



**HARVARD UNIVERSITY
EMPLOYEES CREDIT UNION**

Not a bank. *A benefit.*

Financial Planning

Meeting Your Personal Financial Goals

Objectives

- By the end of this presentation you should be able to:
 - Create a budget to manage your finances
 - Identify tools used to reach your goals
 - **Determine what you can afford**
 - Develop a savings plan
 - Understand how interest works
 - **Learn how to maximize your income**



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First, plan.



[Picnic PSA](#)



First, plan.

- Turn your NEEDS & WANTS into GOALS:

- Short term: 0-2 years
- Medium term: 2 to 5 years
- Long term: 5+ years



- Research indicates that people with financial goals tend to save more.



Building a Budget

- Why have a spending plan?
 - Operating without a budget is like driving a car without a steering wheel...
 - A plan to meet your goals.
 - Minimize anxiety of how to pay bills.
 - Take control of finances.
 - Identify *needs* vs. *wants*.



Lifetime Goals

- Think about your current life stage...
 - What are your priorities?
 - What would you like your money to do for you?
 - In your 20's...
 - In your 30's & 40's...
 - In your 50's & 60's...



Lifetime Goals

- In your 20's, you're just starting out:
 - Set savings goals
 - Pay attention to how you spend
 - Identify ways to save
 - Create a plan
 - **Start an automatic savings program and retirement account**
 - Make higher risk investments, with larger long-term reward potential
 - Finance grad school
 - Purchase a car
 - Purchase a first home



Lifetime Goals

- Your 30's and 40's are prime earning years:
 - Take full advantage of employer-sponsored retirement plans
 - Adjust investment allocations to begin to decrease risk
 - Purchase a bigger home
 - Accumulate wealth
 - Save for children's college
 - Prepare an estate plan



Lifetime Goals

- In your 50's and 60's you're planning for retirement:
 - Adjust your investment plan to eliminate risk and preserve wealth
 - Plan your estate
 - Manage your investments carefully
 - Prepare to retire and enjoy what you have worked so hard to earn



Tools: Retirement Saving

- Employer Offered Options:
 - Direct Deposit
 - Flexible Spending Account (FSA)
 - Tax-deferred Savings: 401(k)
 - Company Stock **!WARNING!**
- Other options:
 - Individual Retirement Account (IRA)
 - Traditional IRA
 - Roth IRA
 - Pension

*On Friday
we will cover
Retirement
and Investing*



Tools: Banks & Credit Unions

- More than a piggy bank:
 - Keep your money safe from loss, theft, or fire
 - Federal Deposit Insurance Corporation (FDIC)
 - National Credit Union Administration (NCUA)
 - Earn interest and grow your savings
 - Deposit your paycheck directly (Direct Deposit)
 - Pay bills automatically (Bill Pay)
 - Track your spending
 - Establish credit
 - Access mortgage loans, car loans, student loans, etc.
 - Transfer money



Barriers to Meeting Goals

- What challenges do you face in making progress toward your financial goals?
 - Impulse buying
 - Unplanned spending
 - Unplanned use of credit cards
 - Poor spending habits
 - Loss of job
 - Financial emergencies
- Commonality? **No plan.**



Budget Worksheet

- Use a budget worksheet:
- How much money do you *think* you spend?
- How much money do you *actually* spend?

How Much Money Do You Think You Spend?

List how much you think you spend on the items below:

| | | | |
|----------------------------|----------|--------------------------------|----------|
| 1. Savings | \$ _____ | 15. Transportation | \$ _____ |
| 2. Food at home | \$ _____ | 16. Child care | \$ _____ |
| 3. Meals on the job | \$ _____ | 17. Barber/beauty shop | \$ _____ |
| 4. School lunches | \$ _____ | 18. Books/newspapers/magazines | \$ _____ |
| 5. Dinner out | \$ _____ | 19. Movies/sports events | \$ _____ |
| 6. Electricity | \$ _____ | 20. Parties/clubbing/beverages | \$ _____ |
| 7. Gas/heating | \$ _____ | 21. Expenses/tobacco/alcohol | \$ _____ |
| 8. Water/sewerage/garbage | \$ _____ | 22. Baby sitters | \$ _____ |
| 9. Telephone | \$ _____ | 23. Hobbies | \$ _____ |
| 10. Family clothing | \$ _____ | 24. Security/lock clubs | \$ _____ |
| 11. Utilities | \$ _____ | 25. Doctors and hospitals | \$ _____ |
| 12. Cleaning and laundry | \$ _____ | 26. Dentists | \$ _____ |
| 13. Home cleaning supplies | \$ _____ | 27. Medicines | \$ _____ |
| 14. Gas/oil/tube | \$ _____ | 28. Other | \$ _____ |
| | | Total | \$ _____ |

Calculate Periodic Expenses
 Periodic expenses are easy to forget and may inadvertently be left out of a monthly spending plan. However, many of these expenses are very significant, and it is vital that you plan ahead and include them in your monthly budget. To plan for periodic expenses, look through last year's check registers, receipts, bills, statements, and credit card statements to find the amount you spent on things that did not fall into fixed and variable expenses. Total all of these periodic expenses. Divide that total amount by 12 to determine an amount that should be saved or set aside each month in order to cover these expenses when they occur.



Income vs. Expenses

- Money **In**
 - Employment
 - Gifts
 - Allowance
- Money **Out**
 - Groceries
 - Housing
 - Transportation
 - Healthcare
 - Clothing
 - Utilities
 - Insurance
 - Taxes

“The only thing certain in life is death and taxes” – Ben Franklin

“The hardest thing in the world to understand is the income tax.”
 Albert Einstein



Needs v. Wants

- Avoid budget busters. **Be realistic.**
- Break down your budget and categorize your spending:
 - essentials
 - secondary needs
 - nice-to-haves
 - ...and un-necessaries



Needs v. Wants

The Essentials: the basic needs that allow you to live your daily life

Groceries
 Housing (mortgage/rent)
 Transportation
 Healthcare & Insurance
 Clothing
 Utilities (water, electric, gas)
 Student Loans
 Taxes

Secondary Needs: Non-essential items that make life easier

Cell phone
 Internet service

Nice-to-Haves: Things you like that make life enjoyable

Vacation
 Entertainment
 Dining out
 Pets
 Gym membership
 Non-basic clothing

Is it a need? Or a want?

Could you live safely without this purchase?

Could you live without this purchase for 6 months?



Types of Expenses

- Fixed expenses: cost the same every time
 - Rent, Student Loan Payment, Insurance
- Variable expenses: fluctuate in amount, more control, but possibly more challenge to plan
 - Groceries, Utilities, Transportation, Shopping
- Periodic expenses: expenses that can be either one time, semi-annual, etc. (can be fixed or variable)
 - Petcare, Gym membership, Tuition



Impact Analysis

- Which apartment should I rent?
 - \$2000/month x 12 months = \$24,000/year
 - \$1500/month x 12 months = \$18,000/year (\$6,000/year less)
 - Live at home?
- Should I pay my credit card off?
 - \$5000 balance @ 18% APR
 - Total interest paid at \$125/month = \$6,923
 - Total interest paid at \$200/month = \$1,313 (\$5,610/year less)



Debt Ratio

- **How much can I afford to pay?**
 - Front End Debt: Housing Costs 28%
 - Back End Debt: Loan Payments 12%
 - *Combined front end and back end debt ratio should not exceed 40% of income*



Debt Ratio: Front End

- **How much can I afford to pay in rent?**

Rule of thumb:

Total *pre-tax* Annual Income divided by 12 X 28%

Example:

\$40,000/year divided by 12 months = \$3,333/month

\$3,333 x 28% = \$950 *maximum* in monthly rent



Debt Ratio: Back End

- **How much can I afford to borrow?**

Rule of thumb:

Credit Card, *and other unsecured debt*, should not be more than 15% of *pre-tax* Annual Income.

Example:

\$40,000 a year x 15% = \$6,000 *maximum*
credit card debt



Debt Ratio: Back End

- **How much can I afford to pay in loans?**

Rule of thumb:

Total Loan Payments (not including mortgage) should be under 12% of Gross Monthly Income.

Example:

\$40,000/year divided by 12 months = \$3,333/month
Monthly Income \$3,333 X 12% = \$400 *maximum*
in total monthly loan payments



Debt Ratio: Your Income

- **Your Paycheck:**

$\$40,000 / 12 = \$3,333.33$ per month

| | | | |
|----------------------|----------|-------------------|--|
| Monthly Salary | = | \$3,333.33 | |
| Federal Taxes | = | \$ 358.33 | |
| State Taxes | = | \$ 176.58 | |
| Social Security | = | \$ 206.67 | |
| Medicare | = | \$ 48.33 | |
| Take Home Pay | = | \$2,543.42 | |



Debt Ratio: Your Income

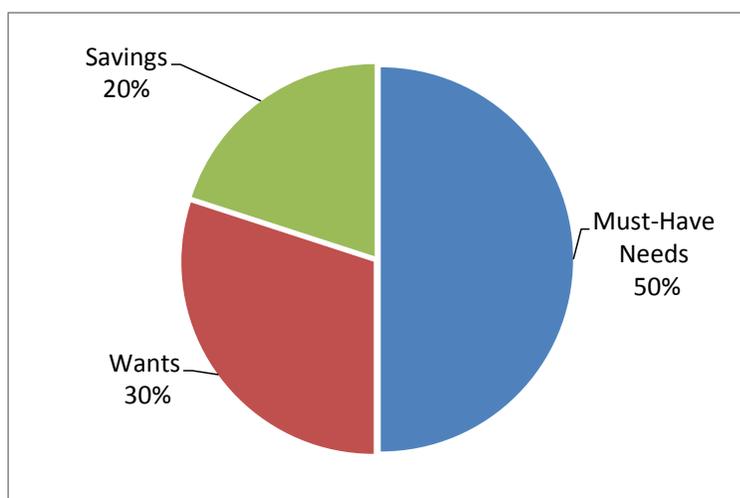
- **Total Debt to Income Ratio**

$\$40,000 / 12 = \$3,333.33$ per month

| | | | |
|---|----------|-------------------|--------------|
| Monthly Salary | = | \$3,333.33 | |
| Tax Withholding | = | (\$ 789.91) | (24%) |
| Net Pay | = | \$2,543.42 | |
| Rent | = | \$ 950.00 | (28%) |
| Loans | = | \$ 400.00 | (12%) |
| Savings, Food, Clothes, Fun, etc | = | \$1,193.42 | (36%) |



Spending Breakdown



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Psychology of Spending

- Consumer spending decisions are about 95% related to *emotional* needs.
 - Many factors impact consumer behavior.
 - Economics
 - **Financial Literacy! Higher literacy leads to:**
 - **More Savings**
 - **Better Investments**
 - **Less likely to face home foreclosure**
 - Individual Psychology
 - **Understanding why we buy what we buy can help us make smart decisions in the future.**

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Psychology of Spending

- Learn the psychology of your financial decision making:
 - understand the **circumstances** in which you are likely to make better vs. worse financial decision.
 - understand how **marketing strategies** are designed to manipulate the choices you make.
 - **Will it make you happier? Maybe...**



Psychology of Spending

- Recall the most recent purchase you made under \$20.



Psychology of Spending

- Recall the most recent purchase you made under \$20.
 - **What** did you buy?
 - **What you buy may influence your happiness.**



Psychology of Spending

Experiences, *not material things.*



Psychology of Spending

- Recall the most recent purchase you made under \$20.
 - **How** did you pay for it?



Cash vs. Credit



Psychology of Spending

- Recall the most recent purchase you made under \$20.
 - **How** did you pay for it?
 - **How you paid may influence your happiness.**



Cash vs. Credit



Cash is King:

- Parting is *painful*.
- Less willing to spend.
- More likely to recall product costs.
- Happier with purchase.
- Higher perceived value of purchase.



Cash vs. Credit

"Is that debit or credit?"



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Cash vs. Credit

- *"Is that debit or credit?"*
 - Debit: CASH
 - No interest.
 - No bill.
 - Immediately withdrawal from your account
 - You can only spend what you have
 - Unlike cash, if you lose it, it can be replaced
 - Fraud protection
 - Not on your credit report
 - Credit: LOAN
 - Interest on purchases.
 - Bills.
 - Purchases are aggregated and billed monthly.
 - Easy to spend more than what you have.
 - Unlike cash, if you lose it, it can be replaced
 - Fraud protection.
 - On your credit report

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Psychology of Spending

- Ask yourself...
 1. Will this purchase put me in the red?
 - Debt is associated with:**
 - More negative evaluations of the products responsible for the debt.
 - More negative evaluations of the self.
 - Higher instances of depression.
 - Increased Stress
 - Loss of Sleep
 - Domestic violence
 - Suicide



Psychology of Spending

- Ask yourself...
 1. Will this purchase put me in the red?
 2. Do I *really* need it?
 3. Do I have to have it *today*?
 4. What will happen if I *don't buy it now*?
 5. Why have I gotten along without it until now?
 6. **Does this purchase help me meet my goals?**



Manage Your Budget

- Periodically review and update your budget
 - Does it align with your goals?
- Live within your means
 - Prioritize spending
 - Reduce
 - Substitute
 - Postpone
 - Forgo
 - Increase your income
- **Understand opportunity costs and tradeoffs**



Manage Your Budget

- Start with manageable goal:
 - Save \$50 per month (\$600/year)
 - Spend \$2 less per day (\$730/year)
- Example: grocery shopping
 - Avoid convenience stores
 - Shop with a list, *and stick to it*
 - Compare and utilize bulk pricing
 - Eat *before* you go grocery shopping
 - Buy generic



Impact Analysis

| | |
|--------------------------------|------------------|
| Coffee \$2.50/ day x 7 = | \$910 per year |
| Lunch \$10/ three times week = | \$1,560 per year |
| Dinner \$25/ twice per week = | \$2,600 per year |
| Total for full year = | \$5,070 |

Determine what purchases meet your goals.



Evaluate

- Are you in financial distress?
 - When your credit card bill arrives, can you pay it in full? Or only the minimum amount?
 - Do you use your credit card out of convenience? Or necessity?
 - Is your credit card debt decreasing? Or increasing?



Evaluate

- Are you in financial distress?
- Creating a budget isn't sufficient if you want to succeed financially. *You must stick to it.*
- **Try this at home:** see if you can follow a budget for just a weekend.
 - "The BIG Chill" - On a Thursday night...
 1. calculate what you can *afford* to spend for the weekend in cash
 2. withdraw that exact amount in cash
 3. put all your "plastic" – credit cards, ATM cards, debit cards – in a metal bowl, fill it with water and freeze it.



Evaluate: Track Spending



Budget to Save

We've addressed *spending*.
Now, let's discuss saving.

[Saving PSA](#)



Saving vs. Investing

- What is the difference between saving and investing?
 - *Saving* is setting aside a certain amount of your income over a period of time in order to accomplish a goal.
 - *Investing* is a long-term activity accomplished by having your money make more money for you.



Friday:
Retirement
and Investing



Saving vs. Investing

- Before you start investing...
you must save.



Saving vs. Investing

- Before you start investing...
 - Save up a 6 month emergency fund
 - Pay off all your credit card debt
 - Maximize contribution to your retirement plan
 - *especially if your employer matches*
 - Save for other important needs



Budget to Save

- Basic Vehicles for Saving:
 - **401(k)**: Maximize your earnings.
 - **Direct Deposit**: Automate your savings.
 - **Overdraft Protection**: Protect your cash.
 - **Savings Accounts**: Earn interest on your cash.



Save: 401(k)

- Maximize your earnings.
- Take advantage of **pre-tax** savings opportunities, such as an employee-sponsored retirement savings plan, like a 401(k). Many employers match your contributions in whole or part.



Save: 401(k)

- Employer Matched 401(k)
 - Many companies will match a portion of what you put into your retirement account
 - You'll see something like "50% match up to 6% of your salary"
 - Your Salary = \$40,000
 - You contribute 6% = \$2400
 - Employer match contributes = \$1200
 - Total = \$3,600
 - **Tip: If you can, invest at least enough to get the full company match**



Save: 401(k) v. IRA

- Both are vehicles for you to invest money with specific tax-advantages:
 - 401(k) and IRA allow you to invest **pre-tax dollars** (your money grows and is later *taxed when withdrawn*)
 - Roth IRA allows you to invest **post-tax dollars** (your money grows and is later *withdrawn tax-free*)
- Which one is right for you depends on many personal factors like your future earning potential and your assumptions about external factors like future tax rates.



Save: Direct Deposit

- Automate your savings.
 - Payment *automatically* goes into your accounts the same day the check is issued
 - Most banks offer free checking accounts if you schedule direct deposit
 - Eliminates the need for paper checks, so there's no need to worry about losing a deposit
 - Divide one paycheck up among multiple accounts
 - Open a savings account that earns interest and schedule deposits into your savings account.



Save: Overdraft Protection

- Protect your cash.
 - When there isn't enough money in your account to pay for the withdrawals, you'll overdraw and be charged an insufficient funds fees, typically \$25 or more per transaction, by your bank *and* the merchant.
 - Overdraft protection allows you to *temporarily* make withdrawals, even in you don't have sufficient funds in your account to cover them.
 - It is not a free ticket to spend more money than is in your account, but **it can help reduce the typically expensive fees associated with having insufficient funds.**



Savings Accounts

- Earn interest on your cash.
- All savings accounts are not created equal.
 - Traditional Savings Account
 - Certificate of Deposit (CD)
 - Money Market
- Before choosing, ask yourself:
 - What am I saving this money for?
 - How long can I leave this money in an account?
 - When will I need the cash?
- Different savings products carry different advantages, timelines and interest rates.



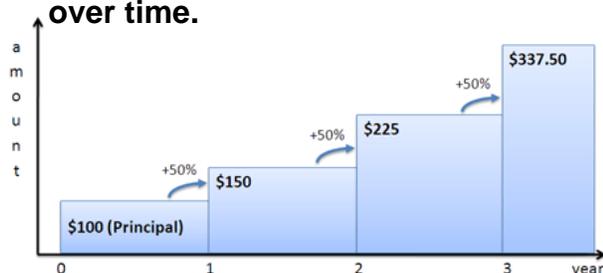
Savings & Interest

- The bank pays you interest on the money you have in a savings account.
 - **Interest** is money paid by a borrower to a lender for a liability.
 - You get paid interest on your Savings Account for your liability of leaving your money in the bank.
 - Conversely, you pay interest on a loan from a bank for their liability in lending you money.



Compound Interest

- Like a snowball effect:
 1. Earn interest on the *original* amount you deposit into your savings account.
 2. In the next month, you'll earn interest on the original deposit *plus the interest you earned last month*.
- **Accelerates your savings and can have a big impact over time.**



Traditional Savings Accounts

- **Savings Accounts:** “no-frills” and tend to pay a lower interest rate, but will usually have a low minimum balance requirement.
- Your money won’t grow quickly, but a basic savings account can:
 - Keeps your money safe and accessible.
 - Becomes a habit.
 - Better interest than a checking account
- **Tip:** Keep enough money in a basic savings account to cover at least 6 months worth of living expenses.
- **High-yield savings accounts** offer higher interest rates than basic savings accounts:
 - CDs
 - Money Markets



Certificate of Deposit

- CDs are deposited for a certain amount of time and earns interest when it matures (when the time is up).
- They typically **earn higher interest rates** than other types of deposit accounts.
- **Your money is off-limits until the CD matures.**
 - If you cash-out before it matures, you may pay a penalty.
- CDs are a good way to save if:
 - You are saving for a big purchase planned for 1+ years away.
 - You want your money to earn more interest than a traditional savings account can offer.
 - You will not need to access your funds during the term of the CD.



Money Market

- Often pay **higher interest rates** than traditional savings accounts, but have **higher minimum balance requirements**.
- You can usually withdraw cash and write checks from the account.
 - you may be limited in the number of withdrawals or checks per month and pay a penalty for going over that limit.
- Money market accounts can be good places to save your money if:
 - You will need access to your cash in the short-term.
 - You will not need to withdraw from the account more than a few times per month.



Government Bonds

- When saving for financial goals that are 5+ years away, another option is a U.S. Savings Bond.
- Buying a savings bond means that you're lending the U.S. government your money and, in exchange, the government will pay you back with interest.
- Savings bonds can be bought for as little as \$25 and are considered extremely low-risk
- **Savings Bonds are exempt from state and local taxes.**



Budget to Save

Start now and your savings will earn more.

The power of compound interest makes it possible to earn exponentially more money by starting today, *rather than waiting until 'some day'*.

A large green 3D arrow pointing upwards and to the right, with the word "SAVINGS" written in large, bold, green letters below it. The arrow and text are rendered with a slight shadow, giving them a three-dimensional appearance.



Budget to Save

- How to get started:
 - **401(k)**: Maximize your earnings.
 - **Direct Deposit**: Automate your savings.
 - **Overdraft Protection**: Protect your cash.
 - **Savings Accounts**: Earn interest on your cash.



Budget to Save

- How much is enough?
 - **10-15% of your income**
 - Evaluate your financial goals, lifestyle, and future plans:
 - How much money you will need in case of unexpected job loss? down payment for a home? grad school? for retirement?



Budget to Save

1. Start now: **compound interest!**
2. Create a plan.
3. Spend less than you earn.
4. Include savings in your budget.
5. Set a goal.
6. Open a savings account.
7. Save up 6 months worth of basic expenses for emergencies.
8. **Automate!** Make savings deposits more than a habit, make them automatic.
9. Watch it grow.



Budget to Save

A 2017 US dollar bill featuring a man's face. The text on the bill reads: "L 37656240 E", "BE THE RICH", "ECCENTRIC", "RELATIVE YOU", "WISH", "YOU HAD.", and "FEEDTHEPIG.ORG". The bottom of the bill has the Ad Council and AICPA logos. On the right edge, it says "A 3 7" and "THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE".



Case Study

- Consider Chris' financial goals:
 - Identify 2-3 short-term goals for Chris.
 - Identify potential challenges in meeting those goals.
 - Identify outcomes from different summer choices.
 - *What actions taken earlier would have expanded Chris' options?*

