Personal Finance: Another Perspective

Saving, Income and Expense Planning:

Giving Every Dollar a Name

Updated 2020-01-10

Objectives

A. Family Record Keeping – What should you keep?

B. Understand the principles of successful saving, income and expense planning (budgeting) and its methods and process

C. Understand and create your Saving, Income and Expense Plans (budgets)

D. Calculate your Net Worth using a Balance Sheet

E. Develop a personal Income Statement and use ratios to analyze your spending

Your Personal Financial Plan

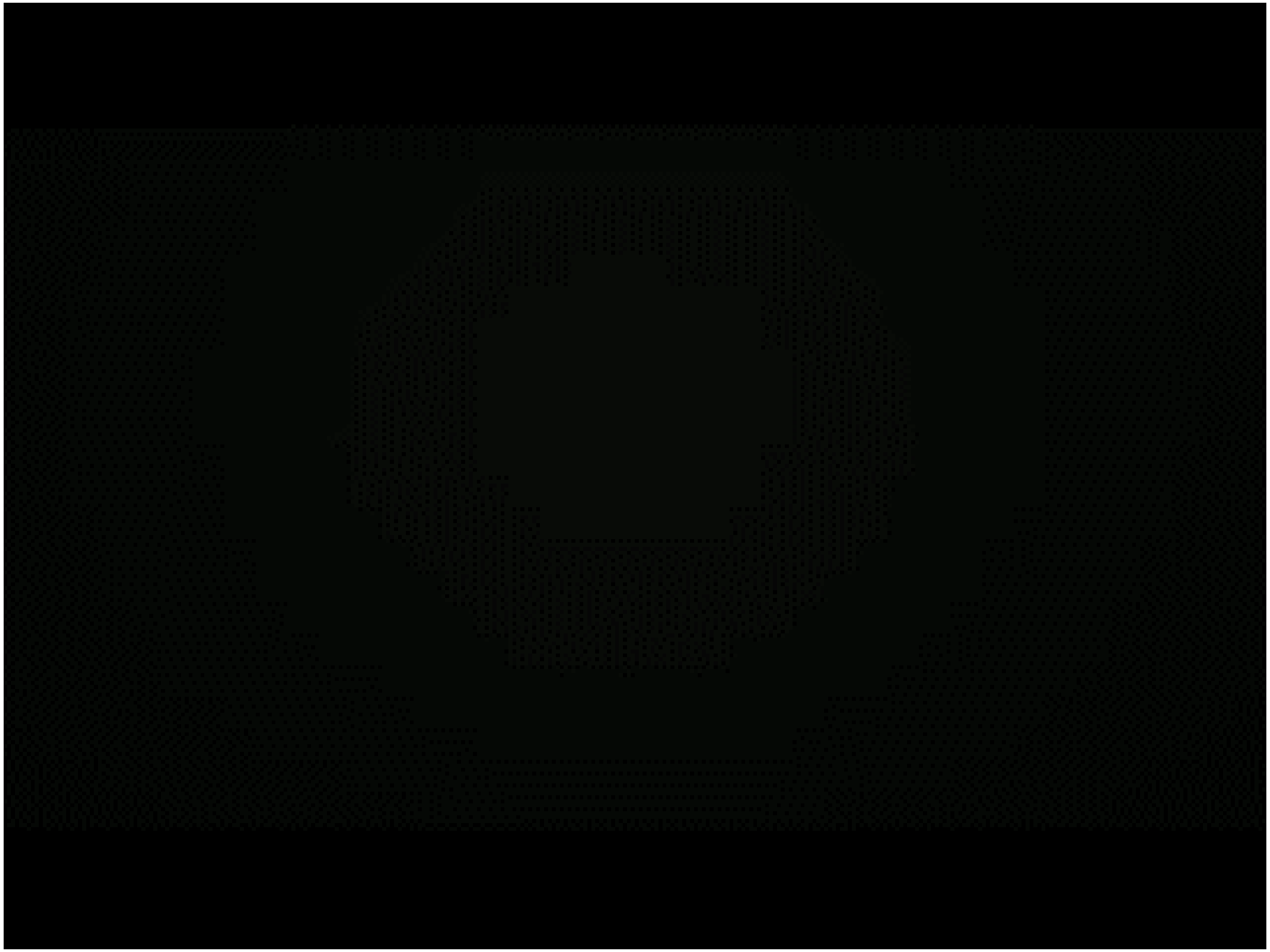
✓Section III. Personal Financial Statements:

- Have a cover sheet with current situation and action plan for each section below explaining where you are and your action plan for getting where you want to be (use Financial Statements LT01-03 template)
- Show first and last months data for your personal
  - a. Income Statements (from your budget/LT04C)
  - b. Balance Sheets (Balance Sheets LT4B)
  - c. Financial Ratios (Ratios LT4B)
- Action Plan for a-c
  - What can you do to improve each of these statements in the future?

Your Personal Financial Plan

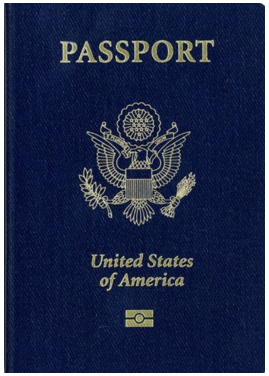
- Section IV. Saving, Income and Expense Planning
  - Include cover sheet that explains differences with explanations. Support includes forecast, actual, and differences (use Budget Template LT01-04)
    - Month 1. (Quicken, LT04C, 04, 31, Mint, YNAB, etc.)
    - Month 2.
    - Month 3. (SIE Plans are be handed in at the end of each of the first two months, with the third month's budget handed in with the PFP)
  - Action Plan
    - What can you do to do better in the future?
    - Include a one year Saving, Income and Expense Plan (LT04C)

Your Personal Financial Plan



A. Family Record Keeping

- In planning budgeting and measuring your financial health, record keeping is critical
  - Here are some insights that may help
    - 1. What records should be keep forever and update as needed?
    - 2. What records do you keep as long as in force or you are the owner?
    - 3. What financial records should you save for at least 7 years?
    - 4. Where should you store your records?

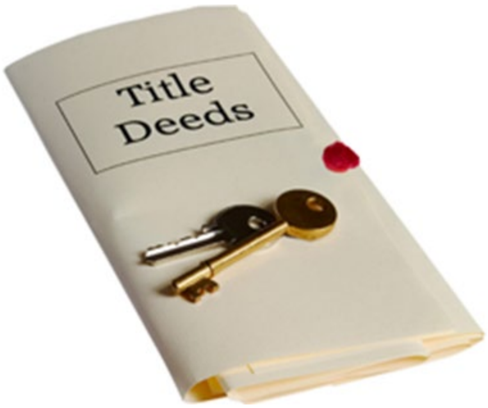


Family Record Keeping (continued)

- 1. What records should be keep forever and update as needed?
  - Advance directives (living wills)
  - Family and personal journals
  - Family and personal photos, videos, audio recordings
  - Household inventory (via video)
  - Life histories (Family Search)
  - Password list
  - Powers of attorney
  - Safe deposit box inventory
  - Social security statement (current year)
  - Vaccination records and Wills

Family Record Keeping (continued)

- 2. What records do you keep as long as in force or you are the owner?
  - Contracts
  - Home purchase and improvement records
  - Life insurance policies
  - Loan documents
  - Real estate deeds
  - Receipts for items under warranty
  - Receipts for large purchases
  - Service contracts and warranties
  - Stock and bond certificates
  - Vehicle titles



Family Record Keeping (continued)

- 3. What financial records should you save for at least 7 years?
  - Anything that could be used in an IRS audit
    - Tax deductible receipts (e.g., end-of-year contribution receipt given to you by ward clerk)
    - Donation receipts from Deseret Industries
    - Access to bank statements
    - Access to credit card statements
    - Medical receipts
    - W-2 forms
    - Other documents for deductions

IRS

Family Record Keeping (continued)

- 4. Where should you store your records?
  - Safe deposit box
  - Fireproof storage safe
  - Digital copies (with back up)
  - ***Secure*** online storage
    - Cloud
  - Multiple hard copies to relatives (copies of the estate).
  - ***If it is not replaceable have a copy somewhere else!***

B. Understand the Principles of Successful Saving, Income and Expense Planning and Methods

- Why saving, income and expense planning, and not just budgeting?
  - Too many people when they think of budgeting think only of expense recording and planning—they leave out a critical parts of a saving and income strategy

SIE Plan Principles (cont

- What is your savings plan and strategy?
  - Developing a saving strategy is critical. Ideas include:
    - My purpose is to save, not just record expenses
    - I will save 20% of every dollar, with 15% for retirement (How Much Should I Save, Sudweeks 2018)
    - I will automate my savings, with __% to my 401k and $200 to my favorite index fund (taxable) monthly
    - I will not make the mistake of not having a saving strategy (6 Investing Mistakes the Ultra Wealth Do Not Make, Investopedia, 08/2018)
    - I know my vision and goals, and have plans and strategies in place to save for them

SIE Plan Principles (continued)

- What is your income plan and strategy?
  - Having an income strategy is important. Ideas include:
    - I will invest in myself through increased education, i.e., associates, bachelors, masters, etc. and certification, i.e., CPA, CFP, CFA, etc.
    - I will increase my ability to do the job better, through spending time and getting help
    - I will improve my attitude toward my work
    - I will pray daily to “work beyond my abilities”
    - I will increase my ability to work faster, through thought, automation and computerization
    - I will “go the extra mile” and do more than expected
    - I will improve my resume each year

EXPENSE STRATEGY

SIE Plan Principles (continued)

- What is your expense strategy?
  - Having an expense strategy is critical. Ideas include:
    - I will record every dollar that I earn and spend
    - I will minimize fixed expenses, and keep them low
    - I will only spend on things in my SIE Plan
    - I will ensure the cares of the world will not impact spending and hence reduced saving
    - I will have patience and save for purchases instead of going into debt
    - I will not make large purchases that are not in our SIE Plan and not without prayer and fasting
    - I will not sell my birthright for a mess of pottage

SIE Plan Principles (continued)

- What are the principles of successful saving, income and expense planning?
  - 1. Understand yourself and your vision and goals
  - 2. Seek, receive and act on the Spirit’s guidance
  - 3. Understand the basics of wise saving, income and expense planning, spend less that you earn
  - 4. Keep good records for saving, income, spending, tax and other purposes
  - 5. Use a budgeting method that meets your individual and family needs and objectives
  - 6. Eliminate (unproductive) consumer debt and minimize (productive) mortgage and education debt

SIE Plan Doctrines (continued)

- What are the doctrines behind the principles?
  - Guiding Principles — Doctrines
  - 1. Understand yourself, vision/goals — Identity
  - 2. Seek, receive and act on guidance — Obedience
  - 3. Understand the basics of budgeting — Stewardship
  - 4. Keep good records — Stewardship
  - 5. Method that meets needs — Accountability
  - 6. Eliminate debt — Stewardship

SIE Plan Principles (continued)

From obedience to consecration

- We are children of Heavenly parents with an unlimited potential (identity); living worthy of the Spirit (obedience), trying to be wise stewards over the things that God has blessed us with (stewardship), and planning for and keeping good records of our saving, income and expenses. This way we can save for our long-term goals, minimize our payments to others (accountability); use a method that most meets our needs (stewardship); so we can accomplish what God would have us do, including attaining our personal mission and our personal and family and vision goals.

SIE Plan Methods and Process

- What saving, income and expense planning methods do you use?
  - Useful methods:
    - 1. The Envelope Method
    - 2. The 60% Rule
    - 3. Spreadsheets
    - 4. Budgeting Software
  - The method too many of us use:
    - 5. DNAH-ial Methods (Do Nothing and Hope)

SIE Plan Methods and P

- The Envelope Method
  - Requirements: Envelopes for each category
    - Divide spending each month into categories. At the beginning of each month, take the money you have planned for each category and put it in the envelope
      - Once a bill comes, take the money from the corresponding envelope and pay the bill
      - Once the money is gone from one envelope and you need more, you must shift money between other envelopes or make do with what you have
      - There is no getting money outside the system

SIE Plan Methods and Process (continued)

- The 60% Solution Method
  - Requirements: Journal or spreadsheet
    - Determine your gross salary each month. Take 60% of that amount and only spend that amount each month. Do not spend beyond that amount
      - Take 20% of your salary and save for long-term goals
      - Take 20% of your salary and save to pay your taxes at year-end
      - Once you have spent your money, you cannot go outside the method for more money

SIE Plan Methods and Process (continued)

- Spreadsheet Methods (LT04C, LT04, LT31)
  - Requirements: Computer and spreadsheets
    - Determine your gross salary and take home each month after taxes and other deductions
      - Determine spending by categories (rows) and dates (columns), and budget each category
      - As bills come in, input the spending on each date (column) and row (category)
      - Plan in adequate amounts for a financial reserve and long-term goals
      - Type in spending directly into spreadsheet
      - Can be useful if updated regularly

SIE Plan Methods and Process (continued)

- Computer Software Methods
  - Requirements: Computer and software, such as Mint.com (free), Quicken, Mvelopes
    - Determine your gross salary and take home each month after taxes and other deductions
      - Determine spending by category, and budget each category. Work to within your budget for each spending category
      - Obtain receipts and credit card information directly via internet from financial institutions
      - Can plan in adequate amounts for a financial reserve and long-term goals

SIE Plan Methods and Process (continued)

- DNAH-ial Methods (Denial - Do nothing and hope for the best)
  - Requirements: None
    - This is what the majority use
    - Do nothing in this areas
    - Deny there is a concern
    - Hope things work out (they should because I pay my tithing)
    - Only respond when things get so bad that you have to act

Which is the best method?

- In my experience, the best plans are those that:
  - 1. Are low cost and relatively easy to use
  - 2. Allows downloading of bills from banks and credit card companies--makes data entry easier
  - 3. Allows adequate categorization of spending for income, spending, reporting and tax purposes
  - 4. Minimizes the time spent in doing finances (I spend roughly 1-2 hours per week)
- What I recommend (for most):
  - Mint.com for those starting out (free), spreadsheets for Excel wizards, and Quicken for more advanced users who are willing to put in the upfront time

SIE Plan Methods and Process (continued)

Spencer W. Kimball said:

- Every family should have a budget. Why, we would not think of going one day without a budget in this Church or our businesses. We have to know approximately what we may receive, and we certainly must know what we are going to spend. And one of the successes of the Church would have to be that the Brethren watch these things very carefully, and *we do not spend that which we do not have* (italics added, Conference Report, April 1975, pp. 166-167).

Your SIE Plan)

- What is a Saving, Income and Expense Plan (budget)?
  - It is the single most important tool in helping you attain your personal financial goals
  - The process is:
    - 1. Know what you want to accomplish--***set your savings goal***
    - 2. Track your saving, income and expenses
    - 3. Develop your cash budget (plan)
    - 4. Implement your saving, income and expense plan
    - 5. Pay the Lord first, and yourself second
    - 6. Compare it to actual saving, income and expenses and make changes where necessary to achieve your goals

Your SIE Plan (continued)

- 1. Know what you want to accomplish
  - Know and write down your vision and your goals, ***especially your savings goals***
    - What do you want to accomplish?
      - Do you want to:
        - Graduate from college
        - Prepare to be a worthy spouse
        - Get a great job
        - Send kids to college and on missions
        - Return to your Heavenly Father

Your SIE Plan (continued)

- 2. Track Saving, Income and Expenses
  - There are different methods to track spending:
    - Checks and credit cards
      - These expenditures leave a paper trail
    - Cash
      - Record expenditures in a notebook
    - Computer programs, i.e., Quicken, Money
      - These are very useful, especially if tied to bank and credit card companies
    - The goal is to generate a monthly income and expense statement

Your SIE Plan (continued)

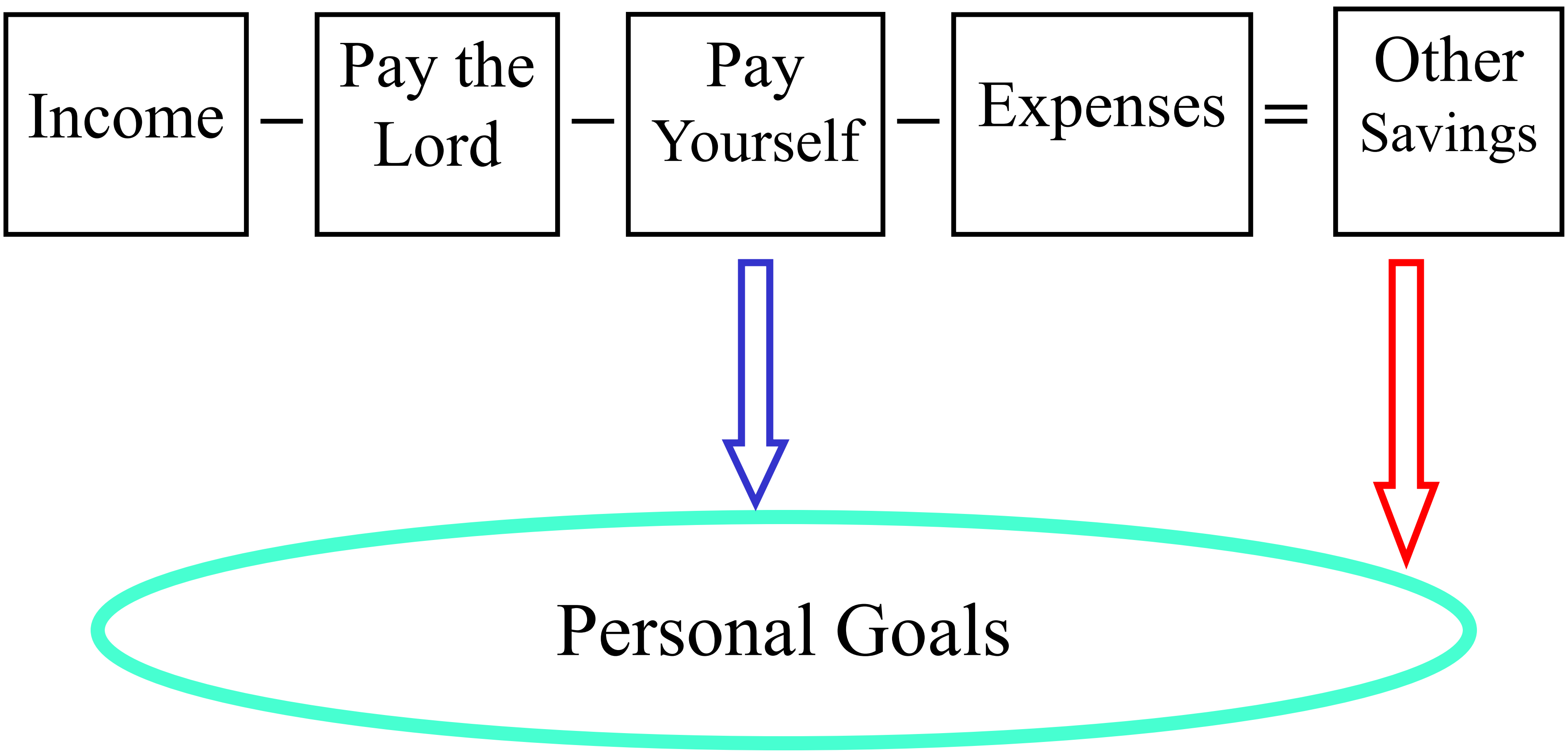
- 3. Develop your Cash Budget (the better way)
  - What is a Cash Budget?
    - A plan for controlling cash, inflows and outflows
  - Income:
    - Examine last year's after-tax total income and make adjustments for the current year.
  - Expenses:
    - Identify all fixed ("must have") and variable ("would be nice to have") expenditures
      - Look for ways to reduce your variable and fixed expenses

Budgeting: The Old Way

Income – Tithing – Expenses = Available for Savings

Personal Goals

Budgeting: The Better Way



Your SIE Plan (continued)

L. Tom Perry said:

- After paying your tithing of 10 percent to the Lord, you pay yourself a predetermined amount directly into savings. That leaves you a balance of your income to budget for taxes, food, clothing, shelter, transportation, etc. It is amazing to me that so many people work all of their lives for the grocer, the landlord, the power company, the automobile salesman, and the bank, and yet think so little of their own efforts that they pay themselves nothing (L. Tom Perry, "Becoming Self-Reliant," *Ensign,* Nov. 1991, 64).

Your SIE Plan (continued)

- 4. Implement your Cash Budget
  - Try the budget for a month
    - Record all saving, income and expenses in the proper category by date
    - Sum all days or columns
    - Note how much you have available in each category at the end of each week
      - Adjust the plan or expenses as necessary to maintain the plan
      - Try to be as financially prudent as possible

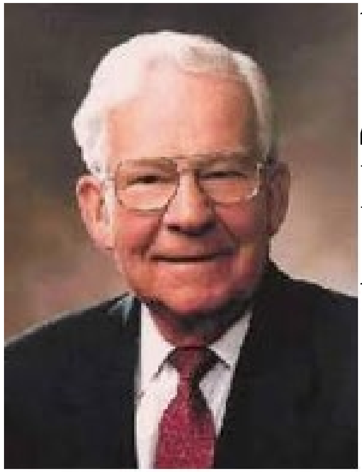
Your SIE Plan (continued)

- 5. Compare budget to actual saving, income and expenses
  - Compare your budget to actual saving, income and expenses to actual
    - Adjust the plan or your expenses as necessary to maintain the plan and keep saving
      - Don’t reduce payments to the Lord or yourself

Your SIE Plan (continued)

Marvin J. Ashton stated:

- Some claim living within a budget takes the fun out of life and is too restrictive. But those who avoid the inconvenience of a budget must suffer the pains of living outside of it. The Church operates within a budget. Successful business functions within a budget. Families free of crushing debt have a budget. *Budget guidelines encourage better performance and management* (italics added, Marvin J. Ashton, "It's No Fun Being Poor," *Ensign,* Sept. 1982, 72).



Questions

- Any questions on Saving, Income and Expense Planning?
  - Teaching Tool Examples include:
    - Simple Saving, Income and Expense Plan (LT04C) - Most simple SIE Budget
    - Budget, Balance Sheet and Ratios (LT04) – More detailed
  - Budgeting Programs include (among others):
    - Mint.com, Quicken (my favorite), MoneyDesktop.com, Mvelopes.com, YNAB, etc.

C. Understand and Create Your Saving, Income and Expense Plans

- What are your saving, income and expense plans?
  - You will create monthly plans, which are what you did and where you can improve
    - This includes your current situation and action plans,
  - You will create an annual plan, which take into account your yearly spending.
    - This includes your vision, goals, plans and strategies, constraints and accountability
  - You will do both for your PFP

Creating your SIE Plan (continued)

Vision

- From your Plan for Life
- Other ideas include:
  - Through proper use of my financial resources, I will have sufficient to accomplish my individual mission and our family vision and goals
  - We will save 20% gross after college, and will save it for retirement, education, missions and other goals

Creating your SIE Plan (continued)

Goals

- *Savings.* I will keep monthly records of my saving, income and expenses, along with a 1 year annual plan and will save 20% gross of my income
- I will never purchase anything unless it is in my Plan
- *Income.* I will grow my income by 1% above inflation through hard work and careful study and prayer
- I will work to be the best employee I can be
- *Expenses.* I will be a wise steward over my resources and will work to minimize fixed and other expenses
- I will not spend more than $20 with out my spouse's approval

Creating your SIE Plan (continued)

Plans and Strategies

Savings

- Pay the Lord first
- Pay myself second with 20% of earnings
- Save automatically through monthly deposits to mutual funds
- Save 20% of income, 15% for retirement, 2% for children’s missions/education, and 3% to pay down my mortgage
- Separate bank accounts for specific goals and children
- Start saving in Roth IRA as soon as possible as it maximizes spendable retirement income

Creating your SIE Plan (continued)

Plans and Strategies

Income

- Get as much education as possible
- Gain accreditation (CFA, CFP, CPA) to keep more marketable in my field
- Read 2 books a month to increase skills
- Pray each day to work beyond my natural abilities so I can be more effective at work
- Expand skills so my employer will want to pay me more to keep me
- Continue to network in your area of expertise
- Keep resume current and improve it monthly
- Find other ways to make money

Creating your SIE Plan (continued)

Plans and Strategies

Expenses

- Live cheap and have $20 mad money each month (wife gets $40). If married, discuss any spending over $20
- Divide expenses into fixed (those that cannot be changed except over long periods) and variable expenses
- Limit fixed expenses by not going into debt
- Do not buy anything not included in your annual Saving, Income and Expense Plan
- Barter for services with others in your same condition
- Keep an annual record of saving, income and expenses
- Remember that happiness is not bought with money but with right living

Noah Garret's email

Creating your SIE Plan (continu

Constraints

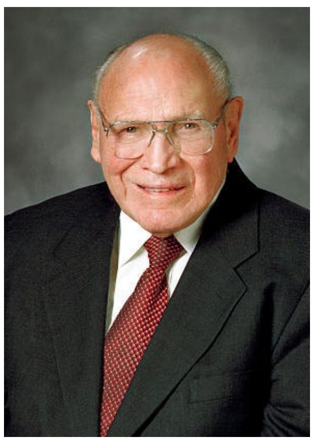
- Losing the Spirit is the worst possible constraint
- Focusing on the things of the world instead of what is really important
- Being impatient and not saving for big-ticket purchases
- Not being careful with the little things, the pennies

Accountability

- I will share my vision, goals and plans and strategies with God each day
- I will share my goals in and my spouse and children

Creating your SIE Plan (continued)

- Joseph B. Wirthlin commented:
  - I advise you to be patient in financial matters. Avoid rash or hurried financial decisions; such decisions require patience and study. Get-rich-quick schemes seldom work. Beware of debt. Be especially careful of easily obtained credit even if the interest is tax deductible. You young couples should not expect to begin your married lives with homes, automobiles, appliances, and conveniences comparable to those your parents have spent years accumulating ("Patience, a Key to Happiness," *Ensign,* May 1987, 30.)



Questions

- Any questions on creating your Saving, Income and Expense Plans?

D. Calculate your Net Worth Using a Balance Sheet

- What is a personal balance sheet?
  - A financial snapshot of your financial position on a given date
- How do you calculate your net worth or equity?

	Assets	(things you own of value)
-	Liabilities	(what you owe others)
	Net Worth	(the value of your holdings)

Note: There are different ways to value your assets and liabilities. Do it correctly!

A useful tool to help prepare your balance sheet is Balance Sheet and Ratios (LT04B)

Assets: What you own

- There are four different types of assets
  - Income-generating assets (portfolios, real estate)
    - These assets generate income or capital gains
  - Appreciating assets (home, education)
    - These are assets which may or which have historically appreciated in value.
  - Depreciating assets (vehicles, RVs, toys, electronics)
    - These are assets which depreciate (often, the minute you take ownership)
  - Income-consuming assets (vehicles, RVs, toys)
    - These are assets perhaps listed above which require a constant infusion of cash

Assets: What you own

- A. Monetary (or Current) Assets
  - Cash or other assets that can be easily converted into cash with 12 months. These provide necessary liquidity in case of an emergency
- B. Investment Assets
  - Assets, stocks, bonds, and mutual funds that are invested for the future. These are used to accumulate wealth to satisfy specific goals
- C. Retirement plans
  - Income-producing assets, such as pensions, IRAs, 401K, etc. by you or employer. These are used to accumulate wealth for retirement

Assets: What you own (continued)

- D. Housing
  - Appreciating tangible assets, such as land, dwellings, vacation home, or rental property. These are used for housing and other personal goals
- E. Automobiles and Other Vehicles
  - Depreciating assets, such as cars, trucks, and RVs that normally must be inspected and licensed. These are used to meet transportation and work needs
- F. Personal Property and Other assets
  - Depreciating tangible assets, such as boats, furniture, clothing, etc., businesses, collections. These represent your lifestyle to others

Liabilities: What You Owe

Liabilities come in two major forms:

- A. Current liabilities
  - Liabilities to be paid-off within the next year.
    - Credit cards, utility bills, rent, books, food, etc.
    - These are reported at the current amount, plus accrued interest
- B. Long-term liabilities
  - Liabilities that extend beyond one year
    - Student loans, auto loans, home mortgage, consumer loans, and credit card beyond 1 year
    - Reported at the current amount, although rates and timing determine your payoff amount

Net Worth

- What does your balance sheet show?
  - Is your net worth growing?
  - Are you are reaching your goals?
  - Are you are planning for emergencies?
  - Do you have adequate liquid assets?
  - Are you out of credit card and consumer debt?
  - Are you saving for retirement and your other financial goals
  - If you can answer affirmatively to the above, you are financially “healthy”

Questions

- Any questions on balance sheets?
  - Learning tools
    - Balance Sheets and Ratios (LT4B) – Most simple
    - Budget Balance Sheets and Income Statement (LT04)

Balance Sheet (LT4B) for Steve and Mary Jo
January 31, 2018

Directions: Fill in the green cells with your data. Be careful not to modify the blue cells. Key inputs for ratios comes from your budget and income statements for the m Frequency Monthly
Month: January Day 31 Year: 2018

Assets		Liabilities or Debts	
Current or Monetary Assets		**Current Liabilities**	
Cash, Checking, Saving	5,000	Unpaid Other Balances	1,150
Other Monetary Assets		Unpaid Credit Cards	
A. Total Monetary Assets	5,000	Other Credit Cards	
Investments & Retirement Plans		I. Total current liabilities	1,150
B. Mutual Funds, securities		**Housing Loans**	
C. Qual./Ind. Retirement Plans		Mortgage Outstanding	100,000
Total Investments (B+C)	-	Other Housing Debt	
Housing		J. Total Housing	100,000
Primary Residence	150,000	**Vehicle Loans**	
Other Housing		Automobiles	20,000
D. Total Housing (at market value)	150,000	Other vehicle loans	
Vehicles		K. Total Automobile Loans	20,000
Automobiles	20,000	**Other Loans**	
Other vehicles, ATVs, RVs, etc.		Students Loans	10,000
E. Total Automobiles	20,000	Other borrowings	
Personal Property & Other Assets		L. Other Loans	10,000
Personal Property	10,000	**M. Total Debt/Liabilities**	131,150
Other assets			
Other miscellaneous assets		**Net Worth**	
F. Personal Property & Other	10,000	N. Total Assets	185,000
		O. Less: Total Debt	131,150
H. Total Assets (A+B+C+D+E+F)	185,000	P. Equals: Net Worth	53,850

E. Develop a Personal Income Statement and use Ratios to Analyze Spending

- What is a Personal Income Statement?
  - A financial record your inflows and outflows of cash
    - It is on a cash basis. The statement is based entirely on actual cash flows, not accruals
  - Sources of income:
    - Wages, tips, royalties, salary, and commissions
      - Income is amount earned, not necessarily amount received. It also includes taxes, health care costs, expenses, etc.

Expenditures: Where Your Money Goes

- Two types of expenses
  - Fixed expenses:
    - Expenses you don't directly control (in the short term)
      - Mortgage, rent, tuition, books, etc.
  - Variable expense:
    - Expenses you can control
      - Food, entertainment, clothing, cable TV
  - There can there be differences of opinion as to fixed versus variable expenses?
    - Most fixed expenses are variable over longer periods of time

Financial Ratios: A Way to Analyze Spending

- In understanding where you are financially, there are three key questions to ask:
  - 1. Do you have adequate liquidity to meet emergencies?
  - 2. Do you have the ability to meet your debt obligations?
  - 3. Are you saving as much as you think you are?

Financial Ratios (continued)

- To answer these questions, all it takes is a balance sheet and five pieces of information (from your Simple SIE Plan (LT4C)
  - 1. How much are you saving each period?
  - 2. How much are your period living expenses?
  - 3. What is your period income less taxes?
  - 4. How much are your period long-term debt payments?
  - 5. What is your period gross or total income?
- Key Questions to Ask Yourself:
  - A useful tool to help you calculate your financial ratios is Balance Sheet and Ratios (LT04B). You can use monthly or annually for your period

Question 1: Do You Have Adequate Liquidity?

- These ratios help determine whether or not you have enough monetary assets to pay for an unexpected large expense or to tide you over during periods of reduced or eliminated earnings
  - Two Key Liquidity Ratios:
    - a. Current ratio
    - b. Month’s Living Expenses Covered ratio

Liquidity Ratios (continued)

- 1.a. Current ratio
  - Monetary Assets/Current Liabilities
    - This ratio tells you how many times you could pay off your current liabilities with your liquid cash on hand
  - Interpretation
    - Ratio greater than 2 recommended
      - Track the trend and if it is going down -- make changes
        - Note that this ratio does not consider long-term assets or liabilities

Liquidity Ratios (continued)

- 1.b. Month's Living Expenses Covered ratio
  - Monetary Assets/Monthly Living Expenses
    - This ratio tells you how many months you could survive in the event of the loss of all current income
      - Your living expenses do not include charitable contributions, taxes or savings
  - Interpretation
    - A ratio of 3-6 is recommended. This ratio should at least be equal to how many months it would take to get a new job
      - Track the trend and if it is going down -- make changes

Question 2: Can You Meet Your Debt Obligations?

- These ratios help determine whether or not you can meet your current or long-term debt obligations:
  - Key debt ratios:
    - a. Debt ratio
    - b. Long-term debt coverage ratio

Debt Ratios (continued)

- 2.a. Debt ratio
  - Total liabilities/total assets
    - This ratio tells you whether you could payoff all your liabilities if you liquidated all your assets.
  - Interpretation
    - This represents the percentage of your assets financed with borrowing
      - Track the trend; this ratio should go down with age.
        - A zero debt ratio is a great goal!

Debt Ratios (continued)

- 2.b. Long-term Debt Coverage ratio
  - After-tax income/Long-term Debt Payments
    - This ratio tells how long you could make monthly payments on your debt based on your income after taxes. The inverse of this ratio is the Debt Service ratio
  - Interpretation
    - The higher this ratio the better, as it indicates the longer you could cover your debt payments
      - Track the trend; this ratio should go up. Ideally, you have no debt

Question 3: Are You Saving As Much As You Think?

- These ratios determine what percent of your income you are putting to work for you each period through savings and investment
  - Two key savings ratios:
    - a. Savings Ratio
    - b. Gross Savings Ratio

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Savings Ratios (continued)

- 3.a. Savings Ratio
  - Income for Savings / Income after taxes
    - This ratio tells you what proportion of your after-tax income is being saved.
  - Interpretation
    - U.S. rate typically -1% to 8%
      - Track the trend. If it is decreasing, make changes
        - We recommend a minimum savings ratio 10%+ but in reality 20%+ if possible, and more as you get older

Savings Ratios (continued)

- 3.b. Gross Savings Ratio
  - Savings / Gross Income
    - This ratio tells you what proportion of your total income is being saved.
  - Interpretation
    - U.S. rate typically -1% to 7%
      - Track the trend. If it is decreasing, make changes
        - We recommend you save at minimum 10% but in reality 20%+ of your gross income if possible, and more as you get older

Review

- A. Do you understand family record keeping?
- B. Do you understand the principles of successful budgeting and the methods and process of successful budgeting?
- C. Can and will you calculate your net worth (wealth) using a balance sheet?
- D. Can and will you develop a personal income statement and use it to analyze your spending?
- E. Can and will you develop and implement a budget?

Case Study #1: Prepare a Balance Sheet

Data

- Steve and Mary Jo, both 35, have a yearly income of $50,000, own a house worth $150,000, monetary assets of $5,000, two cars worth $20,000 total, 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 paying their bills). They are requesting your help.

Calculations

- Using the data above, create a balance sheet for Steve and Mary Jo. How are they doing?

Steve and Mary Joe have yearly income of $50,000; monetary assets of $5,000; a house worth $150,000; two cars worth $20,000; and furniture worth $10,000. The house has a $100,000 mortgage; the cars have $10,000 each outstanding loans; college loans of 10,000; and utility bills totaling $1,150 for this month, have not been paid.

- Assets
  - Monetary assets 5,000
  - Primary residence $150,000
  - 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 x $10,000) 20,000
  - Total Liabilities 131,150
- Net Worth (A – L) $53,850

Key Information: Salary $50,000 per year, tax rate at 15%, charity 12%, and save 10%. They have 25 years and $100,000 on a 6% mortgage ($7,730), 3 years and $20,000 on a 7% auto loans ($7,410), and 10 years and $10,000 on a 3% college loan ($1,160). Utilities and property taxes are $2,270, food $6,000, insurance $1,500, and other expenses $5,430.

Personal Balance Sheet (LT4B) for Steve and Mary Jo
January 31, 2019

Directions: Fill in the green cells with your data. Be careful not to modify the blue cells. Key inputs for ratios comes from your budget and income statements for the m Frequency Annual
Month: January Day 31 Year: 2019

Assets		Liabilities or Debts	
Current or Monetary Assets		**Current Liabilities**	
Cash, Checking, Saving	5,000	Unpaid Other Balances	1,150
Other Monetary Assets		Unpaid Credit Cards	
A. Total Monetary Assets	5,000	Other Credit Cards	
Investments & Retirement Plans		**I.** Total current liabilities	1,150
B. Mutual Funds, securities		**Housing Loans**	
C. Qual./Ind. Retirement Plans		Mortgage Outstanding	100,000
Total Investments (B+C)	-	Other Housing Debt	
Housing		**J.** Total Housing	100,000
Primary Residence	150,000	**Vehicle Loans**	
Other Housing		Automobiles	20,000
D. Total Housing (at market value)	150,000	Other vehicle loans	
Vehicles		**K.** Total Automobile Loans	20,000
Automobiles	20,000	**Other Loans**	
Other vehicles, ATVs, RVs, etc.		Students Loans	10,000
E. Total Automobiles	20,000	Other borrowings	
Personal Property & Other Assets		**L.** Other Loans	10,000
Personal Property	10,000	**M. Total Debt/Liabilities**	131,150
Other assets			
Other miscellaneous assets		**Net Worth**	
F. Personal Property & Other	10,000	**N.** Total Assets	185,000
		O. Less: Total Debt	131,150
H. Total Assets (A+B+C+D+E+F)	185,000	**P.** Equals: Net Worth	53,850

The Balance Sheet and Ratios (LT4B) may be helpful

Case Study #2: Prepare an Income Statement

Data

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

Calculations

- Help them calculate their annual income statement, using the "better" method. How are they doing?

Key Information: Salary $50,000 per year, tax rate at 15%, charity 12%, and save 10%. They have 25 years and $100,000 on a 6% mortgage ($7,730), 3 years and $20,000 on a 7% auto loans ($7,410), and 10 years and $10,000 on a 3% college loan ($1,160). Utilities and property taxes are $2,270, food $6,000, insurance $1,500, and other expenses $5,430.

Annual Income

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

Annual Expense Backup:

- 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

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
Living Expenses	$31,500

Key Information: Salary $50,000 per year, tax rate at 15%, charity 12%, and save 10%. They have 25 years and $100,000 on a 6% mortgage ($7,730), 3 years and $20,000 on a 7% auto loans ($7,410), and 10 years and $10,000 on a 3% college loan ($1,160). Utilities and property taxes are $2,270, food $6,000, insurance $1,500, and other expenses $5,430.

Steve and Mary Jo

nple Annual Saving, Income and Expense Plan (LT4

Description	Income Statement	
Gross Income (U)	50,000	50,000.00
Taxes	7,500	7,500.00
Income less Taxes (S)	42,500	
Pay the Lord	6,000	6,000.00
Pay Yourself (Saving #1)	5,000	5,000.00
Income for Living Expenses	31,500	
Expenses - Fixed		
Fixed Long-term Debt Payments		
Mortgage	7,730	7,730.00
Consumer/Auto Loan pmts	7,410	7,410.00
Student Loan Pmt	1,160	1,160.00
Long-term Debt Payments (T)		
Fixed Other Expenses		
Rent	-	
Utilities	2,270	2,270.00
Insurance: Auto, Renters	1,500	1,500.00
Weekly Date	-	
	-	
	-	
Total Fixed	20,070	

Name:
Year:
Month:
Items are
Item 1

Expenses - Variable		
Food	6,000	6,000.00
Eating Out	-	
Clothing	-	
Entertainment	-	
Gas	-	
Books and Fees	-	
Personal Money	-	
Miscellaneous	5,430	5,430.00
Total Variable	11,430	
Living Expenses - Total (R)	31,500	
Saving #2 - Remaing Income	-	
Saving #1	5,000	
Savings - Total (Q)	5,000	
Savings Percent	10.0%	

The Simple Saving, Income and Expense Plan Spreadsheet (LT4C) may be helpful

Case Study #3: Calculate Financial Ratios

Data

- Steve and Mary Jo would like you to help them understand where they are financially. You have their balance sheet and income statements which you prepared earlier (they are on the next slide)

Calculations

- They ask for help to calculate their key liquidity, debt, and savings ratios

Application

- Using the data earlier, calculate each of the six financial ratios. Explain them to Steve and Mary Jo and help them see how well they are doing.
- What can and should they be doing to improve?

Key Information: Current/monetary assets $5,000; Current liabilities 1,150; Mortgage $7,730; Utilities $2,270; Food 6,000; Insurance 1,500; College Loan $1,160; Car Payment $7,400; Other Expenses $5,430; Total Living Expenses: $31,500;

Assets	
• Monetary/Current Assets	$5,000
• Primary residence	150,000
• Automobiles	20,000
• Furniture	10,000
• Total Assets	185,000
Liabilities	
• Current Liabilities	1,150
• First Mortgage (6% 25y)	100,000
• Automobiles (7% 3 yr)	20,000
• College loan (3% 10 yr)	10,000
• Total Liabilities	131,150
New Worth (Assets – Liabilities.)	53,850

Annual Income	
Wages	$50,000
Taxes	7,500
Income after taxes	42,500
Paying the Lord	6,000
Paying Yourself	5,000
Income for Living Expenses	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

- Liquidity Ratios
  - 1. Current ratio = current assets / current liabilities
    - $5,000 / 1,150 = ?
    - They can cover liabilities 4.35 times
  - 2. Month's Living Expense Covered Ratio = Monetary assets / [Total living expenses /12 (or monthly LE)]
    - $5,000 / (31,500 / 12) = $5,000 / 2,624 [(Mort. + Util. + Food + Ins. + CLoan + CarPmt + Othr. Exp.)/12] = ?
    - They could live 1.9 months on their savings
  - Insights:
    - They are somewhat liquid, current ratio (>2) but can only cover annual living expenses for < 2 months (>3-6+ months is better). They need to cut expenses, and reduce and pay off debt.

Key Information: Total liabilities $131,150; Total assets $185,000; Total income $50,000; Taxes $7,500; Wages after taxes $42,250; Mortgage $10,000; College loan $1,160; Car payments $7,410.

Assets

- Monetary/Current Assets $5,000
- Primary residence 150,000
- Automobiles 20,000
- Furniture 10,000
- Total Assets 185,000

Liabilities

- Current Liabilities 1,150
- First Mortgage (6% 25y) 100,000
- Automobiles (7% 3 yr) 20,000
- College loan (3% 10 yr) 10,000
- Total Liabilities 131,150

New Worth (Assets – Liabilities.) 53,850

Annual Income	
Wages	$50,000
Taxes	7,500
Income after taxes	42,500
Paying the Lord	6,000
Paying Yourself	5,000
Income for Living Expenses	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

- Debt ratios
  - 1. Debt Ratio = Total liabilities / Total assets
    - $131,150 / $185,000 = ?
    - 70.9% of assets covered by debt
  - 2. Long-term Debt Coverage Ratio = Income after taxes (W-T)/ LT debt payments
    - $42,250/($7,730+1,160+7,410)(M+CL+CP) = ?
    - = $42,250 / $16,300 = They can cover debt 2.6x
    - Their debt service ratio is $16,300/42,500 = 38.3%
  - Insights:
    - They have lots of debt--71% of their assets are financed. Their long-term debt ratio is 2.6 times, just above the 2.5 caution level. 38.3% of total income goes to cover debt payments.

Key Information: Salary $50,000; Taxes $7,500; Savings $5,000; Income after Taxes $42,500

Assets
- Monetary/Current Assets $5,000
- Primary residence 150,000
- Automobiles 20,000
- Furniture 10,000
- Total Assets 185,000

Liabilities
- Current Liabilities 1,150
- First Mortgage (6% 25y) 100,000
- Automobiles (7% 3 yr) 20,000
- College loan (3% 10 yr) 10,000
- Total Liabilities 131,150

New Worth (Assets – Liabilities.) 53,850

Annual Income	
Wages	$50,000
Taxes	7,500
Income after taxes	42,500
Paying the Lord	6,000
Paying Yourself	5,000
Income for Living Expenses	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

- Savings ratios
  - 1. Savings ratio = Savings / income after taxes
    - $5,000 (PY) / $42,500 (W-T) = ?
      - They save 11.8% of their income after-tax
  - 2. Gross Savings ratio = Savings / gross salary
    - $5,000 / $50,000 = ?
      - They save 10% of their gross salary
  - Insights:
    - They are saving 11.8% of their Income after taxes, and 10% of their gross salary. This is OK, but should be the minimum amount.
    - I would hope students taking this class would save much more, perhaps 20% of their gross salary (10% minimum though) or more

Key Information: Savings $5,000; Living Expenses $31,500; Income less Taxes $42,500; Long-term Debt $16,300 and Salary $50,000

Realize that once you have your balance sheet, you only need 5 pieces of data to calculate these ratios

Annual Financial Ratios for Steve and Mary Jo

as of January 31, 2019

Q. Savings - Annual	5,000			
(How much did you save this period? - IS)				
R. Living Expenses - Annual	31,500			
(What were your living expenses? - IS)				
S. Income less Taxes - Annual	42,500			
(What was your income less taxes? - IS)				
T. Long-term debt payments - Annual	16,300			
(Sum of all LT debt payments? - IS)				
U. Gross Income - Annual	50,000			
(How much did you make this period? - IS)				

6 Key Ratios Differences

1. Current Ratio (%):	4.35
(Mon. Assets (A)/Current Liabilities(I))	
2. Month's Living Exp. Cov. Ratio (x):	1.90
(Mone. Assets (A)/Living Exp. (Q))	
3. Debt Ratio (%):	70.9%
(Total Liabilities (M)/Total Assets (N))	
4. Long-term Debt Coverage Ratio (x):	2.61
(Inc. after Taxes (S)/LT Debt Pmts (T))	
Debt Service Ratio (1/ LTDCR)	38.3%
5. Net Saving's Ratio (%):	11.8%
(Savings (Q)/Inc. after taxes (S))	
6. Gross Savings Ratio (%)	10.0%
(Savings (Q)/Gross Income (U))	

- Page 1 of 3 -

Case #4 How are They Doing?

Overall situation	Actual	Recommended
• L - Current ratio	4.4 times	> 2
• L - Month's LEC ratio	1.9 times	> 3 – 6+
• D - Debt ratio	70.9%	0% (Note 1)
• D - LT debt coverage ratio	2.6 times	> 2.5
• % income to pay debt	38.0%	0% (Note 1)
• S - Savings ratio	11.8%	> 20%
• S - Gross savings ratio	10.0%	20%, 10% min (Note 2)

- Notes:

1. Depends on your age. Ideally, it should decrease to zero
2. While the recommended minimum is 10%, it should increase as the situation allows. I encourage students to save 20% of every dollar after they graduate from school

Current ratio	4.4 times	> 2	Month's living expense	1.9 times	> 3-6+
Debt ratio	70.9%	0%	LT debt coverage ratio	2.6 times	> 2.5
Savings ratio	11.8%	> 10%	Gross savings ratio	10.0%	10% min

Liquidity Recommendations:

- Steve and Mary Jo are somewhat liquid, but they do not have enough in their monetary assets
  - Insights:
    - They are paying so much on debt payments that they cannot build their savings and emergency fund. They need to go on a more strict budget.
  - Recommendations:
    - They need to significantly increase their monetary assets, to save more, likely their emergency fund.
    - They should set a goal to have a LEC ratio of 3-6 or greater

Current ratio	4.4 times	> 2	Month's living expense	1.9 times	> 3-6+
Debt ratio	70.9%	0%	LT debt coverage ratio	2.6 times	> 2.5
Savings ratio	11.8%	> 10%	Gross savings ratio	10.0%	10% min

Debt Recommendations:

- Steve and Mary Jo are carrying way too much debt. 71% of their assets are financed by debt.
  - Insights:
    - While they have equity in their home, that is where most of their net worth currently resides. They should cut expenses and perhaps sell their expensive cars and purchase cheaper ones reduce their debt
  - Recommendations:
    - They need to act now
    - They must bring down their debt
    - They are very close to the danger range of a debt coverage ratio of 2.5 times. Currently 39% of their income is used for long-term debt payments

Current ratio	4.4 times	> 2	Month's living expense	1.9 times	> 3-6+
Debt ratio	70.9%	0%	LT debt coverage ratio	2.6 times	> 2.5
Savings ratio	11.8%	> 10%	Gross savings ratio	10.0%	10% min

Savings Recommendations:

- Steve and Mary Jo are saving 10% of their income
    - Insights:
        - Their total investment assets are only $5,000. $5,000 in monetary assets divided by $5,000 savings means they only began saving within the last year
    - Recommendations:
        - I would take their 20% savings, after building a 3-6 month emergency fund, and use it to pay down debt
        - While they can't do anything about the fact they should have begun saving earlier, they need to save more now. I would encourage them to reduce their spending and up their savings goal to 20%