Section 4E

Income Taxes

- The complete tax code consists of thousands of pages of detailed regulations.
- The tax laws were greatly simplified by Congress in 1986, but gradually became more complex again.
- An income tax was first levied in 1862 (during the Civil War), but was abandoned a few years later.
- The 16th Amendment to the Constitution, ratified in 1913, gave the federal government full authority to levy an income tax.

- **Gross income** – consists of *all* your income for the year, including wages, tips, profits from a business, interest or dividends from investments, and any other income you receive
- **Adjustments** – untaxed portions of gross income Contributions to IRAs and other tax-deferred savings plans
- **Adjusted gross income (AGI)** – gross income minus adjustments

Filing Status

- **Single** – applies if you are unmarried, divorced, or legally separated
- **Married filing jointly** – applies if you are married AND you and your spouse file a single tax return
- **Married filing separately** – applies if you are married AND you and your spouse file two separate tax returns
- **Head of household** – applies if you are unmarried and are paying more than half the cost of supporting a dependent child or parent

- **Exemptions** – fixed amount per person
  Can claim amount for yourself & each dependent
  $3650 per person in 2009
- **Deductions** – vary from person to person
  Found in Table 4.9 on page 269
  Examples include: home mortgage interest; contributions to charity; taxes paid to other agencies
- **Standard deduction** – set amount which depends on your filing status
- **Itemized deduction** – add up all the individual deductions to which you are entitled
- You should choose whichever is *larger*.

- **Taxable income** – adjusted gross income minus exemptions and deductions
- **Total tax** – amount of tax you owe on your taxable income determined by a tax table or tax rate computation
- **Tax owed (or refund)** – total tax minus amounts already paid through withholdings (through employer) or through paying quarterly estimated taxes (if self-employed)

    If amount paid is larger than tax owed, you receive a refund of the difference

Example 1: Find the gross income, adjusted gross income, and taxable income if Marie earned wages of $28,400, received $95 in interest from a savings account, and was entitled to a personal exemption of $3300 and a standard deduction of $5150.

- Marie's gross income is the sum of all her income (sum of wages and interest):

  gross income = $28,400 + $95 = **$28,495**

- She has no adjustments so her AGI = **$28,495**
- To find her taxable income, we subtract deductions & exemptions:

  taxable income = $28,495 - $3300 - $5150 = **$20,045**

Example 2: Decide whether you should itemize your deductions or take the standard deduction if your deductible expenditures are $3700 for contributions to charity and $760 for state income taxes. Your filing status entitles you to a standard deduction of $5700.

- The total deductible expenditures is

  $3700 + $760 = **$4460**
- If you were to itemize, you can subtract $4460 when finding your taxable income.
- However, if you take the standard deduction, you can subtract $5700.
- You are better off with the **standard deduction**.

Example 3: Compute the gross income, adjusted gross income, and taxable income. Explain how you decided to itemize deductions or use the standard deduction if Emily and Juan are married and filed jointly. Their combined wages were $75,300. They earned $2000 from a rental property they own and $1650 in interest. They claimed four exemptions and contributed $3240 to their tax-deferred retirement plans. Their itemized deductions totaled $9610.

- Gross income is sum of all income:

  gross income = $75,300 + $2000 + $1650 = **$78,950**.
- The adjustments include their contributions to tax-deferred retirement plans which totaled $3240.
- Adjusted gross income is the gross income minus adjustments.

  AGI = $78,950 - $3240 = **$75,710**.
- Taxable income is AGI minus deductions & exemptions.
- Since their itemized deductions totaled $9610 and the standard deduction for married filing jointly is $11,400, they should use the standard deduction.
- They were able to claim four exemptions which total

  4*$3650 = $14,600
- taxable income = $75,710 - $11,400 - $14,600 = **$49, 710**.
- Their taxable income is $49,710.

- **Progressive income tax** – people with higher taxable incomes pay at a higher tax rate

  Assigns different **marginal tax rates** to different income ranges (or margins)

2009 Margin Tax Rates, Standard Deductions, and Exemptions

Tax Rate	Single	Married Filing Jointly	Married Filing Separately	Head of Household
10%	up to $8350	up to $16,700	up to $8350	up to $11,950
15%	up to $33,950	up to $67,900	up to $33,950	up to $45,500
25%	up to $82,250	up to $137,050	up to $68,525	up to $117,450
28%	up to $171,550	up to $208,850	up to $104,425	up to $190,200
33%	up to $372,950	up to $372,950	up to $186,475	up to $372,950
35%	above $372,950	above $372,950	above $186,475	above $372,950
Standard deduction	$5700	$11,400	$5700	$8350
Exemption (per person)	$3650	$3650	$3650	$3650

Example 4: Use the marginal tax rates to compute the tax owed if Sarah and Marco are married filing jointly with a taxable income of $87,500.

- We calculate the taxes using Table 4.9 (page 269).
- They will be in the 25% tax bracket because their taxable income is above $67,900 but below $137,050.
- They will owe 10% on the first $16,700 of their taxable income, 15% on taxable income above $16,700 but below $67,900 and 25% on taxable income above $67,900 but below $137,050.

(10%*$16,700) + (15%*[$67,900 - $16,700]) + (25%*[$87,500 – $67,900])

= $1670 + $7680 + $4900

= **$14, 250**

Credits vs. Deductions

- Tax credits and tax deductions are very different.
- A tax credit reduces the *total tax bill* by the credit amount.
- A tax deduction reduces the *taxable income* by that amount

    Reduces the tax bill by the tax percent of the amount.

- Which is more valuable?

    Tax credit

- The most valuable deduction is a **mortgage interest tax deduction** – allows you to deduct the interest you pay on a home mortgage

Example 5: Vanessa is in the 35% tax bracket and itemizes her deductions. How much will her tax bill be reduced if she qualifies for a $500 tax credit?

- Since a tax credit reduces the *total tax bill*, her tax bill will be reduced by the full credit amount.
- Her tax bill will be reduced by **$500.**

Example 6: Shiro is in the 15% tax bracket and itemizes his deductions. How much money will his tax bill be reduced by if he makes a $1000 contribution to charity?

- Since Shiro itemizes his deductions and he is in the 15% tax bracket, he will save 15% of the $1000 contribution.
- His tax bill will be reduced by:

  0.15 * $1000

  = **$150**

FICA (Federal Insurance Contribution Act) taxes

- Used to pay Social Security and Medicare benefits, primarily to people who are retired
- Applies only to income from wages and self-employment
- Does not apply to income from interest, dividends, or profits from sales of stock.
- 2009 FICA rates (*not self-employed*)
  - 7.65% on first $106,800 of income from wages
  - 1.45% on any income from wages in excess of $106,800
  - Employer is required to match amounts.
- Self-employed people must pay BOTH parts (double above)

Example 7: Carla is single and took the standard deduction. She earned $34,500 in salary and made $3000 in tax-deferred contributions to a retirement fund. Calculate the FICA taxes and income taxes to obtain a total tax bill. Then find the overall tax rate on the gross income, including both FICA and income taxes.

- Carla's entire income of $34,500 is subject to the 7.65% FICA tax:
- FICA tax = 0.0765 * $34,500

  = **$2639.25**
- Her AGI = $34,500 - $3000 = $31,500
- Taxable income = $31,500 - $5700 - $3650 = $22,150.
- Income tax = (10%*$8350) + (15%*[$22,150 - $8350])

  = $835 + $2070 = $2,905
- Thus, her total tax is $2639.25 + $2905 = **$5544.25**
- Her overall tax rate, including both FICA and income taxes is:

$$\frac{\text{total tax}}{\text{gross income}} = \frac{\$5544.25}{\$34{,}500}$$

= 0.1607028986

= 16.07028986%

Capital Gains

- **Short-term capital gains** – profits on items sold within 12 months of their purchase
- **Long-term capital gains** – profits on items held for more than 12 months before being sold
- Some capital gains, like the sale of a home, are tax exempt.
- Most long-term capital gains and most dividends are taxed at lower rates than other income.
- As of 2009, the rates were
  - 0% for income in the 10% and 15% tax brackets.
  - 15% for income in all higher tax brackets.