actual Cash Flows for This Month

<table>
<thead>
<tr>
<th>Cash Inflows</th>
<th>Expected Amounts (forecasted at the beginning of the month)</th>
<th>Actual Amounts (determined at the end of the month)</th>
<th>Forecasting Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable (after-tax) income</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$0</td>
</tr>
<tr>
<td>Interest on deposits</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dividend payments</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Cash Inflows</strong></td>
<td><strong>$2,500</strong></td>
<td><strong>$2,500</strong></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Outflows</th>
<th>Expected Amounts</th>
<th>Actual Amounts</th>
<th>Forecasting Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$600</td>
<td>$600</td>
<td>$0</td>
</tr>
<tr>
<td>Cable TV</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>60</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Telephone</td>
<td>60</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Groceries</td>
<td>300</td>
<td>280</td>
<td>+20</td>
</tr>
<tr>
<td>Health care insurance and expenses</td>
<td>430</td>
<td>430</td>
<td>0</td>
</tr>
<tr>
<td>Clothing</td>
<td>100</td>
<td>170</td>
<td>–70</td>
</tr>
<tr>
<td>Car expenses (insurance, maintenance, and gas)</td>
<td>500</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>Recreation</td>
<td>600</td>
<td>650</td>
<td>–50</td>
</tr>
<tr>
<td><strong>Total Cash Outflows</strong></td>
<td><strong>$2,700</strong></td>
<td><strong>$2,800</strong></td>
<td><strong>–$100</strong></td>
</tr>
<tr>
<td><strong>Net Cash Flows</strong></td>
<td>–$200</td>
<td>–$300</td>
<td>–$100</td>
</tr>
</tbody>
</table>
Recall that Stephanie Spratt expects to spend about $2,100 and invest the remaining $400 in assets (such as bank accounts or stocks) each month. She would like to save a substantial amount of money so that she can purchase a new car and a home someday, so she considers how she might increase her net cash flows.

Stephanie assesses her personal income statement to determine whether she can increase her cash inflows or reduce her cash outflows. She would like to generate more

one month to another. To forecast these types of cash outflows, she simply multiplies the monthly amount by 12 (for each month of the year) to derive an estimate of the annual expenses, as shown in the third column of Exhibit 2.6.

Some other items vary from month to month, but last month’s budgeted amount seems a reasonable estimate for the next 12 months. Over the next 12 months Stephanie expects net cash flows of $4,800. Therefore, she sets a goal of saving $4,800, which she can place in a bank account or invest in stocks.

**Improving the Budget**

As time passes, you should review your budget to determine whether you are progressing toward the financial goals that you established. To increase your savings or pay down more debt so that you can more easily achieve your financial goals, you should identify the components within the budget that you can change to improve your budget over time.

**EXAMPLE**

Recall that Stephanie Spratt expects to spend about $2,100 and invest the remaining $400 in assets (such as bank accounts or stocks) each month. She would like to save a substantial amount of money so that she can purchase a new car and a home someday, so she considers how she might increase her net cash flows.

Stephanie assesses her personal income statement to determine whether she can increase her cash inflows or reduce her cash outflows. She would like to generate more

<table>
<thead>
<tr>
<th>Cash Inflows</th>
<th>Typical Month</th>
<th>This Year’s Cash Flows (equal to the typical monthly cash flows × 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable (after-tax) income</td>
<td>$2,500</td>
<td>$30,000</td>
</tr>
<tr>
<td>Interest on deposits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dividend payments</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Cash Inflows</strong></td>
<td><strong>$2,500</strong></td>
<td><strong>$30,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Outflows</th>
<th>Typical Month</th>
<th>This Year’s Cash Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$600</td>
<td>$7,200</td>
</tr>
<tr>
<td>Cable TV</td>
<td>50</td>
<td>600</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>60</td>
<td>720</td>
</tr>
<tr>
<td>Telephone</td>
<td>60</td>
<td>720</td>
</tr>
<tr>
<td>Groceries</td>
<td>300</td>
<td>3,600</td>
</tr>
<tr>
<td>Health care insurance and expenses</td>
<td>130</td>
<td>1,560</td>
</tr>
<tr>
<td>Clothing</td>
<td>100</td>
<td>1,200</td>
</tr>
<tr>
<td>Car expenses (insurance, maintenance, and gas)</td>
<td>200</td>
<td>2,400</td>
</tr>
<tr>
<td>Recreation</td>
<td>600</td>
<td>7,200</td>
</tr>
<tr>
<td><strong>Total Cash Outflows</strong></td>
<td><strong>$2,100</strong></td>
<td><strong>$25,200</strong></td>
</tr>
<tr>
<td>Net Cash Flows</td>
<td>+$400</td>
<td>$4,800 (difference between cash inflows and outflows)</td>
</tr>
</tbody>
</table>

**Exhibit 2.6 Annual Budget for Stephanie Spratt**
Cash inflows than $2,500, but she is already paid well, given her skills and experience. She considers pursuing a part-time job on weekends, but does not want to use her limited free time to work. Therefore, she realizes that given her present situation and preferences, she will not be able to increase her monthly cash inflows. She decides to reduce her monthly cash outflows so that she can save more than $400 per month.

Stephanie reviews the summary of cash outflows on her budget to determine how she can reduce spending. Of the $2,100 that she spends per month, about $1,500 is spent on what she considers necessities (such as her rent and utilities). The remainder of the cash outflows (about $600) is spent on recreation; Stephanie realizes that any major reduction in spending will have to be in this category of cash outflows.

Most of her recreation spending is on her health club membership and eating at restaurants. She recognizes that she can scale back her spending while still enjoying these activities. Specifically, she observes that her health club is upscale and overpriced. She can save about $60 per month by going to a different health club that offers essentially the same services. She also decides to reduce her spending at restaurants by about $40 per month. By revising her spending behavior in these ways, she can reduce her cash outflows by $100 per month, as summarized here:

<table>
<thead>
<tr>
<th></th>
<th>Previous Cash Flow Situation</th>
<th>Planned Cash Flow Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly cash inflows</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>Monthly cash outflows</td>
<td>$2,100</td>
<td>$2,000</td>
</tr>
<tr>
<td>Monthly net cash flows</td>
<td>$400</td>
<td>$500</td>
</tr>
<tr>
<td>Yearly net cash flows</td>
<td>$4,800</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

This reduction in spending will increase net cash flows from the present level of about $400 per month to a new level of $500 per month. Over the course of a year, her net cash flows will now be $6,000. Although Stephanie had hoped to find a solution that would improve her personal cash flow statement more substantially, she believes this is a good start. Most importantly, her budget is realistic.

**Financial Planning Online 2.1: Budgeting Tips**

**Go to**
www.moneycrashers.com/five-steps-to-effective-budgeting/

**Click**
“Budget to Save”

This Web site provides tips on effective budgeting based on your goals.
Chapter 2  Planning with Personal Financial Statements

FOCUS ON ETHICS: Excessive Financial Dependence

Have you ever been faced with a large unexpected expense that forced you to ask for financial assistance from your family or your friends? Such a situation could result from a failure to maintain a budget or to even set a budget. Other causes are unexpected expenses. Perhaps your car breaks down and needs some expensive repairs. Or perhaps you see something that you would really like to buy, but you know you cannot afford it. If you have not planned for such a large expenditure, you may not have money to pay for it. Faced with a looming debt, it may seem easy to fall back on your family for support. Beware of relying too much on such support. When you fail to control your own budget, your reliance on others over long periods of time can create tension with your relatives and can ultimately destroy family relationships.

You must become self-reliant. While there are times when an emergency may force you to rely on family or friends for financial assistance, you should not take such help for granted on a regular and long-term basis. Create a budget and stay within it. Build and maintain an emergency fund so that you need not rely on others in times of financial crisis. Before you seek help from family members or friends, ask yourself if you have done all you can on your own. Is your financial crisis an unforeseen emergency or did you spend the money earlier instead of saving it for this expense? Careful budgeting and controlled spending lead to self-reliance and a feeling of financial freedom.

PERSONAL BALANCE SHEET

The next step in the budgeting process is to create a personal balance sheet. A budget tracks your cash flows over a given period of time, whereas a personal balance sheet provides an overall snapshot of your wealth at a specific point in time. The personal balance sheet summarizes your assets (what you own), your liabilities (what you owe), and your net worth (assets minus liabilities).

Assets

The assets on a balance sheet can be classified as liquid assets, household assets, and investments.

Financial Planning Online 2.2: The Impact of Reduced Spending

Go to www.calculatorweb.com/calculators/savingscalc.shtml

This Web site provides an estimate of the savings that you can accumulate over time if you can reduce your spending on one or more of your monthly expenses.
Liquid assets

Liquid assets are financial assets that can be easily sold without a loss in value. They are especially useful for covering upcoming expenses. Some of the more common liquid assets are cash, checking accounts, and savings accounts. Cash is handy to cover small purchases, while a checking account is convenient for larger purchases. Savings accounts are desirable because they pay interest on the money that is deposited. For example, if your savings account offers an interest rate of 4 percent, you earn annual interest of $4 for every $100 deposited in your account. The management of liquid assets for covering day-to-day transactions is discussed in Part 2.

Household assets

Household assets include items normally owned by a household, such as a home, car, and furniture. The financial planning involved in purchasing large household assets is discussed in Part 3. These items tend to make up a larger proportion of your total assets than the liquid assets.

When creating a personal balance sheet, you need to assess the value of your household assets. The market value of an asset is the amount you would receive if you sold the asset today. For example, if you purchased a car last year for $20,000, the car may have a market value of $14,000 today, meaning that you could sell it to someone else for $14,000. The market values of cars can easily be obtained from various sources on the Internet, such as kbb.com. Although establishing the precise market value of some assets such as a house may be difficult, you can use recent selling prices of other similar houses nearby to obtain a reasonable estimate.

Investments

Some of the more common investments are in bonds, stocks, and rental property.

Bonds are certificates issued by borrowers (typically firms and government agencies) to raise funds. When you purchase a $1,000 bond that was just issued, you provide a $1,000 loan to the issuer of the bond. You earn interest while you hold the bond for a specified period. (Bonds are discussed further in Chapter 14.)

Stocks are certificates representing partial ownership of a firm. Firms issue stock to obtain funding for various purposes, such as purchasing new machinery or building new facilities. Many firms have millions of shareholders who own shares of the firm’s stock. The investors who purchase stock are referred to as shareholders or stockholders. You may consider purchasing stocks if you have excess funds. You can sell some of your stock holdings when you need funds.
The market value of stocks changes daily. You can find the current market value of a stock at many Web sites, including finance.yahoo.com. Stock investors can earn a return on their investment if the stock’s value increases over time. They can also earn a return if the firm pays dividends to its shareholders.

Investments such as stocks normally are not considered liquid assets because they can result in a loss in value if they have to be sold suddenly. Stocks are commonly viewed as a long-term investment and therefore are not used to cover day-to-day expenses. (Stocks will be discussed in detail in Chapter 14.)

Mutual funds sell shares to individuals and invest the proceeds in an overall portfolio of investment instruments such as bonds or stocks. They are managed by portfolio managers who decide what securities to purchase so that the individual investors do not have to make the investment decisions themselves. The minimum investment varies depending on the particular fund, but it is usually between $500 and $3,000. The value of the shares of any mutual fund can be found in periodicals such as The Wall Street Journal or on various Web sites. We’ll examine mutual funds in detail in Chapter 14.

Real estate includes holdings in rental property and land. Rental property is housing or commercial property that is rented out to others. Some individuals purchase a second home and rent it out to generate additional income every year. Others purchase apartment complexes for the same reason. Some individuals purchase land as an investment.

Liabilities

Liabilities represent debt (what you owe) and can be segmented into current liabilities and long-term liabilities.

Current Liabilities. Current liabilities are debt that you will pay off in the near future (within a year). The most common example of a current liability is a credit card balance that will be paid off in the near future. Credit card companies send the cardholder a monthly bill that itemizes all the purchases made in the previous month. If you pay your balance in full upon receipt of the bill, no interest is charged on the balance. The liability is then eliminated until you receive the next monthly bill.

Long-Term Liabilities. Long-term liabilities are debt that will be paid over a period longer than one year. A common long-term liability is a student loan, which reflects debt that a student must pay back to a lender over time after graduation. This liability requires you to pay an interest expense periodically. Once you pay off this loan, you eliminate this liability and do not have to pay any more interest expenses. In general, you should limit your liabilities so that you can limit the amount of interest owed.

Other common examples of long-term liabilities are a car loan and a mortgage (housing) loan. Car loans typically have a maturity of between 3 and 5 years, while mortgages typically have a maturity of 15 or 30 years. Both types of loans can be paid off before their maturity date.

Net Worth

Your net worth is the difference between what you own and what you owe.

\[
\text{Net Worth} = \text{Value of Total Assets} - \text{Value of Total Liabilities}
\]

In other words, if you sold enough of your assets to pay off all of your liabilities, your net worth would be the amount of assets you would have remaining. Your net worth is a measure of your wealth because it represents what you own after deducting any money that you owe. If your liabilities exceed your assets, your net worth is negative. Excessive liabilities and spending beyond your means can lead to bankruptcy.

Creating a Personal Balance Sheet

You should create a personal balance sheet to determine your net worth. Update it periodically to monitor how your wealth changes over time.
Stephanie Spratt is considering purchasing a new car for $20,000. To make the purchase, Stephanie would do the following:

- She would trade in her existing car, which has a market value of about $1,000.
- She would write a check for $3,000 as a down payment on the car.
- She would obtain a five-year loan for $16,000 to cover the remaining amount owed to the car dealer.

Her personal balance sheet would be affected as shown in Exhibit 2.8 and explained next.

**Change in Stephanie’s Assets.** Stephanie’s assets would change as follows:

- Her car would now have a market value of $20,000 instead of $1,000.
- Her checking account balance would be reduced from $3,500 to $500.

Thus, her total assets would increase by $16,000 (her new car would be valued at $19,000 more than her old one, but her checking account would be reduced by $3,000).
### Exhibit 2.7  Stephanie Spratt’s Personal Balance Sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquid Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$500</td>
</tr>
<tr>
<td>Checking account</td>
<td>3,500</td>
</tr>
<tr>
<td>Savings account</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total liquid assets</strong></td>
<td><strong>$4,000</strong></td>
</tr>
<tr>
<td><strong>Household Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>$0</td>
</tr>
<tr>
<td>Car</td>
<td>1,000</td>
</tr>
<tr>
<td>Furniture</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total household assets</strong></td>
<td><strong>$2,000</strong></td>
</tr>
<tr>
<td><strong>Investment Assets</strong></td>
<td></td>
</tr>
<tr>
<td>Stocks</td>
<td>$3,000</td>
</tr>
<tr>
<td><strong>Total investment assets</strong></td>
<td><strong>$3,000</strong></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$9,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Net Worth</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Credit card balance</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td><strong>$2,000</strong></td>
</tr>
<tr>
<td><strong>Long-Term Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Mortgage</td>
<td>$0</td>
</tr>
<tr>
<td>Car loan</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td><strong>$0</strong></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>$2,000</strong></td>
</tr>
<tr>
<td><strong>Net Worth</strong></td>
<td><strong>$7,000</strong></td>
</tr>
</tbody>
</table>

### Change in Stephanie’s Liabilities. **Stephanie’s liabilities would also change:**
- She would now have a long-term liability of $16,000 as a result of the car loan.

Therefore, her total liabilities would increase by $16,000 if she purchases the car.

### Change in Stephanie’s Net Worth. **If Stephanie purchases the car, her net worth would be:**

\[
\text{Net Worth} = \text{Total Assets} - \text{Total liabilities} \\
= $25,000 - $18,000 \\
= $7,000
\]

Stephanie’s net worth would remain unchanged as a result of buying the car because her total assets and total liabilities would increase by the same amount.

### Stephanie’s Decision. **Because the purchase of a new car will not increase her net worth, she decides not to purchase the car at this time. Still, she is concerned that her old car will require expensive maintenance in the future, so she will likely buy a car in a few months once she improves her financial position.**
How Cash Flows Affect the Personal Balance Sheet

The relationship between the personal cash flow statement and the personal balance sheet is shown in Exhibit 2.9. This relationship explains how you build wealth (net worth) over time. If you use net cash flows to invest in more assets, you increase the value of your assets without increasing your liabilities. Therefore, you increase your net worth. You can also increase your net worth by using net cash flows to reduce your liabilities. So, the more of your income that you allocate to investing in assets or to reducing your debt, the more wealth you will build.

Your net worth can change even if your net cash flows are zero. For example, if the market value of your car declines over time, the value of this asset is reduced and your net worth will decline. Conversely, if the value of a stock that you own increases, the value of your assets will rise, and your net worth will increase.
ECONOMIC IMPACT

Impact of the Economy on the Personal Balance Sheet

Economic conditions can affect your cash flows, and therefore affect your personal balance sheet, as illustrated in Exhibit 2.10. Favorable economic conditions can increase job opportunities and therefore your income. Conversely, unfavorable economic conditions such as the financial crisis of 2008–2009 can result in the elimination of jobs and reduced income for some individuals.

Economic conditions also affect the value of your assets. Favorable economic conditions result in a high demand to purchase homes, which increases the values of homes. In addition, the values of stocks rise when economic conditions are favorable, because corporations experience higher sales of the products or services they produce. Conversely, weak economic conditions such as the financial crisis result in lower values of assets. Home prices declined substantially during the financial crisis, as demand for homes declined. Stock prices declined because the corporations experienced a reduction in sales. Many individuals experienced such a large decline in their asset value during the crisis that their assets were worth less than their liabilities. That is, their net worth became negative.

QUESTIONS

a. Economic Impact on Asset Values. Explain in logical terms why values of assets such as homes and stocks may decline during a weak economy.

b. Economic Impact on Net Worth. Explain in logical terms why a weak economy can cause the net worth of individuals to decline.
Based on the information in her personal balance sheet shown in Exhibit 2.7, Stephanie measures her liquidity:

\[
\text{Liquidity Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{4,000}{2,000} = 2.0
\]

Stephanie's liquidity ratio of 2.0 means that for every dollar of current liabilities, she has $2 of liquid assets. This means that she has more than enough funds available to cover her current liabilities, so she is maintaining sufficient liquidity to cover her current liabilities.

Debt Level. You also need to monitor your debt level to ensure that it does not become so high that you are unable to cover your debt payments. A debt level of $20,000 would not be a serious problem for a person with assets of $100,000, but it could be quite serious for someone with hardly any assets. Thus, your debt level should be measured relative to your assets, as shown here:

\[
\text{Debt-to-Asset Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}
\]

A high debt ratio indicates an excessive amount of debt and should be reduced over time to avoid any debt repayment problems. Individuals in this position should review their cash flows to maximize inflows and minimize outflows.
Based on her personal balance sheet, Stephanie calculates her debt-to-asset ratio as:

\[
\text{Debt-to-Asset Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}} = \frac{2,000}{9,000} = 22.22\%
\]

This 22.22 percent debt level is not a cause for concern. Even if Stephanie lost her job, she could still pay off her debt.

**Savings Rate.** To determine the proportion of disposable income that you save, you can measure your savings over a particular period in comparison to your disposable income (income after taxes are taken out) using the following formula:

\[
\text{Savings Rate} = \frac{\text{Savings during the Period}}{\text{Disposable Income during the Period}}
\]

Based on her cash flow statement, Stephanie earns $2,500 in a particular month and expects to have net cash flows of $400 for savings or investments. She calculates her typical savings rate per month as:

\[
\text{Savings Rate} = \frac{\$400}{\$2,500} = 16\%
\]

Thus, Stephanie saves 16 percent of her disposable income.

**HOW BUDGETING FITS WITHIN YOUR FINANCIAL PLAN**

The key budgeting decisions for building your financial plan are:

- How can I improve my net cash flows in the near future?
- How can I improve my net cash flows in the distant future?

These decisions require initial estimates of your cash inflows and outflows and an assessment of how you might change your spending behavior to improve your budget over time. By limiting your spending, you may be able to increase your net cash flows and your net worth. Exhibit 2.11 provides an example of how the budgeting decisions apply to Stephanie Spratt’s financial plan.

**GOALS FOR A BUDGETING PLAN**

1. Determine how I can increase my net cash flows in the near future.
2. Determine how I can increase my net cash flows in the distant future.

**ANALYSIS**

**Present Situation:**

- Cash Inflows = $2,500 per month
- Cash Outflows = $2,100 per month
- Net Cash Flows = $400 per month
- Estimated Savings per Year = $4,800 ($400 per month × 12 months)
SUMMARY

- The personal cash flow statement measures your cash inflows, your cash outflows, and their difference (net cash flows) over a specific period. Cash inflows result from your salary or from income generated by your investments. Cash outflows result from your spending.

- Your cash inflows are primarily affected by your stage in your career path and your type of job.

Your cash outflows are influenced by your family status, age, and personal consumption behavior. If you develop specialized skills, you may be able to obtain a job position that increases your cash inflows. If you limit your consumption, you can limit your spending and therefore reduce your cash outflows. Either of these actions will increase net cash flows and thus allow you to increase your wealth.
You can forecast net cash flows (and therefore anticipate cash deficiencies) by creating a budget, which is based on forecasted cash inflows and outflows for an upcoming period.

The budgeting process allows you to control spending. Comparing your forecasted and actual income and expenses will show whether or not you were able to stay within the budget. By examining the difference between your forecast and the actual cash flow, you can determine areas of your budget that may need further control or areas of your budget that required less in expenditures than you predicted. This analysis will help you modify your spending in the future or perhaps adjust your future budgets.

The personal balance sheet measures the value of your assets, your liabilities, and your net worth. The assets can be categorized into liquid assets, household assets, and investments. Liabilities can be categorized as current or long-term liabilities. The difference between total assets and total liabilities is net worth, which is a measure of your wealth.

The net cash flows on the personal cash flow statement are related to the net worth on the personal balance sheet. When you have positive net cash flows over a period, you can invest that amount in additional assets, which results in an increase in your net worth (or your wealth). Alternatively, you may use the net cash flows to pay off liabilities, which also increases your wealth.

11. Cash Deficiencies. How do you think people who do not create a budget may deal with cash deficiencies? How can this affect their personal relationships?

12. Personal Balance Sheet. What is a personal balance sheet?

13. Asset Classifications. Name three classifications of assets. Briefly define and give examples of each.

14. Types of Investments. What are bonds? What are stocks? What are mutual funds? Describe how each of these provides a return on your investment.

15. Real Estate Investment. Describe two ways real estate might provide a return on an investment.


17. Measuring Net Worth. How is net worth a measure of wealth?

18. Change in Net Worth. When does your net worth increase? Will the purchase of additional assets always increase your net worth? Why or why not?

19. Financial Characteristics. What three financial characteristics can be monitored by analyzing your personal balance sheet?

20. Liquidity Ratio. What is the liquidity ratio? What does it indicate? How is the debt-to-asset ratio calculated? What does a high debt ratio indicate? How is your savings rate determined? What does it indicate?

21. Personal Financial Statements. Describe how wealth is built over time. How do your personal
Financial Planning Problems

1. **Estimating Disposable Income.** Angela earns $2,170 per month before taxes in her full-time job and $900 before taxes in her part-time job. About $650 per month is needed to pay taxes. What is Angela’s disposable income?

2. **Estimating Net Cash Flow.** Angela (from problem 1) inspects her checkbook and her credit card bills and determines that she has the following monthly expenses:

   - Rent: $500
   - Cable TV: $30
   - Electricity: $100
   - Water: $25
   - Telephone: $40
   - Groceries: $400
   - Car expenses: $350
   - Health insurance: $200
   - Clothing and personal items: $175
   - Recreation: $300

   What is Angela’s net cash flow?

3. **Impact on Net Cash Flow.** Angela makes a budget based on her personal cash flow statement. In two months, she must pay $375 for tags and taxes on her car. How will this payment affect her net cash flow for that month? Suggest ways that Angela might handle this situation.

4. **Estimating Savings.** From the information in problems 1 through 3, how much can Angela expect to save in the next 12 months?

5. **Change in Savings.** Angela analyzes her personal budget and decides that she can reduce her recreational spending by $50 per month. How much will that increase her annual savings? What will her annual savings be now?

6. **Savings Rate.** If Angela is saving $350 per month, what is her savings rate (i.e., savings as a percentage of disposable income)?

7. **Estimating Liquidity.** Jarrod is a college student. All of Jarrod’s disposable income is used to pay his college-related expenses. While he has no liabilities (Jarrod is on a scholarship), he does have a credit card that he typically uses for emergencies. He and his friend went on a shopping spree in New York City costing $2,000, which Jarrod charged to his credit card. Jarrod has $20 in his wallet, but his bank accounts are empty. What is Jarrod’s liquidity ratio? What does this ratio indicate about Jarrod’s financial position?

8. **Estimating Debt.** Jarrod (from problem 7) has an old TV worth about $100. Jarrod’s other assets total about $150. What is Jarrod’s debt-to-asset ratio? What does this indicate about Jarrod’s financial position?

9. **Asset Levels.** Ryan and Nicole have the following assets:

   - Home: $85,000
   - Cars: $22,000
   - Furniture: $14,000
   - Stocks: $10,000
   - Savings account: $5,000
   - Checking account: $1,200
   - Bonds: $15,000
   - Cash: $150
   - Mutual funds: $7,000
   - Land: $19,000

   What is the value of their liquid assets? What is the value of their household assets? What is the value of their investments?

10. **Liability Levels.** Ryan and Nicole have the following liabilities:

    - Mortgage: $43,500
    - Car loan: $2,750
    - Credit card balance: $165
    - Student loans: $15,000
    - Furniture loan (6 months): $1,200

    What are their current liabilities? What are their long-term liabilities? What is their net worth?

11. **Impact on Net Worth.** Ryan and Nicole would like to trade in one of their cars with a fair market value of $7,000 for a new one with a fair market value of $21,500. The dealer will take their car and provide a $15,000 loan for the new car. If they make this deal, what will be the effect on their net worth?

12. **Liquidity and Debt.** What is Ryan and Nicole’s liquidity ratio? What is their debt-to-asset ratio? Comment on each ratio.
13. **ETHICAL DILEMMA**: Jason and Mia are in their early 20s and have been married for three years. They are eager to purchase their first house, but they do not have sufficient money for a down payment. Mia’s Uncle Chris has agreed to loan them the money to purchase a small house. Uncle Chris requests a personal balance sheet and cash flow statement as well as tax returns for the last two years to verify their income and their ability to make monthly payments.

For the past two years, Chris has been working substantial overtime, which has increased his income by over 25 percent. The cash flow statements for the last two years show that Mia and Jason will have no difficulty making the payments Uncle Chris requires. However, Jason’s company has informed their employees that the overtime will not continue in the coming year. Mia and Jason are concerned that if they prepare their personal cash flow statement based on Jason’s base salary that Uncle Chris will not loan them the money because it will show the loan payments can only be made with very strict cost cutting and financial discipline. Therefore they elect to present just what Uncle Chris requested, which are the last two years’ personal cash flow statements and tax returns. They decide not to provide any additional information unless he asks.

a. Comment on Mia and Jason’s decision not to provide the information underlying their cash flow statement. What potential problems could result from their decision?

b. Discuss in general the disadvantages of borrowing money from relatives.

c. Explain what is meant by “looking ahead budgeting”

d. Explain one effective method discussed in the Web site for organizing your budget.

2. Go to calculators.aol.com/tools/aol/savings13/tool.fcs and go to “What’s it worth to reduce my spending?”

You can input various expenses that can be reduced and determine the savings that will accrue over time. Input your age, your age at retirement, 2 percent for the rate you can earn on savings, and 25 percent and 6 percent for the federal and state tax rates, respectively.

a. If you waited to buy a car, you could, perhaps, save $220 monthly. Enter this information and go to the Results page to find out what this savings would amount to at retirement.

b. If you ate out less, you could save, say, $150 monthly. Enter this information and go to the Results page to find out what this adds up to by retirement.

c. If you went to fewer movies and reduced expenses by $50 monthly, how much extra could you save by retirement? Enter this information and go to the Results page to find out the impact.

d. If you paid off credit card balances and reduced interest costs by $100 monthly, how much could you accumulate by retirement? Enter this information and go to the Results page to find out.

e. If you took all these measures to reduce your spending, what is the total savings you could accrue at retirement? To find out, look at the bottom section on the Results page.

3. Go to calculators.aol.com/tools/aol/budget03/tool.fcs and go to “How much am I spending?”

Do you want to know how your spending habits affect your future wealth? Using this information, you can fine-tune your budget.

a. Enter an actual home payment or rent of $600 per month and a desired amount of $550. Determine the impact of only this difference on future wealth. You can also view the impact graphically by clicking on the Graph tab.
b. Enter an actual expense for utilities of $350 per month and your desired amount of $250. Calculate the effect of only this change on future wealth. You can also view the impact graphically by clicking on the Graph tab.

c. Enter an actual expense for food of $600 monthly and a desired amount of $500. Determine the financial consequences of only this change in figures. You can also view the results graphically by clicking on the Graph tab.

d. Enter actual entertainment expenses of $250 monthly and a desired amount of $175. Determine the financial impact of only this change on future wealth. You can also view the results graphically by clicking on the Graph tab.

**VIDEO EXERCISE: Budgeting**

Go to one of the Web sites that contain video clips (such as www.youtube.com) and view some video clips about budgeting. You can use search phrases such as “budgeting tips.” Select one video clip on this topic that you would recommend for the other students in your class.

1. Provide the Web link for the video clip.
2. What do you think is the main point of this video clip?
3. How might you change your budgeting as a result of watching this clip?

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**BUILDING YOUR OWN FINANCIAL PLAN**

Two major components of any good personal financial plan are a personal cash flow statement and a balance sheet. If you are a full-time student, prepare your cash flow statement based upon your anticipated cash flow at graduation.

To prepare your personal balance sheet and cash flow statement, turn to the worksheets at the end of this chapter and to the CD-ROM accompanying this text. In most cases, you will not have all of the cash inflows and outflows or assets and liabilities listed on the worksheet.

When listing your liabilities, be sure to include any educational loans even if they are not payable until after graduation.

When preparing your personal cash flow statement, break down all expenses into the frequency in which you are/will be paid. For example, if your car insurance is $700 per year and you are paid monthly, divide the $700 by 12. If you are paid biweekly, divide the $700 by 26. Personal cash flow statements should be set up based upon the frequency of your pay. This way, each time you are paid, you can distribute your paycheck to the appropriate cash outflow categories.

If, after preparing your personal cash flow statement, you have an excess of cash outflows over cash inflows, you should review in detail each cash outflow to determine its necessity and whether it can realistically be reduced in order to balance your cash inflows and outflows. Using Web sites like www.firsttechcu.com/Calculators/budget/calculators_budget.html (click “What's it worth to reduce my spending?”), you can also estimate the savings that you can accumulate over time by reducing your cash outflows.

Personal financial statements should be reviewed annually or whenever you experience a change that affects your cash inflows such as getting a raise, obtaining a new job, marrying, or getting divorced.
The Sampsons realize that the first step toward achieving their financial goals is to create a budget capturing their monthly cash inflows and outflows. Dave and Sharon’s combined income is now about $4,000 per month after taxes. With the new cash inflows from Sharon’s paycheck, the Sampsons have started spending more on various after-school programs for their children, such as soccer leagues and tennis lessons. In Chapter 1, they resolved to save a total of $800 per month for a new car and for their children’s education.

Reviewing their checking account statement from last month, Dave and Sharon identify the following monthly household payments:

- $900 for the mortgage payment ($700 loan payment plus home insurance and property taxes)
- $60 for cable TV
- $80 for electricity and water
- $70 for telephone expenses
- $500 for groceries
- $160 for a health care plan provided by Dave’s employer (this expense is deducted directly from Dave’s salary)

The Sampsons also review several credit card bills to estimate their other typical monthly expenses:

- About $180 for clothing
- About $300 for car expenses (insurance, maintenance, and gas)
- About $100 for school expenses
- About $1,000 for recreation and programs for the children
- About $20 as a minimum payment on their existing credit card balance

To determine their net worth, the Sampsons also assess their assets and liabilities, which include the following:

- $300 in cash
- $1,700 in their checking account
- Home valued at $100,000
- Furniture worth about $3,000
- Sharon’s car, which needs to be replaced soon, is worth about $1,000; Dave’s car is worth approximately $8,000
- They owe $90,000 on their home mortgage and about $2,000 on their credit cards

Go to the worksheets at the end of this chapter, and to the CD-ROM accompanying this text, to continue this case.
Chapter 2: Building Your Own Financial Plan

GOALS

1. Determine how to increase net cash flows in the near future.
2. Determine how to increase net cash flows in the distant future.

ANALYSIS

1. Prepare your personal cash flow statement.

Personal Cash Flow Statement

<table>
<thead>
<tr>
<th>Cash Inflows</th>
<th>This Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable (after-tax) income</td>
<td></td>
</tr>
<tr>
<td>Interest on deposits</td>
<td></td>
</tr>
<tr>
<td>Dividend payments</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Total Cash Inflows</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Outflows</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent/Mortgage</td>
<td></td>
</tr>
<tr>
<td>Cable TV</td>
<td></td>
</tr>
<tr>
<td>Electricity and water</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
</tr>
<tr>
<td>Groceries</td>
<td></td>
</tr>
<tr>
<td>Health care insurance and expenses</td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Car expenses (insurance, maintenance, and gas)</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Total Cash Outflows</td>
<td></td>
</tr>
</tbody>
</table>

| Net Cash Flows                      |            |

If you enter your cash flow information in the Excel worksheet, the software will create a pie chart of your cash outflows.
2. Prepare your personal balance sheet.

**Personal Balance Sheet**

**Assets**

**Liquid Assets**

- Cash
- Checking account
- Savings account
- Other liquid assets
- Total liquid assets

**Household Assets**

- Home
- Car
- Furniture
- Other household assets
- Total household assets

**Investment Assets**

- Stocks
- Bonds
- Mutual Funds
- Other investments
- Total investment assets

**Real Estate**

- Residence
- Vacation home
- Other
- Total real estate
- Total Assets
**Liabilities and Net Worth**

### Current Liabilities
- Loans
- Credit card balance
- Other current liabilities
- Total current liabilities

### Long-Term Liabilities
- Mortgage
- Car loan
- Other long-term liabilities
- Total long-term liabilities

### Total Liabilities

### Net Worth

---

3. Reevaluate the goals you set in Chapter 1. Based on your personal cash flow statement, indicate how much you can save each year to reach your goals.

**Personal Financial Goals**

<table>
<thead>
<tr>
<th>Financial Goal</th>
<th>Dollar Amount</th>
<th>Savings per Year</th>
<th>Number of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-Term Goals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intermediate-Term Goals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Long-Term Goals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DECISIONS

1. Describe the actions you will take to increase your net cash flows in the near future.

2. Detail your plans to increase your net cash flows in the distant future.
## Chapter 2: The Sampsons—A Continuing Case

### CASE QUESTIONS

1. Using the information in the case, prepare a personal cash flow statement for the Sampsons.

### Personal Cash Flow Statement

<table>
<thead>
<tr>
<th>Cash Inflows</th>
<th>This Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Cash Inflows**

<table>
<thead>
<tr>
<th>Cash Outflows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Include categories for cash outflows as follows:**

- Rent/Mortgage
- Cable TV
- Electricity and water
- Telephone
- Groceries
- Health care insurance and expenses
- Clothing
- Car expenses (insurance, maintenance, and gas)
- School expenses
- Recreation
- Credit card minimum payments
- Other

**Total Cash Outflows**

**Net Cash Flows**
2. Based on their personal cash flow statement, will the Sampsons be able to meet their savings goals? If not, how do you recommend that they revise their personal cash flow statement in order to achieve their savings goals?


**Personal Balance Sheet**

**Assets**

**Liquid Assets**
- Cash
- Checking account
- Savings account
- Total liquid assets

**Household Assets**
- Home
- Car
- Furniture
- Total household assets

**Investment Assets**
- Stocks
- Bonds
- Mutual Funds
- Total investment assets

**Total Assets**
### Liabilities and Net Worth

#### Current Liabilities

<table>
<thead>
<tr>
<th>Loans</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit card balance</td>
<td></td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Long-Term Liabilities

<table>
<thead>
<tr>
<th>Mortgage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Car loan</td>
<td></td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Liabilities

<table>
<thead>
<tr>
<th><strong>Net Worth</strong></th>
<th></th>
</tr>
</thead>
</table>

4. What is the Sampsons’ net worth? Based on the personal cash flow statement that you prepared in question 2, do you expect that their net worth will increase or decrease in the future? Why?

---

**NAME**

**DATE**