Unit 7 ---- Personal finance

Welcome to the economic units
Budget

- A written plan for managing finances and wealth in multiple categories:
  - Ex. Housing, food, insurance, utilities, etc.
Income

- A gain or benefit usually measured in money that comes from selling something of value, labor, rents, or investments.
Expenditures

- the act of *expend*ing funds; the disbursement of money, think of it as categories in the budget

- Using the word in a sentence
  - “…income should exceed expenditures”

- Sample Quote:
  - From the beginning, the greatness of America has stemmed from the boundless industry of its people, but also from our willingness to invest in ourselves through the expenditure of public moneys.
Gross pay and Net pay

- **Gross Pay** --- Total money earned BEFORE taxes and other deductions

- **Net Pay** --- Total earnings that one takes home AFTER taxes and deductions.
Disposable Income and Discretionary Income

- **Disposable Income**
  - money a person has available to spend after paying taxes, retirement contributions, etc.

**Discretionary Income**: income after paying for things that are essential, such as food and housing. Example: “She has enough discretionary income to pay for a nice vacation each year.”
Taxes: Income, Sales, Property

Tax money is the income (revenue) for local/state/federal gov't.

- **Income Taxes**: Taxes paid on income earned or received. In the USA we have a progressive tax system. The more money one makes, the higher the taxes paid.

- **Sales Taxes**: Taxes paid on items bought. Local governments decide on tax rates.

- **Property Taxes**: Taxes paid on property such as houses, cars, business equipment, buildings, boats, etc.
Progressive Taxes: tax rate increases with certain increases in taxable income.

Regressive Taxes: Tax where lower-income households pay a higher % of income in taxes than do higher-income households.

Proportional Taxes: Think---FLAT TAX. Tax where everyone, regardless of income, pays the same fraction of income in taxes.
Savings Account and Checking Account

- **Savings Account**--- Not intended for daily use, but meant to stay in the account so that it earns interest over time. Savings accounts often have higher interest rates than checking accounts.

- **Checking Account**--- A type of bank deposit account that is designed for everyday money transactions. Little, if any, interest is ever earned in this.

**Activity:** Compare the current interest rates for savings and checking accounts at a local bank.
Credit, Debit, Overdraft

- **CREDIT**---Providing money, goods, or services with the expectation of future payment. Also, can mean the addition of funds to an account.

- **DEBIT**---The subtraction of funds from an account.

- **OVERDRAFT**---money that is spent by someone using a bank account that is more than the amount available in the account: an amount that is overdrawn from an account. Fees are applied to the customer when this happens.
Simple Interest and Compound Interest

- **Simple Interest** - determined by multiplying the daily interest rate by the principal by the number of days between payments.

  --- usually used for car loans or short-term personal loans

- **Compound Interest** --- Compound interest is the addition of interest to the principal sum of a loan or deposit, or in other words, *interest on interest*. 
SIMPLE INTEREST

I = Interest
P = Principal
R = Rate (of interest)
T = Time (usually in years)
13.1 Compound Interest

- Example: $800 is invested at 7% for 6 years. Find the simple interest and the interest compounded annually.

Simple interest:
\[ I = PRT = 800 \times 0.07 \times 6 = 336 \]

Compound interest:
\[ M = P(1 + i)^n = 800(1.07)^6 = 1200.58 \]
\[ I = M - P = 1200.58 - 800 = 400.58 \]
<table>
<thead>
<tr>
<th>Year</th>
<th>Simple Interest</th>
<th>Compound Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>R% of P = I</td>
<td>R% of P = I</td>
</tr>
<tr>
<td>Year 2</td>
<td>R% of P = I</td>
<td>R% of P + R% of I = I + R% of I</td>
</tr>
<tr>
<td>Year 3</td>
<td>R% of P = I</td>
<td>R% of P + R% of (I + I + R% of I) = I + R% of (I + I + R% of I)</td>
</tr>
<tr>
<td>Total</td>
<td>3I</td>
<td>3I + 3(R% of I) + R% of (R% of I)</td>
</tr>
</tbody>
</table>
## Compound Interest

<table>
<thead>
<tr>
<th>Year</th>
<th>Opening balance (P)</th>
<th>Interest@5% (I)</th>
<th>Closing balance (P+I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$10,000.00</td>
<td>$500.00</td>
<td>$10,500.00</td>
</tr>
<tr>
<td>2</td>
<td>$10,500.00</td>
<td>$525.00</td>
<td>$11,025.00</td>
</tr>
<tr>
<td>3</td>
<td>$11,025.00</td>
<td>$551.25</td>
<td>$11,576.25</td>
</tr>
<tr>
<td></td>
<td><strong>Total Interest</strong></td>
<td></td>
<td><strong>$1,576.25</strong></td>
</tr>
</tbody>
</table>
## Compound Interest

<table>
<thead>
<tr>
<th>Year</th>
<th>Starting Value</th>
<th>Annual Interest Earned on Principal</th>
<th>Annual Interest Earned on the Interest</th>
<th>Total Interest Earned</th>
<th>Annual Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$100.00</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$100.00</td>
</tr>
<tr>
<td>1</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ -</td>
<td>$ 5.00</td>
<td>$105.00</td>
</tr>
<tr>
<td>2</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 0.25</td>
<td>$10.25</td>
<td>$110.25</td>
</tr>
<tr>
<td>3</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 0.51</td>
<td>$15.76</td>
<td>$115.76</td>
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<tr>
<td>4</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 0.79</td>
<td>$21.55</td>
<td>$121.55</td>
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<tr>
<td>5</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 1.08</td>
<td>$27.63</td>
<td>$127.63</td>
</tr>
<tr>
<td>6</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 1.38</td>
<td>$34.01</td>
<td>$134.01</td>
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<td>7</td>
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<td>$ 1.70</td>
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<td>8</td>
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<td>$ 5.00</td>
<td>$ 2.04</td>
<td>$47.75</td>
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<td>9</td>
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<td>$ 5.00</td>
<td>$ 2.39</td>
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<td>$155.13</td>
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<tr>
<td>10</td>
<td>$100.00</td>
<td>$ 5.00</td>
<td>$ 2.76</td>
<td>$62.89</td>
<td>$162.89</td>
</tr>
</tbody>
</table>

**TOTAL = $ 50.00  $ 12.89**
Here are some interest rates to compare—as you can see, modest increases in rates have a dramatic effect on the doubling time.

<table>
<thead>
<tr>
<th>Years</th>
<th>1.5%</th>
<th>3%</th>
<th>6%</th>
<th>12%</th>
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<tbody>
<tr>
<td>0</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>12</td>
<td>In times of historically low interest rates, it's especially important to start investing early</td>
<td>$20,000</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>$80,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>24</td>
<td>$20,000</td>
<td></td>
<td>$40,000</td>
<td>$160,000</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>$80,000</td>
<td>$640,000</td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td>$1,280,000</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td>$2,560,000</td>
</tr>
<tr>
<td>48</td>
<td>$20,000</td>
<td>$40,000</td>
<td>$160,000</td>
<td></td>
</tr>
</tbody>
</table>
The rule of 72 is a shortcut for estimating how fast your money will double.

Divide 72 by an annual rate of return (written as a whole number) to determine how many years it will take to double your investment.

Source: Investopedia
Credit Score

- Review other PowerPoint presentation
Review other PowerPoint presentation
Stocks, Bonds, and Mutual Funds

- Review other PowerPoint presentation
CD’s and Money Market Account

- Review other PowerPoint presentation
Consumer Protection Laws

- https://www.ftc.gov/about-ftc/bureaus-offices/bureau-consumer-protection
Truth-In-Lending Act
TOP COMPLAINTS FROM CONSUMERS
January - December 2016

BY CATEGORY
1. DEBT COLLECTION
2. IMPOSTER SCAMS* (moved to #2 due to more complaints about government imitators and fewer in ID theft)
3. IDENTITY (ID) THEFT
4. PHONE & MOBILE
5. BANKS & LENDERS

BY STATE
IDENTITY THEFT
MI, FL, DE, CA, IL
FRAUD & OTHERS
FL, GA, MI, TX, NV

FOR MILITARY CONSUMERS:
IMPOSTER SCAMS WAS THE #1 COMPLAINT, FOLLOWED BY ID THEFT

Source: Consumer Sentinel Network Data Book
Federal Trade Commission  www.ftc.gov
What Does the FTC Do?
Three Missions of the FTC

1) Ensure that the nation’s markets function competitively by enforcing certain antitrust laws
   - these laws require companies to compete in the marketplace

2) Enhance the smooth operation of the marketplace by eliminating false and deceptive advertising or practices

3) Investigate the workings of business and contribute to the policy deliberations of various levels of government.
What Does The FTC Do?

- Dual mission to protect consumers and promote competition.
- Goal of advancing consumer interests while encouraging innovation and competition in our dynamic economy.
- Policy development through hearings, workshops, and conferences.
- Collaboration with law enforcement partners across the country and around the world.
- Cooperation with international agencies and organizations to protect consumers in the global marketplace.
*Non-Profit formed in early 1900’s
*Gives info about a company before you do business with it.
*Helps to resolve complaints you might have against a business, including legal counsel.
*Provides good consumer info in order to make intelligent buying decisions.
*Provides financial and ethical information on charitable organizations.
Identity Theft

What to do if you are victimized

- Act quickly
  - Cancel cards immediately
  - Contact the police
  - If you fail to act quickly this can cause out of pocket expenses and tarnish your reputation
  - It often takes much longer to recover from identity theft then it does to actually commit the crime.

- Contact the Federal Trade Commission (FTC)
  - You can contact them online, by telephone, or by mail.
  - They provide information and refer the complaints to appropriate entities.
**PONZI SCHEMES**

**IF IT’S TOO GOOD TO BE TRUE**

**What is a Ponzi Scheme?**

An investment scheme that lures new investors by offering unusually high payouts.

Older investors get payouts from new investors, rather than from profits earned.

The scheme collapses and everyone loses their money when it becomes difficult to lure new investors, a number of investors cash out or the promoter runs off with the money.

Investors receive payouts and encourage other investors to invest or invest more themselves.

**HOW TO SPOT A SCHEME**

Compare the scheme’s interest rate to the country’s official rate (Repo Rate).

5% - 6%

Average interest rate in a country

30%

Unusually high rate

Don’t be comforted if the scheme has paid out regularly to family and friends.

“**My husband did not want to invest initially, because he was very conservative. The monthly statements showed very impressive growth. This convinced us to use some of our other investments to live off.**” Ponzi victim

**WHAT TO ASK BEFORE INVESTING**

How long have you been in the investment business? What are your qualifications?

Do they require me to introduce other investors?

“We heard about it from friends, they all invested and received great returns. All our friends and family were invested and now have nothing to live off.” Ponzi victim

Are you registered with the Financial Services Board? Can you show me proof?


Trust your instincts!
Multi-Level Marketing

- MLM is a marketing strategy
- MLM - commission is paid to multiple levels of distributors when an ACTUAL PRODUCT IS SOLD
- MLM is used as an avenue to sell TANGIBLE goods

Pyramid Scheme

- A PYRAMID SCHEME IS A FRAUDULENT SCHEME THAT IS ILLEGAL
- PYRAMID SCHEME - NO REAL PRODUCT IS SOLD
- NO PRODUCT = NO COMMISSION
Pyramid Schemes

Read this article for more interesting details of how Pyramid Schemes work.

Benefits of Insurance and Risks Without Insurance

- **Benefit:** Insurance is to help you pay for expenses you can’t afford but desperately need to cover.

- **Risks:** To be without insurance puts you and your family at great risk for financial devastation with expenses that may be impossible to pay.

- To better afford any insurance, one can raise the deductibles (your portion of coverage---Making an emergency savings account critically important).
Life, Auto, Health

- Life Insurance
- Car Insurance ---

Visit usaa.com/life to see why protecting your loved ones is so important.

MYTH: Life insurance is too expensive.

FACT: A healthy 30-year-old could get $250,000 of coverage for twenty years around $15 per month.

Funeral costs
Bills and ongoing expenses
Outstanding debt
Future needs, like education
Spouse's retirement plan
Premium, Deductible, Copay

- **Insurance Premium** --- The cost that you pay to have insurance coverage. Premium=Cost

- **Insurance Deductible** --- Insurance deductible is your portion that is paid in case there is an insurance claim.
  - **Explanation:** The amount of your deductible directly affects your premium, or cost of insurance. A higher deductible typically means your premium will be less because you are willing to take more of the risk.

- **Copay** --- The Out-of-Pocket expense to help offset medical costs of the insured person(s).
Out-of-Pocket Expenses

- expenses for medical care not reimbursed by insurance.

- Out-of-pocket costs include deductibles, coinsurance, and copayments for covered services plus all costs for services that aren't covered.
<table>
<thead>
<tr>
<th>Out-of-Pocket Costs</th>
<th>What Is It?</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premium</strong></td>
<td>Your premium is the amount you pay to your health insurance carrier each month (or quarter) to maintain health insurance coverage.</td>
<td>If your insurance premium is $220, that is the amount you pay to your health insurer on a monthly basis.</td>
</tr>
<tr>
<td><strong>Deductible</strong></td>
<td>A fixed amount of money (depending on your plan, it could be $0, $500, or $1000, or other amount) that you must pay—&quot;fulfill&quot; per industry lingo—before your insurance coverage kicks in.</td>
<td>If your deductible is $1,000, you must pay $1,000 for your own care out-of-pocket before your insurer starts covering a higher portion of costs. Health insurance deductibles reset on a yearly basis.</td>
</tr>
<tr>
<td><strong>Copay</strong></td>
<td>A fixed dollar amount you pay upfront for a procedure, medical examination, or prescription drug purchase.</td>
<td>You may have a $25 copay every time you see your primary care physician, a $10 copay for each monthly medication and a $250 copay for an emergency room visit.</td>
</tr>
</tbody>
</table>
Estate Planning

Do you need an estate plan?

- You have children or dependent minors.
- You have philanthropic goals.
- You want to minimize probate costs and protect your privacy.
- You own a business and need to engage in business succession planning.
- You want to control the disposition of your assets after your passing.
- You want to ensure that you provide for your heirs, including children and grandchildren, and your surviving spouse.

Estate Planning:

- **Asset Protection**
  - Trusts
  - Prenuptial Agreement
  - Liability Insurance
  - Statutory Protection

- **Charitable Gifting**
  - Charitable Trusts
  - Direct Gifts
  - Private Foundations
  - Donor Advised Trusts

- **Transferring Wealth**
  - Inheritance
  - Trusts
  - Business Succession
  - Gifts

- **Taxation**
  - GST Tax
  - Income Tax
  - Real Estate Tax
Key understandings...

- Your financial choices have an impact on your future.

- An investment opportunity that looks too good to be true probably is.

- Insurance allows a group of consumers to share risk and benefits.

- The government plays a role in protecting consumers.