



#### Personal Finance: Another Perspective

# Debt: Avoid It Like the Plague

Updated 2020-01-14





## Objectives

- A. Understand our leader's counsel on debt
- B. Understand the principles of using debt wisely
- C. Know how to develop and use debt reduction strategies
- D. Understand and develop a Consumer Loan and Debt Plan





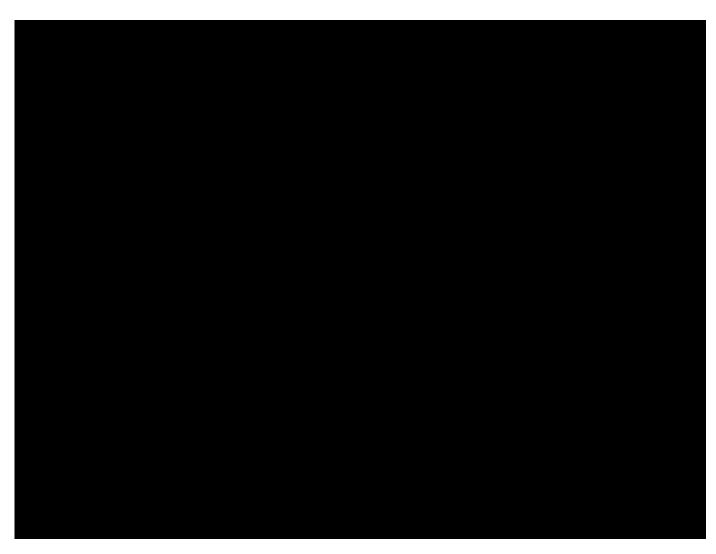
#### Your Personal Financial Plan

- IX. Student/Consumer Loans and Debt Reduction? (Loans and Debt Template LT01-08)
  - What is your vision for consumer/student loans and debt outstanding?
  - What are your goals and your current situation?
    - What is your current debt situation with interest rates, costs, and other fees?
  - What are your plans and strategies for consumer, student, and other debt?
  - If in debt, what is your debt reduction strategy and views on future debt?





## A Lighthearted Look at Debt







#### Case Study

#### Data

A family friend has asked you to help one of their children who is having some financial problems. The son came over and gave you the following information. They are married and have four children ages 18 to 3 months. Their bills include: mortgage \$150,000 at 6%, 2nd mortgage \$20,000 at 7.5% (they took out the 2<sup>nd</sup> mortgage three years earlier to pay off credit card debt), various financial institutions \$10,000 at between 12% an 28% (she lost her job due to the pregnancy), lease on a new truck \$18,000, car loan on her car \$5,000, and miscellaneous Christmas bills \$3,000. After some work and using LT20, you determined that debt payments represented 83% of their income for living expenses.

#### Application

• What suggestions do you have to help them get out of debt?





#### A. Understand our Leader's Counsel on Debt

- J. Reuben Clark said:
  - It is a rule of our financial and economic life in all the world that interest is to be paid on borrowed money. . . Interest never sleeps nor sickens nor dies; it never goes to the hospital; . . it never visits nor travels; it is never laid off work; it never works on reduced hours; it never pays taxes; it buys no food, it wears no clothes. . . Once in debt, interest is your constant companion every minute of the day and night; you cannot shun it or slip away from it; you cannot dismiss it; . . and whenever you get in its way or cross its course or fail to meet its



you get in its way or cross its course or fail to meet its demands it crushes you. So much for the interest we pay. Whoever borrows should understand what interest is, it is with them every minute of the day and night. (J. Reuben Clark, conference address, April 6, 1938)





#### Counsel on Debt (continued)

- We have been counseled for 6,000 years to
  - "Pay thy debt and live" (2 Kings 4:7)
- More recently, James E. Faust stated:
  - Over the years the wise counsel of our leaders has been to avoid debt except for the purchase of a home or to pay for an education. I have not heard any of the prophets change this counsel ("Doing the Rest Things in the Worst Times", Ensign August

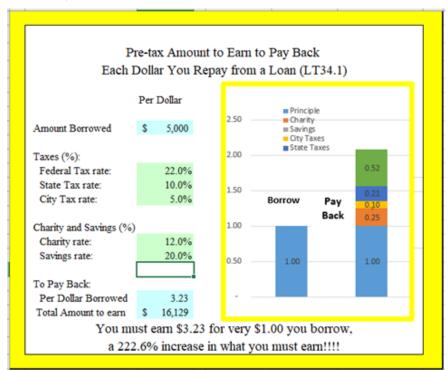
Best Things in the Worst Times," Ensign, August 1984, 41).





#### Counsel on Debt (continued)

- Why is repaying debt so hard?
  - We are not consistent in our thinking. With debt, we borrow an after-tax amount, while with repayment, we must earn a before-tax amount







## SNL Counsel on Debt (continued)







## B. Understand Principles of Using Debt Wisely

- Guiding Principles
  - 1. Know yourself, your vision and your goals.
  - 2. Seek, receive and act on the Spirit's guidance.
  - 3. Understand the key areas of debt and know where you are financially.
  - 4. Set your goals and resolve to not go into debt except for a modest home and education as guided
  - 5. Pay as you go.
- If in debt add:
  - 6. Prioritize your debts (if you cannot repay them). Give priority to secured debts and immediate needs
  - 7. Develop a repayment plan and automate it
  - 8. Avoid any new debt





## Using Debt Wisely (continued)

•	Guiding Principles	<b>Doctrines</b>
	<ul> <li>Know yourself, your vision and goals</li> </ul>	Identity
	<ul> <li>Seek, receive and act on guidance</li> </ul>	Obedience
	<ul> <li>Understand the key areas of debt</li> </ul>	Accountability
	<ul> <li>Make home/education your only debt</li> </ul>	Agency
	<ul> <li>Pay as you go</li> </ul>	Stewardship
	If in debt add:	
	• In in debt, prioritize your debts	Stewardship
	• Develop a plan for debt elimination	Stewardship
	<ul> <li>Avoid any new debt</li> </ul>	Accountability





#### Using Debt Wisely (continued)

- From Obedience to Consecration
- I am child of God (identity), living so the Spirit can guide me (obedience), showing what I believe by my actions, and choosing to delay gratification (accountability). I am using my agency to save for things and not borrow (stewardship), and learning the lessons God would have me learn through distinguishing between my wants and needs (agency) so I can accomplish my individual mission and individual and family vision and goals.





## Questions

Any questions on what our leaders have said regarding debt?





## B. Know How to Develop and Use Debt Reduction Strategies

• If you never get your first ticket . . .









#### Debt Reduction Strategies (continued)

- What is the process of you (or helping others) getting out of debt? What should you do?
  - 1. Accept that you have a debt problem. Keep it in perspective
  - 2. Write down your vision and goals so you know where you want to be. Stop incurring new debt
  - 3. See where you are by making a list of <u>all</u> your bills and debts. Admit the need to change your habits and lifestyle if being debt free is important
  - 4. Look for one-shot ways of reducing debt
  - 5. Organize a Debt Repayment Plan, and
  - 6. Follow through on the Debt Plan until total debt elimination





#### Debt Reduction Strategies (continued)

- What are debt reduction (or elimination) strategies?
  - Methods of reducing or paying off debt
  - Why should you understand these strategies even if you do not have any debt?
    - You will be working with others who do
  - Are there different types of strategies?
    - a. Personal Strategies: Highest, smallest, replace.
       Debt Elimination Spreadsheet with
       Accelerator (LT20) may help
    - b. Counseling Strategies: Consolidation and negotiation
    - c. Legal Strategies: Bankruptcy





#### a. Personal: Expensive Debt First

- Logic: Pay off your most expensive debts first
  - List all debts and order by highest interest rate
  - Setup a spreadsheet with rows = months and columns = creditors
  - Start with debt with highest interest rate
    - This way you are paying off the most expensive debt first (and you will be saving the most)
  - Once the most expensive debt is paid off, keep paying *the same amount* until all debts are paid off
    - This is the method recommend in Marvin J. Ashton's "One for the Money" article (see <u>Debt Elimination Spreadsheet with Accelerator TT20</u>)







## Expensive Debt First

	19%	13%	9%	7%	6.50%
	Credit	Dept.			
	Card	Store	Dentist	Piano	Auto
March	110	70	50	75	235
April	110	70	50	75	235
May	110	70	50	75	235
Јине	110	70	50	75	235
July		180	<i>5</i> 0	75	235
August		180	50	75	235
September		180	50	75	235
October			230	75	235
November			230	75	235
December				305	235
January				305	235
February					540
Amt Owed	\$ 423	779	771	1,230	3,009







## Debt Elimination: Expensive Debt First

Debt-Elimination Spreadsheet with Accelerator (LT20)					
Total Debt Total Interest Paid		Beginning Month: Beginning Year:	October 2018	1. Clear Form	2. Add Debt
Total Interest and Principle		Accelerator:	\$ -	3. Calculate	4. Calculate with Additional Payments
Minimum Payments/Month		Beginning Month	October 2018	o. carcarate	4. Sulvatato With Flavillonian Paymonto
Months Paid Off Early Date Paid Off		Ending Month	September 2019		
Total Interest Saved	-	Years to Pay Off Years Paid Early	0.92 0.42	Pay highest interes	t Ioan first
Total interest Saved	ψτο.τ/	Tears Faid Early	0.42		
Debt:	Credit Card	Department Store	Dentist	Piano	Auto
Balance Due	7 .=0.00			\$ 1,230.00	\$ 3,009.00
APR	19.0%	13.0%	9.0%	7.0%	6.5%
Monthly Interest Rate	1.58%			0.58%	0.54%
# of months to pay off	4	11.92	16.45	17.29	13.3
Scheduled Payment Amount:	\$109.97	\$70.02	\$50.00	\$74.99	\$235.10
October 2018	\$109.97	\$70.02	\$50.00	\$74.99	\$235.10
November 2018	\$109.97	\$70.02	\$50.00	\$74.99	\$235.10
December 2018	\$109.97	\$70.02	\$50.00	\$74.99	\$235.10
January 2019	\$109.97	\$70.02	\$50.00	\$74.99	\$235.10
February 2019	-	\$179.98	\$50.00	\$74.99	\$235.10
March 2019	-	\$179.98	\$50.00	\$74.99	\$235.10
April 2019	<u>-</u>	\$179.98	\$50.00	\$74.99	\$235.10
May 2019	-	\$0.21	\$229.77	\$74.99	\$235.10
June 2019	-	-	\$229.81	\$75.17	\$235.10
July 2019	-	-	-	\$304.97	\$235.10
August 2019		-	-	\$304.97	_
September 2019		-	-	\$0.37	\$538.84





#### b. Personal: Smallest Debt First

- Logic: Pay of the smallest debts first. Then take the money saved to pay off all your other debts
  - List all debts, and order from smallest to largest
    - The goal is to pay off the largest number of debts as soon as you can
  - If you have additional money, use a payoff accelerator amount
    - This is an amount over and above your minimum monthly payments, and apply it to your first debt payment
  - Target in on one debt at a time until it is paid off. Then continue paying the same amount on your remaining debts until they are all paid off (LT20)







#### Smallest Debt First

	Amount	Monthly	Interest	Interest	# of
	Owed	Payments	Rate	Payment	Months
Credit Card	423	110	19.0%	6.70	4.10
Dentist	771	50	9.0%	5.79	17.45
Dept. Store	779	70	13.0%	8.44	12.65
Piano	1,230	75	7.0%	7.17	18.13
Auto	3,009	235	6.5%	16.30	13.76
Totals	6,212	540	8.6%	44.39	12.53







#### Debt Elimination: Smallest Debt First

	Debt-Elimination Spreadsheet with Accelerator (LT20)						
Total Debt		Beginning Month:	October	1. Clear Form	2. Add Debt		
Total Interest Paid Total Interest and Principle	\$271.11 \$ 6,483.11	Beginning Year: Accelerator:	\$ -				
Minimum Payments/Month	\$ 540.07	Beginning Month	October 2018	3. Calculate	4. Calculate with Additional Payments		
Months Paid Off Early		Ending Month	October 2019				
Date Paid Off		Years to Pay Off	1.00	Pay smallest balance	te first ▼		
Total Interest Saved	\$37.38	Years Paid Early	0.33	,			
Debt:	Credit Card	Dentist	Department Store	Piano	Auto		
Balance Due	\$ 423.00	\$ 771.00	\$ 779.00	\$ 1,230.00	\$ 3,009.00		
APR	19.0%	9.0%	13.0%	7.0%			
Monthly Interest Rate	1.58%	0.75%	1.08%	0.58%	0.54%		
# of months to pay off	4	16.45	11.92	17.29	13.3		
Scheduled Payment Amount:	\$109.97	\$50.00	\$70.02	\$74.99	\$235.10		
October 2018	\$109.97	\$50.00	\$70.02	\$74.99	\$235.10		
November 2018	\$109.97	\$50.00	\$70.02	\$74.99	\$235.10		
December 2018	\$109.97	\$50.00	\$70.02	\$74.99	\$235.10		
January 2019	\$109.97	\$50.00	\$70.02	\$74.99	\$235.10		
February 2019	-	\$159.96	\$70.02	\$74.99	\$235.10		
March 2019	-	\$159.96	\$70.02	\$74.99	\$235.10		
April 2019	-	\$159.96	\$70.02	\$74.99	\$235.10		
May 2019	-	\$122.99	\$106.99	\$74.99	\$235.10		
June 2019	-	-	\$229.98	\$74.99	\$235.10		
July 2019	-	-	\$2.87	·			
August 2019		-	-	\$304.97			
September 2019		-	-	\$3.45			
October 2019				-	\$2.23		





#### Does it Matter Which Method You Use?

- Does it matter with method you use?
  - Not really
    - Using pay the highest interest rate first, you saved \$40.47 in interest
    - Using the pay smallest balance first, you saved \$37.38
      - The difference is only \$3.09
      - The important thing is that you DO IT!!!!





#### c. Personal: Exchange Secured Debt

- Home Equity Loans
  - If you have equity in your home, you can consolidate your debts with a home equity loan which will replace your unsecured debt with secured debt. Is it a good idea?
    - That depends:
      - Have you addressed the original problem which got you into debt in the first place?
      - Is your job stable enough so that you could take on additional long-term debt?





#### Home Equity Loans (continued)

- Benefits
  - Reduce monthly payments, as rates on secured debt (house) is less than unsecured debt (credit cards)
- Concerns
  - Interest is no longer tax deductible
  - You may pay more in interest as rates are lower but you spread payments over more years
  - Experience has shown that 80% of those that take out a home equity loan are back to where they were in debt within three years.
    - The habit hasn't changed, the spending will continue again, and now they lose *both their credit rating and their house*.





### Counseling: Credit Counseling Agencies

- Counseling Strategies: Credit Counseling Agencies (CCAs)
  - If you are too far in debt, you can get help 3 places
    - 1. Non-profit credit counseling agencies (consolidation)
    - 2. For-profit credit counseling agencies (debt consolidation and negotiation). Be careful here!
    - 3. Legal help--Bankruptcy
  - Regardless of your choice, check the company out with the Better Business Bureau before you commit to anything





#### a. Counseling: Non-profit CCAs

- What are non-profit CCAs?
  - Agencies set up specifically to help people reduce the credit-card debt load in their lives.
- What do they cost?
  - Generally, \$15-20 for setup and \$12 per month
- How do they work?
  - They have arrangements with many of the credit companies are reimbursed 10% of the money you pay to the credit card companies
- Where can I find them?
  - Call the National Foundation for Credit Counseling (800-388-2227)





#### Counseling: Non-profit CCAs (continued)

- Questions to ask non-profit agencies?
  - What is your tax ID? Are you licensed?
  - Are they members of the National Foundation of Consumer Credit (NFCC)?
  - Are they accredited through the Council on Accreditation?
  - Are their counselors certified by the NFCC?
  - What is the monthly management fee? Is it tax deductible?
  - How long will I be in your program? (it should never be longer than 5 years)
  - How much will I be paying each month? (generally, it is taken from a checking or savings account)





#### b. Counseling: For-profit CCAs

- What are For-profit CCA?
  - Companies whose goal is to make money through helping people get out of debt
  - How do they work?
    - Consolidate debt into a single loan with a lower rate. Get homeowners into a interest-only home loan and use the excess cash to pay down debt.
      - Work with creditors to reduce the interest rate of certain types of loans, especially credit cards.
      - They get rebates, make money on loan origination and fees, and/or charge retainer fees upfront





#### Counseling: For-profit CCAs (continued)

- Questions to ask:
  - What type of loans will they help you work with?
  - How much will it cost me?
  - How do they make their money?
  - When do they get paid?
  - What is the monthly management fee? Is it tax deductible?
  - How long will I be in your program? (it should never be longer than 5 years)
  - How much will I be paying each month? (generally, it is taken from a checking or savings account)
  - Will I talk only with one person or many people?





## Counseling: Warning Signs

- Watch for these warning signs and hang up if you sense these:
  - High up-front fees
  - Promises things they cannot deliver (i.e., we promise creditors will cut the principle owed by 50%)
  - Pressure you to sign up for debt-repayment services the moment you call





### Legal: Bankruptcy Chapter 7

- Major types of bankruptcy
  - Chapter 7:
    - Liquidates assets and uses them to pay creditors according to precedence in the Bankruptcy Code.
      - It is the quickest, simplest and the most frequently selected (75%) kind of bankruptcy filing. Certain debts cannot be waived by Chapter 7 bankruptcy such as child support, student loans, drunk driving fines, etc.





#### Legal: Bankruptcy Chapter 13 (continued)

- ✓ Chapter 13:
  - A repayment plan in which the court binds both the debtor and the creditors to terms of repayment.
    - The debtor retains property and makes regular payments to a trustee out of future income to pay creditors over the life of the bankruptcy plan.





#### Legal: Bankruptcy (continued)

- Interesting facts on bankruptcy
  - 87% of all bankruptcies are due to 3 events:
    - Divorce, death, or separation
    - Unpaid medical expenses
    - Loss of primary source of employment
  - Eliminate the likelihood of these events and you reduce substantially your chance of filing bankruptcy





#### Bankruptcy (continued)

- Questions when thinking about bankruptcy
  - Is it honest?
    - Is it just a way to get out of debt legally?
      - Things that are legal may not be honest.
      - Remember your integrity is worth more than money
  - Is it really necessary?
    - It will remain on your credit report for up to 10 years after you make your last payment
    - It will hurt your chances to get the credit necessary for the purchase of a home or business







#### Bankruptcy (continued)

#### L. Aldin Porter said:

Utah is the number-two state in the nation "for per-capita bankruptcy filings"... What an indictment of those of us who live in Utah!... Our bankruptcy law is on the books for the rare occasion when true disaster strikes a family, and none of us would take away that protection. But I'll also tell you it cannot function as it ought in a society with overextended and, frankly, somewhat dishonest people. The editorial goes on to suggest that the majority [in Utah] are not using chapter 13, [which] permits the applicant to repay his debts over a longer period of time. . . Instead, [60%] applied for chapter 7, which permits one to break his promises . . . and walk away from his debts, leaving his obligations forever unpaid. . . There is a question asked of those who seek a temple recommend that deals with honesty. I sincerely hope that those who have taken unfair advantage of this just and proper law don't carry a temple recommend and feel that they're absolved from responsibilities (Devotional address given February 49, 2001 at BYU).





# C. Understand and Create you Consumer Loan and Debt Plan

- If you are out of debt, we are pleased and impressed. It is not an easy thing
  - For those in debt, your Consumer Loans and Debt Plan will consist of four areas:
    - Consumer loans (including auto loans)
    - Student loans
    - Other debt
    - Debt reduction strategies (if in debt)
    - Views on future debt





- Start with your views on debt. What are they? *Views on Debt* 
  - I will keep an emergency fund of 3-6 months at all times. When I use these, I will repay them in 6 months
  - I will avoid debt except for a home and education, and will pay cash for all transportation purchases and toys
  - I may need to borrow for my first car. If so, I will pay it off within 3 years and pay cash for all future vehicles
  - I will save money for my children's education and missions by saving \$20 per child per month so I will not need to go into debt for these things
  - I will save 20% of my income and will invest wisely. I will get the company match, save 15% of my income for retirement. I will not borrow against my 401k!





- Vision
  - From your "Plan for Life"
  - Other ideas include:
    - I will only use debt for a home and education
- Goals
  - We will always live on a budget and save 20%
  - We will shop around for best rates on necessary debt and avoid unnecessary debt like the plague
  - Consumer Loans. We will never go into debt for consumer products, including autos
  - Student loans. We will only use subsidized Student loans and will repay them quickly





Plans and Strategies

#### Consumer Loans

- We will separate needs from wants
- We pay cash for all consumer purchases
- We will pay off all credit cards monthly
- We avoid debt like the plague
- We keep our emergency fund at 4 months and rebuild it quickly once it is drawn down
- We defer all wants until we can pay cash for them
- We may have to borrow for our first car, but after that, we will pay cash for all transportation needs
- We will never buy toys with debt





- Plans and Strategies
  - Student Loans
  - We will spend loan money only on education
  - We will seek scholarships as much as possible
  - We defer all wants until we can pay cash for them and after we have paid off our student loans
  - We will not buy toys until our student loans are all paid off
  - We will understand our employment options to help pay off our student loan debt
  - We build our emergency fund to 3 months and then use the 20%+ to pay down non-subsidized and then subsidized loans





Plans and Strategies

Debt Reduction

After school, put enough in the 401k for the match, then save 20% to build our emergency fund.

- After that, I will use 20-30% to pay off debt as quickly as possible paying the highest interest rate first (LT20). Once debt is paid off, continue to pay 20% into savings
- Continue to live like a student after college, build my emergency fund, then pay 20%+ each month against my debt using the debt snowball method until debt is all gone.
- Pay more than your minimum payments on debt





- Plans and Strategies
   One-off Debt Reduction Strategies
- Increase your debt repayment \_\_\_%. Pay more, and use 30-50% of income to get out of debt.
- Call the credit card company and request a lower interest rate. This can reduce your interest costs. If they will not do this, move your balances to another card that has a lower interest rate (but make sure transfer fees are low)
- Use savings to pay down debt after you have your Emergency Fund
- Use any salary increase to pay down debt. Live at your previous salary and use increases to pay debt





One-off Debt Reduction Strategies (continued)

- Use your tax refund check entirely to pay down debt
- Exchange consumer debt for mortgage debt but only if you have equity in your home and you have changed your spending habits
- Sell assets. Have a yard sale and sell those things you probably should not have bought in the first place to reduce your debt
- Look for ways to put more money against debts
- Try to settle with creditors
- Go through credit counseling





#### Constraints

- Key is living on a budget and saving 20%.
- We will stay strong in the gospel, keeping our covenants, attending the temple and serving
- One half of all unexpected money (bonuses, tax refunds, etc.) will be put toward paying down debt (after our emergency fund).

#### Accountability

- We will share our vision and goals with our children
- Children will have daily and weekly indoor jobs, as well as weekly yardwork.
- Home is where we teach our children to work.





# Review of Objectives

- A. Do you understand our leaders counsel on debt?
- B. Do you understand the principles of using debt wisely?
- C. Do you understand how to develop and use debt reduction strategies?
- D. Do you understand and can you create your Debt Reduction Plan?





# Case Study #1

#### Data

A family friend has asked you to help one of their children who is having some financial problems. The son came over and gave you the following information. They have four children, ages 18 to 3 months. Their bills include: mortgage \$150,000 at 6%, 2nd mortgage \$20,000 at 7.5% (they took out the 2<sup>nd</sup> mortgage three years earlier to pay off credit card debt), various financial institutions \$10,000 at between 12% an 28% (she lost her job due to the pregnancy), lease on a new truck \$18,000, car loan on her car \$5,000, and miscellaneous Christmas bills \$3,000. After some work and using LT20, you determined that debt payments represented 83% of their income for living expenses.

#### Application

• What suggestions do you have to help them get out of debt?





# Case Study #1 Answers

- The above was a real case that occurred in a few years ago
  - Following was my process to help
    - Please know there are other ways to help as well and that this is not the only way
  - Notice that the topics and order that I helped teach this couple are the topics and order that I teach *in this class* 
    - Through thought, prayer, and the guidance of the Spirit, you will know what to do to help





- 1. Help them to catch their vision of where they want to be
  - I shared with them the importance of perspective that personal finance is just part of living the gospel of Jesus Christ
  - I shared with them the "why's" and "what's" of personal finance, why the Lord wants us to be financially secure
  - They recognized they had a debt problem. They were sick and tired of being sick and tired





- I encouraged them to do the things they should be doing, their daily conduct on the journey
  - They resolved to come back to Church and be more active
  - They started back having family home evening
  - They began working on family scripture study





- 2. Help them determine what was important to them with their goals
  - We helped them think through the process of setting effective goals from their vision, and then they wrote down their goals so they would be working for the right things
    - We didn't spend a lot of time together on this area, but we did emphasize its importance and had them do it on their own
    - Be careful as they have to be working toward their goals—not yours
  - They stopped incurring new debt





- 3. Help them realize where they were financially and that their habits are not taking them toward their goals
  - We developed a balance sheet for the family
    - We determined what assets were available and owed on each asset truck, motorcycle, etc.
  - We developed an income statement and ratios
    - We worked at finding out how much was available and where it was going
  - They knew they had to change to reach their goals
    - We put the family on a very strict budget
    - We did leave a little for a date on Friday though





- 4. Determine one-off ways of reducing debt
  - We tried to find one-ways to pay off debt
    - We had them fill out their income taxes quickly for an early income tax return (January)
    - We borrowed money against their cash-value insurance policy to reduce assets
    - We had them sell assets that they could do without, i.e. the leased truck, motorcycle, and old vehicles, etc.
    - We talked about yard sales, car sales, or anything else they could do to raise funds





- 5. We helped them organize a debt reduction plan, and committed them to that course of action
  - We used <u>Debt-Elimination Spreadsheet with</u>
    <u>Accelerator</u> (LT20) to prepare a debt reduction plan and then we worked on that plan together
  - We got other people involved to help them with talking to creditors and paying off their debts
  - We worked with family, friends, and enlisted their help to work with this couple





- 6. We helped them follow through with their plan (until total debt elimination\*)
  - We worked together on their debt reduction plan (not our plan) and held them accountable for it
  - We met with them weekly to see how they were doing and to encourage them to stick with the Plan
  - We continued to offer encouragement and support in a non-judgmental manner





- Now, five years later, they are still in debt, but it is much more manageable and they are working to get it all paid off
  - Was it easy? No.
  - Was it worthwhile? Yes.
  - Are they doing better with both their temporal and spiritual goals? Definitely.
    - The wife shared: "I just didn't realize that it would be so hard for so long. You run into debt, but you crawl out of it!"
- \*My mistakes (what I would change)
  - I should have worked longer with them
  - I should have done better at following up each month





# Case Study #2

#### Data

• Emilee has been thinking about how much she has to earn to pay back her loans once she leaves school. Assume she will be in the 25% Federal tax bracket after school, living in New York (10% state tax rate) and New York City (5% city tax rate), and she pays 12% gross of her income to charity.

#### Calculations

• How much must she earn to pay back \$1.00 in student loans (this assumes 0% interest)?





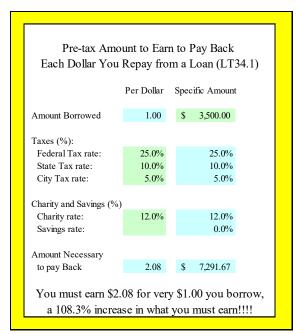
# Case Study #2 Answer

#### Calculations

- To pay back \$1.00 in loans:
  - Taxes:

<ul> <li>Federal tax</li> </ul>	x rate: 25%	)
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- State tax rate: 10%
- City tax rate: 5%
- Charitable contributions: 12%
- The formula is:
  - x .25x .10x .05x .12x = 1. Solve for x?
  - X = 2.08 (1/(.25+.10+.05+.12)
- Emilee must earn \$2.08 for every dollar she borrows (and that assumes a 0% interest rate). That's expensive (see Loan Amount to Pay Back (LT34))







# Case Study #3

#### Data

• Use the tax and charity information from the previous case. Emilee is in her second to last year in school (24 months till graduation) and is considering a \$5,000 alternative loan at 12% and plans to pay it back in 60 months after she graduates.

#### Calculations

• How much must she earn to pay back that alternative loan of \$5,000 (which is not subsidized and accrues interest while she is in school) at 12% interest over 60 months and including taxes and charitable contributions?





# Case Study #3 Answer

#### Calculations

- To pay back \$5,000 in student loans requires:
  - At 12% interest and in her second to last year of school, she will add 24 months of interest or \$1,349
    - Pv=5,000, rate = 12%, periods = 2, Solve for FV?
    - Future value = \$6,349
  - To pay off \$6,349 for 60 months will require a payment of \$141.22 per month
    - PV=5,000, rate = 12%/12, Periods = 60 months, Solve for her Pmt = ?
    - Payment = \$141.22
  - Her total payments will be \$141.22 \* 60 months or
    - Total Pmts = \$8,473 or 68% more than borrowed





# Case Study #3 Answer

#### Calculations

- To determine how much she needs to earn to pay back this \$8,473, we determine:
  - Taxes:

• Federal tax rate: 25%

• State tax rate: 10%

• City tax rate: 5%

• Charitable contributions: 12%

The formula is x-.25x-.10x-.05x-.12x = 1. X = 2.08

- To pay back this \$8,474, Emilee must earn 2.08 \* \$8,474 or \$17,653
  - Emilee must earn \$3.53 for every \$1.00 she borrows (\$17,653/\$5,000=3.53). Very expensive







# Case Study #3 Answer

For the logic and calculations, see Loan

Amount to Pay Back (LT34)

		Back Student Loans and Contributions (LT		
-	Loan 1	-	Fotal	
Loan Information:	Loui I	•	Total	
Amount Borrowed:	\$5,000.00	Total Amount Borrowed	\$ 5,000.00	
Interest Rate (APR):	12.0%	Weighted Interest Rate	12.0%	
Education Information:				
Months Until Education is done?	24			
Subsidized? $(1 = yes, 0 = no)$		Total amount due:		
Amount due at end of education	\$6,348.67	at end of education:	\$6,348.67	
Repayment Information:				
How Many Months to Pay off?	60	Average months to pay off	60	
Payment per Month	\$141.22	Total Payments per month	\$141.22	
Total Amount to Pay off	\$8,473.36	Total Amount to Pay	\$8,473.36	
Ratio of Earned (P&I) to Borrowed:	1.69		1.69	
Taxes:				
Federal Tax Rate:	25.0%	Average Federal Tax Rate	25.0%	
State Tax Rate:	10.0%	Average State Tax Rate	10.0%	
City Tax Rate:	5.0%	Average City Tax Rate	5.0%	
Charity and Savings:				
Charity rate (%):	12.0%	Average Charity Rate	12.0%	
Savings rate (%):				
Ratio of Earned (PITSC) to Borrowed:	2.08		2.08	
Total Amount Needed to Pay Back	17,652.84	Total Amount to Pay Back	\$17,652.84	
Ratio:	3.53	Ratio of amount borrowed	3.53	
	3.53	to amount earned to pay ba		
Annual Percentage Rate	68.0%	is a second of pay on		