Section 3: Income and Taxes

Concepts you’ll learn
1. How to understand a paycheck summary
2. Gross income
3. Income taxes
4. Tax deductions
5. Adjusted gross income
6. Net Income

Problems you’ll solve
1. Calculate your expected earnings (gross income) for a given time period
2. Estimate the impact of expected tax deductions on adjusted gross income
3. Budget for State and Federal income taxes
4. Estimate net income
### Deciphering a Paycheck

#### Current Pay Period -- 02/02/98 through 02/14/98

1. **Gross income**, or total amount earned (shown twice on this particular paycheck)
2. All taxes withheld – some determined by federal tax law, some unique to specific locale
3. **Insurance withholdings** (more on this in a later section)
4. **TOTAL withholdings**
5. Net pay = gross income – total withholdings

#### Year to Date -- 01/01/98 through 02/14/98

6. **Gross income** (again, shown twice)
7. **Taxes withheld**
8. **Insurance withheld**
9. **TOTAL withheld**
10. Net pay so far for the year

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**Bottom line:** don’t die of shock when you see how much lower your take home pay is vs. advertised salary
More On Income -- Definitions

- **Gross Income**: 100% of the money earned in a given year. Includes wages, salaries, and tips; earned interest, capital gains, dividends, etc.
  - **Wages, salaries, and tips**: Earnings paid from employer to employee via a regular paycheck typically fall into this category and are subject to additional payroll taxes (specifically OASDI and Medicare, collectively called FICA – see next page).
  - **Earned interest**: Earnings from interest paid out from holding money in interest bearing accounts such as savings accounts, certificates of deposit, etc.
  - **Capital gains**: Earnings from profitable sale of assets – stocks, bonds, real estate, etc. Tax rules vary according to the type of asset sold.
    - **Short term capital gain**: Earnings from profitable sale of assets held for less than one year
    - **Long term capital gain**: Earnings from profitable sale of assets held for more than one year
    - **Special capital gains**: e.g. Earnings from profitable sale of a primary residence occupied for 2 of the 5 years prior to sale
  - **Dividends**: Earnings paid out to stockholders by corporations

- **Adjusted Gross Income**: Gross income minus all deductions (more on deductions later)

- **Net Income (also called Disposable Income)**: Adjusted gross income minus final taxes paid. This is the money you actually get to keep for purposes of spending, saving, and investing.
More on Taxes -- Definitions

- **Federal Income Tax**: A progressive income tax imposed on adjusted gross income by the federal government of The United States and collected by the Internal Revenue Service.
- **State Income Tax**: An income tax imposed on adjusted gross income by certain states – some are progressive, and some are flat.
- **FICA (Federal Insurance Contributions Act)**: FICA is actually two taxes – OASDI and Medicare, both described below. Some paycheck summaries will list FICA only, some will break out OASDI and Medicare, and still others will list “FICA” instead of “OASDI” while still listing Medicare separately. Confusing as hell. Employers must match employee FICA contributions, which means that self-employed people essentially pay twice. Not kidding. FICA payments are generally a pre-requisite for receiving Social Security benefits in retirement.
- **OASDI (Old Age, Survivors, and Disability Insurance)**: A regressive tax imposed on wages, salaries, and tips by the federal government to fund Social Security. OASDI is actually the official name for the U.S. Social Security program, which provides retirement benefits, unemployment insurance, and several other public assistance programs.
- **Medicare**: A flat tax imposed on wages, salaries, and tips by the federal government to provide health insurance and other medical benefits to retirees and people meeting certain other criteria.
- **State, City, and other local taxes**: These vary widely by specific location. Utah’s state income tax rate is a flat 5%.
- **Special Taxes**:
  - **Short Term Capital Gain Tax**: Taxed at the same federal tax rates as wages, salaries, and tips – see next page
  - **Long Term Capital Gain Tax**: Taxed at a flat federal tax rate of 15%
  - **Primary residence sale tax**: This is a good one. If your profit from the sale of your primary residence (i.e. you own it and have lived in it for 2 of the past 5 years) is $250,000 or less (or $500,000 or less if you’re married filing jointly), you pay no taxes. On all profits above those amounts you pay a flat federal tax rate of 15%.
More on Federal Taxes

- In general, as your income increases, the federal tax imposed on your “last dollar earned” will increase as well.
  - e.g. If you’re single, and you earn $9,225 or less in 2015, you’ll pay 10% in federal taxes on all of your income...
  - ...but, if you earn $30,000, you’ll pay 10% in the first $9,225, and then pay 15% on the remaining $20,775.
  - And, if you earn, say, $250,000, you’ll pay 10% on the first $9,225...
  - ...then 15% on the next $28,225 (since $37,450 - $9,225 = $28,225)
  - ...then 25% on the next $53,300 (since $90,750 - $37,450 = $53,300)
  - ...then 28% on the next $98,550 (since $189,300 - $90,750 = $98,550)
  - ...and finally 33% on $60,700 (since $250,000 - $189,300 = $60,700)
  - So the total federal income tax on $250,000 in this example would be: \((0.10 \times 9225) + (0.15 \times 28225) + (0.25 \times 53300) + (0.28 \times 98550) + (0.33 \times 60700) = 922.50 + 4233.75 + 13325 + 27594 + 20031 = 66,106.25\)

- **Key Point #1:** there is usually a difference between your “last dollar earned” federal tax bracket and your effective federal tax rate
  - In the above example, $250,000 put you in the 33% tax bracket, but...
  - ...your effective tax rate was $66,106.25 out of $250,000 in gross income, or \(66106.25 / 250,000 = 26.44\%\).

- **Key Point #2:** Federal tax rules change all the time. The income “break points” change in most years, and the tax percentages can change as well – e.g. the 39.6% is a new bracket as of 2014.
More on OASDI and Medicare

• **OASDI**: Much more straightforward than federal income tax.
  - In 2015, you pay 6.2% of your gross wages, salary, and tips until you’ve earned $118,500, after which you stop paying the tax for the year.
  - So, the most you will pay as an employee OASDI is \(0.062 \times 118,500 = 7,347\).  
  - Remember, employers must match employee contributions so, if you’re self-employed, you pay 12.4%.
  - Like federal income tax, OASDI tax rules change frequently.

• **Medicare**: More straightforward than OASDI.
  - You pay 1.45% of your gross wages, salaries, and tips. Period.
  - Remember, employers must match employee contributions so, if you’re self-employed, you pay 2.9%.
  - Like federal income tax, Medicare tax rules change frequently.

As of January 2013: 0.9% Medicare Tax on all wages over $200,000 for single filers and $250,000 for families, levied against the employee only; there is no corresponding 0.9% paid by the employer.
“Progressive” vs. “Regressive” vs. “Flat” Taxes

• **Progressive Tax**
  - Effective tax rate increases with income
  - Example: U.S. Federal Income Tax

• **Regressive Tax**
  - Effective tax rate decreases with income
  - Example: OASDI

• **Flat Tax**
  - Effective tax rate does not change with income level
  - Example: Medicare
A Few Words About Tax Deductions

• **When people speak of “tax deductions”...**
  - ...They’re not really talking about dollar-for-dollar reductions in the amount of taxes owed
  - ...They’re talking about reductions to Gross Income, which gives you a lower Adjusted Gross Income, which means you pay taxes on a lower income amount

• **Example:**
  - You’re single, and you earn $100,000 in 2015, but after taking all allowable deductions your adjusted gross income is only $75,000. For the purposes of federal taxes you’d fall from the 28% “last dollar earned” bracket to the 25% bracket and calculate your federal taxes accordingly.

• **Typical deduction “order”**
  - Gross Income → net out OASDI, Medicare, and other taxes paid → net out other allowable deductions = Adjustable Gross Income
  - “Other taxes paid” could include state taxes (i.e. 2014 UT income tax paid in 2015 will be deductible from 2015 gross income), property taxes, car registration, etc.

• **Another word about “other allowable deductions”**
  - For federal income tax purposes in 2015, you are automatically allowed a “standard deduction” of $6,300 ($12,600 if married filing jointly). Alternatively, you could take itemized deductions on all sorts of other allowable things – primary residence mortgage interest, child care, capital losses, etc. If your itemized deduction total is greater than the allowed standard deduction, subtract that total from gross income minus other taxes paid to arrive at your adjusted gross income. If the standard deduction is higher, use that instead.
  - Note: if the standard deduction is taken, remember that this money is never actually spent (as opposed to money for itemized deductions) – it’s just an amount by which the government allows you to reduce the adjustable gross income on which you’ll pay federal and (sometimes) state tax. So, if you’ve taken the standard deduction, when calculating net income you need to add the standard deduction dollars back into your total (since you never actually spent the money).
Just So You Know... Tax Filing Season

• I won’t test you on this page, but...
  – When you start a job, fill out your W-4 as carefully as possible
    • Your W-4 determines how much tax will be withheld from your salary, wages, and tips
    • Withhold too much, and it’s like giving Uncle Sam an interest free loan
    • Withhold too little, and you’ll owe taxes at the end of the year and may be subject to interest and penalties
  – If your earnings are not too high, and not derived from too many different sources – that is, not too complicated – you can use computer software (i.e. TurboTax; cost: about $50) to calculate your taxes, fill out all necessary filing forms, and submit your tax return to the federal and state government agencies
  – If you start earning a ton of money, or if your earnings become very complex, either hire a CPA or become one yourself. The cost is much higher, but it’ll potentially save you a lot of money... and a lot of trouble.
  – Federal and state tax returns (i.e. filing forms) and any tax dollars owed are typically due on April 15th each year. It’s a date you’ll learn to love.
1. True or false?
   • Gross income and wages, salary, and tips may be the same amount.
   • Federal taxes are paid on gross income.
   • OASDI is paid on adjusted gross income.
   • Medicare is paid on salary, wages, and tips.
   • If you have money in a savings account earning interest, that interest may be taxed.

2. Define gross income.

3. Define net income.

4. Define FICA.

5. Write and solve a mathematical formula for the following problem: You earn $100 mowing lawns and you need to pay for an item that costs $50 out of your net income. You live in Utah and are in the 10% federal tax bracket. What have you got left after you pay for the item?

6. Write and solve a mathematical formula for the following problem: You earn $100 mowing lawns and you need to pay for a tax deductible item that costs $50 out of your gross income. You live in Utah and are in the 10% tax bracket. What have you got left after you pay for the item?

   • What’s your gross income?
   • What will you pay in FICA taxes?
   • What deductions are you likely to take?
   • What’s your adjustable gross income?
   • What do expect to pay in federal income tax?
   • What do you expect to pay in UT income taxes?
   • What’s your expected net income?

8. In 2015, you earn $120,000 in wages, salary, and tips, and you earn $5,000 on an interest bearing account. You also earn $25,000 from your favorite sporting equipment company for endorsing their product. In April 2015, you paid $5,000 in UT State income tax for 2014. You’re single with no kids. You own a home and you paid $5,000 in mortgage interest in 2015.
   • What’s your gross income?
   • What will you pay in FICA taxes?
   • What deductions are you likely to take?
   • What’s your adjustable gross income?
   • What do expect to pay in federal income tax?
   • What do you expect to pay in UT income taxes?
   • What’s your expected net income?