## AURORA UNIVERSITY

## Forming Financial Security

## Saving, Investing, Credit, Risk Management, and Retirement

## Discussion Overview

1. Your Personal Relationship with Money \& Budgeting
2. Build Savings Into your Budget
3. The Three Dimensions of Saving
4. You Must Begin Saving Right Away!
5. The Lesson of John and Jane
6. Credit - Definitely Dangerous but Potentially Helpful
7. Retirement Planning
8. Risk Management - The Why of Insurance?
9. A Model for How to Save
10. Wrap Up
11. Procrastination

## Your Personal Relationship with Money and Budgeting

## You Can Achieve Your Reasonable Objectives!

- You Must Set Out to Accomplish Two Objectives:
- Build a Healthy Relationship with Your Money
- Keep Five Things Top of Mind:
- Budget for savings
- Save/Invest Early and Often
- Understand and Prepare for Retirement
- Take Charge of Your Knowledge About and Use of Credit
- Manage Your Risk


## \#1 Relationship with Money? Yes!

- What do you value?
- Family?
- Big Bank Account?
- Job Satisfaction?
- Possessions?
- Security?
- If More Than One, How Do You Rank Them?
- You Probably Can't Achieve All of Your Preferred Values. You Will Have to Make Choices!
- Your Values Will Inform Your Choices.
- How Much Money is Enough?


## \#2 Be Sure You Build Saving Into Your Budget- You Have to Plan Personal Financial Independence

- Budget to Spend Less than You Make. Spending Less than Your Income is the Key to Financial Independence.
- Don't Become a Victim of Lifestyle Creep.
- Pay Yourself First.
- Learn to Discern if an Expenditure is a "Want" or "Need"
- Don't be Disappointed if You Sometimes Have to Spend Funds Budgeted for Savings. Just Get Back on Track Next Month.
- Persistently Cut Costs and Save


## \#3 What Should You Do With the Money You Budget to Save?

- There are Three Dimensions to Saving:

- Regular Savings and the Returns Earned on Your Savings Will Make You Independent. But...You Must Try Not to Spend your Savings.


## \#4 You Have To Start Saving Right Away

## Why?

- The sooner you start to save the more math can work in your favor to maximize your wealth!

LET'S ASK AN EXPERT...

## Just Ask Einstein...

"...Compound Interest [or Investment Return] is the Most Powerful Force in the Universe..."


## What is Interest (or Return)? How is it earned?

- Money paid to a depositor by a bank, government or corporation in exchange for the deposit
- Two forms:
- Simple interest is paid to the depositor and not reinvested
- Compound interest is paid to the depositor and reinvested so that the depositor can earn interest on the original investment AND the interest previously earned.


## An Example of Simple Interest

- Invest $\$ 10,000$ at $5 \%$ annual interest
- At the end of each year you receive $\$ 500(\$ 10,000$ * .05) interest
- You spend the interest instead of reinvesting it.
- You never have more than $\$ 10,000$


## An Example of Compound Interest

- Let's say you invest $\$ 10,000$ at $5 \%$ interest
- At the end of the first year you receive a $\$ 500$ interest payment
- You combine your interest payment with the original investment and reinvest $\$ 10,500$.
- At the end of year two you receive interest of $\$ 525$ which is interest on both the original \$10,000 investment AND the previously earned interest of $\$ 500$


## \$25 Isn't a Big Deal What Makes Compound Interest So Powerful?

- Time is what makes compound interest powerful
- If you leave that $\$ 10,000$ invested for 30 years you would have \$43,219
- In general, you can compute the future value of an investment as follows:
- $\mathrm{FV}=\mathrm{C}(1+r)^{t}$ where C is the invested amount, $r$ is the interest rate and $t$ is the time of the investment
- In the example above $\$ 10,000(1.05)^{30}=\$ 43,219$


## But, If It Takes 30 Years to Make $\$ 10,000$ Turn Into \$43,000 How Do I Get Rich?

- The key is systematic or regular investing
- Consider someone who works from age 22 to age 65, 43 years.
- Each year they save \$6,000
- So, in 43 years they would have saved $\$ 258,000$
- But, is that their savings balance?
- NO! With $5 \%$ compound interest, they would have saved $\$ 857,960$.
- The key is systematic or regular investing


## What Does it Take To Be a Millionaire?

- Invest regularly
- \$6,000 per year over a 43 year working life will yield \$1,000,000 at an interest rate of 5.57\%
- The good news: In the past 90+ years a market basket of diverse investments has returned about 8\%
- At $8 \%$ return, that $\$ 6,000$ per year will be worth $\$ 1,977,498$

Formula For Future Value (FV) of an annuity:

$$
F V=P m t x\left\{(1+r)^{n}-1\right\} / r
$$

## \#5 The Lesson of John and Jane!



## \#6 Credit is Dangerous but Can be Helpful

- Try to Use Credit Only for Appreciating Assets
- Shop For the Lowest Available Interest Rate
- Always Pay Your Balances in Full if You Can
- If You Can't, Pay Them Off ASAP
- Don't Let Yourself Be Lured Into Optional Credit Spending, It Will Make You Feel Badly
- "I'd Rather Earn Interest Than Pay Interest"


# Two Credit Behaviors That Can Help You Succeed 

- Pay Cash as Much as Possible
- Keeps You Connected With Your Spending
- Helps Make Budget Compliance and Saving Possible
- Avoid Credit Cards
- They Encourage Optional Spending and Make Consequences Emotionally Remote
- Credit Card Interest Rates are Very High - As Much As 30\%
- Credit Cards are Addictive


## A Credit Card Example

- Emergency Dental Situation - \$8,000
- Credit Card Interest - 12.99\%
- Minimum Monthly Payment \$150
- Takes nearly 7 Years to Pay Off
- Interest Cost: \$3,995
- Assuming You Don't Buy Anything Else
- If you have credit card debt your first priority is to pay it off. Credit card debt can wreck your financial life.


## \#7 Retirement

- The days of employer's providing "defined" retirement benefits are largely gone
- Local governments and public education are notable exceptions.
- You will likely qualify for modest Social Security benefits but will pay for them through your work life.
- Assuming you were not a local government or public education employee.
- Assuming Social Security is not changed by Congress.
- Bottom Line:
- To assure a comfortable retirement you will have to plan and save for it.
- Let's consider available plans


## Two Common Self Funded Retirement Plans

- Roth Individual Retirement Account:
- You can set it up at any financial institution
- Contribute up to \$6,500 per year of taxed income
- Employer Sponsored 401(K) or 403(B) Plan:
- The employer sets up a plan with an independent Trustee
- You can contribute up to $\$ 22,500$ each year with the contribution being excluded from your taxable income
- Generally, the employer will match a portion on the employee contributions. This is essentially free money so maximize your retirement by contributing at least enough to collect the employer contribution.


## \#8 Risk Management: The Why of Insurance

- After you save and invest to accumulate assets, you need to protect them from damage or loss
- You also need to protect your financial assets from claims made against you for negligence
- Therefore, you need quality insurance to protect:

1. Your home and cars
2. Claims made in connection with professional liability
3. Your life, to provide for your family after your death

- Develop a trusted advisor relationship with an insurance professional to help you select appropriate coverage, limits, and providers.
- Remember to Include Your Insurance Costs in Your Budget


## \#9 How to Save:

## Building an Investment Strategy

1. Establish an Emergency Fund
A. Should be at a bank; insured deposits of cash
B. 3 Months of Living Expenses
2. Save for Planned Expenses
A. Such as Home, Car, Wedding, Education
3. Build a Personal Financial Cushion
A. Retirement
B. Personal Security
C. Legacy
D. Philanthropy

## Places to Save / Invest

- Bank Accounts, CD's, Money Markets
- Should be your first investments
- Emergency Fund - Very Liquid
- Very low risk; defined return
- US government securities
- Low Risk
- Longer Term
- Defined return
- Mutual Funds, Stocks, Bonds
- Best Returns, Greatest Risk
- Attention to Diversification
- Requires Professional Assistance
- Real Estate
- Individual Properties
- Real Estate Investment Trusts
- Options, Futures, Commodities
- Don't do this; too risky


## Advisors

- In the early stages, keep your saving limited to banks and US Government Securities. They can advise you on the optimal accounts.
- Banks are relatively low risk
- You won't need an outside advisor
- When you expand your investing to include mutual funds, stocks, bonds and other securities you should engage an advisor.
- Be cautious of "captive" advisors
- Engage an advisor with a good reputation
- Advisors with credentials such as CFP ${ }^{\circledR}$ can be a plus


## \#10 You Won’t Become Financially Independent Overnight

- However:
- Consistent Savings Over Time
- Carefully Invested
- Patiently Stewarded
- Yields:
- Financial Independence
- More Means Than You Will Require


## \#11 Components of Financial Independence



## A Book You Should Read

The Millionaire Next Door: The Surprising Secrets of America's Wealthy by Thomas J. Stanley Ph.D., William D. Danko Ph.D, et al. | Oct 1, 2016

## Contact Info

David W. Diehl, MBA, EdS, CPA, CMA, CGMA, PFS, CITP 905 W. Lockwood Avenue St. Louis, MO 63122

314-223-9617
ddiehl@aurora.edu

