Financial Plan Assignments

While the previous chapter helped you determine where you wanted to be, this chapter helps you see where you are right now. Financial statements help you understand your current financial position.

If you are not already living on a budget, your assignment is to begin today. Begin keeping a record of all your expenses, using the recording method of your choice. Your budget is probably the single-most important tool that will help you attain your goals. Use it wisely and refer to it often. It is important to remember that recording expenses alone is not budgeting. Recording expenses is just record-keeping. You need to plan where your money should go and then see that you follow your plan.

In addition to making a budget, put together your own personal or family balance sheet. Be conservative in evaluating your assets, and be exact in evaluating your liabilities. Follow the methods discussed in this chapter and see where you are financially.

Finally, calculate your financial ratios regarding liquidity, debt, and savings. Are your assets as liquid as they should be? Are you reducing debt as you should? Are you saving as much as you should?

Learning Tools

The following Learning Tool may be helpful as you prepare your personal financial statements.

4. Budget, Balance Sheet, and Income Statements

This is an excel spreadsheet that includes a one-year budget, a two-period balance sheet, an income statement, and financial ratios for determining where you are financially.

Review Materials

Review Questions

1. Why is it necessary to understand financial statements? Why is it necessary to create your own personal financial statements?
2. According to Spencer W. Kimball, who should have a budget? Why?
3. What is the process of creating an effective budget?

4. What is the main difference between the "old way" and the "new way" of budgeting (see Chart 1 and Chart 2)? Why is this so important to the success of your financial plan?
5. Why is it important to calculate your net worth? What does your net worth say about your financial position? What is a "good" net worth?

Case Studies

Case Study 1

Data

Steve and Mary Jo, both 35 years old, own a house worth $150,000 and have a yearly income of $50,000, monetary assets of $5,000, two cars worth $20,000, and furniture worth $10,000. The house has a $100,000 mortgage, they have college loans of $10,000 outstanding, and the cars have outstanding loans of $10,000 each. Bills totaling $1,150 for this month have not been paid ($1,000 is to pay off their credit card that they use for bills). They are requesting your help.

Calculations

Using the data above, create a balance sheet to calculate Steve and Mary Jo's net worth. How are they doing?

Case Study 1 Answers

The balance sheet for Steve and Mary Jo should look like this:

Assets	
Primary Residence	$150,000
Monetary Assets	$5,000
Automobiles	$20,000
Furniture	$10,000
Total Assets	$185,000
Liabilities	
Current Bills	$1,150
First Mortgage	$100,000
College Loan	$10,000
Automobiles (2 * $10,000)	$20,000
Total Liabilities	$131,150
Net Worth (Assets – Liabilities)	$53,850

Generally, they are doing OK. While they have a positive net worth, most of that value is from the equity of their home.

Case Study 2

Data

Steve and Mary Jo, who make $50,000 per year, calculated their average tax rate at 15 percent. They contribute 12 percent of their income to charity and pay themselves 10 percent of their income. They have 25 years and $100,000 remaining on their 6-percent mortgage ($7,730 per year), three years and $20,000 remaining on their 7-percent auto loan ($7,410), and 10 years and $10,000 remaining on their 3-percent college loan ($1,160). In addition, utilities and property taxes were $2,270 per year, food was $6,000, insurance was $1,500, and other expenses were $5,430.

Calculations

Calculate their income statement using the "better" method, and round values to the nearest $10. How are they doing?

Case Study 2 Answers

Their income statement should look like this:

Annual Income

Wages	$50,000
Taxes (15%)	7,500
Income for Living Expenses	42,500
Paying the Lord (12%)	6,000
Paying Yourself (10%)	5,000
Total Income	$31,500

Expenses

Mortgage	$7,730
Utilities, Taxes	2,270
Food	6,000
Insurance	1,500
College Loan	1,160
Car Payment	7,410
Other Expenses	5,430
Total Living Expenses	$31,500

They seem to be doing OK; they are saving money, and it appears that they are living within their income. We need more information though.

This is the way Steve and Mary Jo calculated their annual expenses. (For information on using a financial calculator, see **Learning Tool 3: Financial Calculator Tutorial**, and **Learning Tool 12: Excel Financial Calculator**.)

Mortgage PV = $100,000, I = 6%, N = 25 * 12, PMT = ? * 12 = $7,730
College Loan PV = $10,000, I = 3%, N = 10 * 12, PMT = ? * 12 = $1,160
Car PV = $20,000, I = 7%, N = 3 * 12, PMT = ? * 12 = $7,410

Case Study 3

Data

Steve and Mary Jo would like you to help them understand where they are financially. You have Steve and Mary Jo's balance sheet and income statements, which were prepared earlier.

Calculations

They ask for help to calculate each of the six key liquidity, debt, and savings ratios.

Application

Using the data and calculations, comment on how well they are doing. What can and should they be doing to improve?

Case Study 3 Answers

Liquidity Ratios

Current ratio = current assets / current liabilities
$5,000 / 1,150 = 4.35 times

Month's living expense covered ratio = monetary assets / (annual living expenses / 12)

$5,000 / (31,500 / 12) = $5,000 / 2,624 [(M + F + I + CL + CP + OE) / 12] = 1.9 months (Living expenses do not include charity, taxes, or paying yourself because if you were not earning money, you would not pay these expenses.)

Steve and Mary Jo are somewhat liquid. They have a good current ratio (>2) but could only cover annual living expenses for less than two months (>3–6+ months is much better). They need to cut expenses and reduce debt.

Debt Ratios

Debt ratio = total liabilities / total assets
$131,150 / 185,000 = 70.9%

Long-term debt coverage ratio = income available for living expenses (wages – taxes or W – T) / long-term debt payments (debt you would not pay off in 12 months)
$42,500 (W – T) / (7,730 + 1,160 + 7,410) (M + CL + CP) = $42,250 / 16,300 = 2.6 times

Their debt service ratio or inverse of the long-term debt coverage ratio is $16,300 / 42,500 = 38.6%.

They have lots of debt—71 percent of their assets are financed, and their long-term debt ratio is 2.6 times, just above the 2.5 times caution level. Thirty-nine percent of their total income available goes to cover just debt payments. Just think—they could be investing that money instead of paying it!

Savings Ratios

Savings ratio = income available for savings and investment / income available for living expenses

$5,000 (PY) / 42,500 (W – T) = 11.8%

Gross savings ratio = income available for savings and investment / gross salary

$5,000 / 50,000 = 10%

They are saving 11.8 percent of their income available for living expenses, and 10 percent of their gross salary. This is OK, but it should be the minimum amount. I hope students taking this class will save much more, perhaps 20 percent of their gross salary.

Ratio Summary

Overall Situation	Actual	Recommended
Liquidity		
Current Ratio	4.4 Times	> 2
Month's LEC Ratio	1.9 Times	> 3 – 6+
Debt		
Debt Ratio	70.9%	0% (See Note 1)
LT Debt Coverage Ratio	2.6 Times	> 2.5
% Income to Pay Debt	38.0%	0% (See Note 1)
Savings		
Savings Ratio	11.8%	> 10%
Gross Savings Ratio	10.0%	10% Min (See Note 2)

Notes:

1. It depends on your age. Ideally, it should decrease to zero.
2. While the minimum is 10 percent, it should increase as the situation allows.

Recommendations:

Liquidity—Steve and Mary Jo are somewhat liquid, but they do not have enough monetary assets. They need to significantly increase their monetary assets by saving more. They should set a goal to have an LEC ratio of at least three to six times. To conserve cash, they need to reduce spending, and perhaps sell some assets. They are paying so much on debt payments that they cannot build their savings and emergency fund. They likely need a stricter budget.

Debt—Steve and Mary Jo are carrying way too much debt. Seventy-one percent of their assets are financed by debt. They are very close to the danger range of a debt coverage ratio of 2.5 times. Currently, 38 percent of their income is used for long-term debt payments. While they have equity in their home, that is where most of their net worth currently resides. Given the recent housing crisis, the amount of equity in their home has likely dropped. They should cut expenses, reduce their debt, and perhaps sell their expensive cars and purchase cheaper ones.

Savings—Steve and Mary Jo are saving 10 percent of their income, which is good. However, their total investment assets are only $5,000. Having $5,000 in monetary assets at a savings rate of $5,000 per year means they only began saving within the last year. While they can't do anything about the fact that they should have begun saving earlier, they need to save more now. I would encourage them to reduce their spending and increase their savings goal to 20 percent, if possible, which is what I recommend for my students. After a three-to-six month emergency fund, I would help them to take additional funds and use it to pay off debt.