Income taxes

How not to dread April 15th

Legally minimize your taxes

Ins and outs of the 1040 form

Can I declare Smithers as a dependent?

Welcome to the real world of income taxes

- Once you are no longer a dependent of your parents, you will need to pay income taxes to the Internal Revenue Service (IRS) – which is a big drag
- But there are ways to **legally** minimize the taxes you pay
- Having a basic understanding of income tax law is one of the best things you can do for yourself financially

Do you need to file?

- If you earn over $8,200 for the year, you need to file
- If you had federal income taxes withheld by your employer and you want them refunded, you need to file

How to get started

- Form 1040 and the accompanying instructions manual (about 90 pages)
  - Available at most post offices and public libraries
  - Once you file a tax return, the IRS will mail you the forms for the following year
- Form 1040 is the main form – all other forms and schedules flow in and out of the 1040

How taxes are calculated

Gross Income
- <u>Adjustments</u>
Adjusted gross income (AGI)
- <u>Deductions and exemptions</u>
Taxable income
<u>x Tax rate</u>
Total tax
- Credits
- <u>Withholding</u>
+ Tax you owe
- Taxes refund

Gross income

- Wages, salaries, tips, stock dividends, interest, alimony, golf bets, **net short-term** capital gains
  - Net capital gains = capital gains – capital losses
  - Short-term capital gain = profit made on selling an asset held for 1 year or less
  - Short-term capital loss = loss sustained on selling an asset held for 1 year or less

Capital gains and losses

- Need to include capital gains and losses on sale of assets such as stocks and bonds, mutual funds, land, cars, art, homes, collectibles
- Capital gain = price you sold it for – price you bought it for
- You buy a Peyton Manning rookie card on eBay for $200 and 6 months later sell it for $500, you need to declare a $300 capital gain
- If you sell it after 6 months for only $50, you can claim a $150 capital loss but capital losses are NOT deductible – used only to offset capital gains

Capital losses are good for something

- Only pay tax on the **net** capital gains
- But what if you don't have any capital gains to offset; then what?
- Up to $3,000/year of capital losses can be carried forward to offset capital gains in later years
- Might unload some "dogs" at year's end to offset capital gains you've already taken

The long and the short of it

- Selling an asset after more than one year results in a long-term capital gain (or loss)
- Long-term capital gains are taxed at a lower rate than your regular tax rate
- The long-term capital gains rate is capped at 20% (but if your marginal rate is low, say, 15%, capital gains rate is only 10%)

What a difference a year makes

- Assume you're in the 35% **marginal tax bracket** (any new income is taxed at 35%)
- The 1,000 shares of Microsoft that you bought 11.5 months ago can be sold for a $20,000 gain. Sell now and you pay taxes of .35x20,000=$7,000 and net only $13,000.
- Wait 2 more weeks and pay taxes of only .20x20,000=$4,000 and net $16,000

Shoulda waited

- You sell that '66 Corvette you bought at the Barrett-Jackson auction 10 months ago for a $40,000 gain
- But Uncle Sam takes $14,000 (.35x40,000) leaving you with a $26,000 gain
- Had you waited 2 months, taxes drop to $8,000 and your gain jumps to $32,000

Back to 1040

Gross Income
- Adjustments

Adjusted gross income (AGI)
- Deductions and exemptions

Taxable income
x Tax rate
Total tax
- Credits
- Withholding

+ Tax you owe
- Taxes refund

Adjustments

- Adjustments are the same as deductions but are allowed whether you take the standard deduction (which most all of you will do for a few years) or itemize your deductions
- Moving expenses, paying your own tuition, IRA contributions, student loan interest
- Adjustments reduce gross income (and, therefore, your lower taxes)

Deductions and exemptions

Gross Income
- Adjustments

Adjusted gross income (AGI)
- Deductions and exemptions

Taxable income
x Tax rate
Total tax
- Credits
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+ Tax you owe
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Standard deduction

- Two options: **standard** or **itemized** (choose the bigger)
- Standard deduction is currently about $5,000 and usually increases a little each year for inflation
  - Use if you don't have enough deductions to itemize
  - Based on your filing status (married, single, 65+, blind)
- **Until you buy a house, take standard deduction**
  - Making a charitable contribution to Lehigh is not tax-deductible if you take the standard deduction

Itemizing your deductions

- You can itemize your deductions and deduct your actual expenses (capped for some high incomes)
  - Mortgage interest and property taxes (usually greater than $5,000) (need to own a home to itemize)
  - Other taxes (state and city income taxes)
  - Charitable contributions (can give to Alma Mater)
  - Some job-related expenses (but only over 2% of AGI)
  - **Unreimbursed** medical and dental expenses (over 7.5% of AGI)
    - 7.5% of $50,000 is $3,750 – usually of no help
  - No longer interest on car loans or sales tax

Exemptions

- For each dependent, you get one exemption and get to deduct about $3,200 (rises slightly each year with inflation)
  - Yourself, your spouse (filing jointly), each child (cute babies, unpleasant teenagers)
  - So I get to subtract 5 x 3,200 = $16,000
- Exemptions are separate from deductions (both should be taken)

Tax rates

- Progressive tax system - as your income rises, your **marginal tax rate** also rises
  - Marginal tax rate is the rate on your **next** dollar
    - "Maybe the single most important concept in personal finance"
  - You make your decisions at the margin, so you need to know your marginal tax rate
    - A raise, any investment income, income from a second job are all taxed at the marginal rate
      - Your average tax rate is IRRELEVANT

Making decisions at the margin

- Let's say you're in the 30% marginal tax bracket
  - You earn a $1,000 playing Santa at the mall
    - You keep only $700 – Uncle Sam gets $300
  - You make a $100 donation to charity
    - You "shield" $100 of income, thereby saving $30 in lower taxes. Essentially you give $70 to the charity and the government gives the other $30

Marginal tax rates (in bold)

Income	Tax	On the amount over
$0 – 7,300	**10%**	$0
$7,300 - 29,700	730 + **15%**	7,300
$29,700 – 71,950	4,090 + **25%**	29,700
$71,950 – 150,150	14,652 + **28%**	71,950
$150,150 – 326,450	36,548 + **33%**	150,150
Over $326,450	94,727 + **35%**	326,450

Progressive example

- You earn $35,000
- First 7,300 is taxed at **10%** = 730
- Next 22,400 is taxed at **15%** = 3,360
- Next 5,300 is taxed at **25%** = 1,325
- Total tax is 730 + 3,360 + 1,325 = 5,415
- Or 4,090 + **.25** (35,000 – 29,700) = 5,415
- Average tax rate is 5,415/35,000 = 15.5%

You make another $100?

- It is NOT taxed at the average rate of 15.5%; it is taxed at the marginal rate of 25%. You pay $25 in taxes and keep $75
- Your true or effective marginal rate is actually higher than the federal rate
  - Social security and medicare tax of 7.65%
  - State tax (PA 3.07%) and city tax (Bethlehem 1%)
- Really pay 25 + 7.65 + 3.07 + 1 = 36.72%
- Keep only 1 - .3672 = 63.28%

Marginal tax rate

- You earn $7,300 => your tax is $730
- You earn $7,310 => your tax is $731.50
- The marginal rate of 15% is applied only to the last $10 and not to the entire $7,310.
- You always have the incentive to earn more but the incentive declines as your income rises

Credits and withholding

Gross income
- Adjustments

Adjusted gross income (AGI)
- Deductions and exemptions

Taxable income
x Tax rate

Total tax
- Credits
- Withholding

+ Tax you owe
- Taxes refund

No partial credit

- Not nearly as common as deductions
  - Paying for your own education
  - Being disabled
  - Raising kids on a very low income
  - Check IRS publication
- Better than deductions since credits are subtracted directly from taxes – with a marginal rate of 30%:
  - \$1,000 deduction lowers tax bill by only \$300
  - \$1,000 credit lowers it by the full \$1,000

Withholding

- To help ensure you won't have a heart attack on April 15th, your employer keeps some of your pay and sends it to the IRS as prepayment of your taxes
- So by April 15th, you've already paid most of the taxes you owe
- Amount withheld depends on your income and number of **declared** deductions
- Fill out a W-4 (Employee Withholding Allowance Certificate) the first day on the job

W–4 (no spouse, no kids, no you)

- OK to declare fewer deductions than you have (even 0) and to request additional funds be withheld from each paycheck
- Is this rational? Most tax advisors say you are letting the government use your money interest free
- 80% of all tax-payers have too much withheld
- You could have invested it – but you can't spend it if you don't have it
- It is **forced savings** (but it earns no interest) and you avoid cardiac arrest at tax time – know your weaknesses

W-2 Wage and tax statement

- Mailed out by employers in January
- Shows your taxable income and taxes withheld
  - Federal income taxes withheld
  - State and local income taxes withheld
  - Social security taxes withheld
- Difference between total tax and federal withholding is the amount of your refund or what you owe IRS

Tis better to receive

- Tax refunds are received about 6 weeks after you file your return
- If you owe taxes and don't have the money:
  - IRS allows you to pay by credit card but charges a 2.5% "convenience fee" on the amount
  - Possible to set up an installment plan with IRS

Do your own taxes

- Hire a CPA or other tax professional?
  - Not necessary in the early years
    - After graduation, your financial life probably won't be very complicated
    - Costly
    - You will learn the tax code a lot better if you do your own taxes– help make better decisions
- Buy *Turbo Tax* or other PC tax programs?
  - See above

Remember Al

- Al Capone probably killed a dozen people
- He was sent to Alcatraz prison for tax-evasion

Tax evasion is illegal

- Do not invent deductions or fail to report income
  - You will have to pay the taxes and a big penalty
  - You will be audited for many years to come
- If you make an honest mistake, IRS will usually let you refile correctly with little or no penalty

Tax avoidance is very legal

- ❑Use your knowledge of the tax code to take advantage of all deductions and credits that you are legally entitled to
- ❑Three common strategies
  - Tax-sheltered returns on investments
  - Reduce your **taxable** income via your employer
  - Tax-sheltered investments

Strategy
Tax-sheltered returns on investments

- ❑Invest with pretax income
  - Invest in an IRA with pretax dollars
    - ❑Deposit $2,000 in an IRA (assume 30% tax rate)
    - ❑You would have paid $600 in taxes anyway
      - Really as though you deposit $1,400 and the gov't $600
      - 600/1400 = 43% rate of return immediately
- ❑Defer taxes on investment income
  - Some investments allow money to accumulate tax-free and only pay taxes when it is withdrawn
    - ❑More money remains in the investment to accumulate
    - ❑Often the tax rate will be lower at withdrawal (at retirement?)
    - ❑Next table assumes a single $2,000 deposit – very dramatic

Investment vs. tax-deferred IRA

Time	Regular (tax=30%)	Tax-deferred IRA
0	Single 2000 deposit	Single 2000 deposit
1	2000+.70(.10)(2000) = 2140	2000 + .10(2000) = 2200
2	2290	2420
10	3934	5180
40	29,950	90,520
	Grows at 7%	Grows at 10%

Strategy
Employer reduced **taxable** income

- All three programs use pretax dollars to pay for the benefit – IRS subsidizes your participation in the benefit
- You can pay **health-care plan premiums** from pretax salary (assume $100/month or $1,200/year)
  - 1,200x(.30[fed marginal rate]+.062[FICA]+.0145[Medicare]) = $452 saved in lower taxes
  - You really only pay $748 and gov't pays $452

Employer reduced taxable income

- Flexible spending arrangement (aka expense reimbursement account)
  - You can make pretax contributions to a separate medical ($5,000 max) and child-care ($3,000 max) accounts and funds are **not** reported to the IRS as income
  - Salary is reduced and put into separate accounts
  - Over the year as you pay for non-reimbursed medical expenses (co-pays, deductibles, portion not covered by insurance), you are reimbursed from the special account up to $5,000 max

What if your child has bad teeth?

- Same for day-care expenses up to $3,000
  - You essentially pay your day-care provider with pre-tax dollars
  - In the 30% marginal tax bracket, a $3,000 day-care expense really costs only $2,100 because you save $900 in lower taxes (Uncle Sam pays $900 toward your day-care)
- **But there is a drawback**
  - **Use-it-or-lose-it; any unspent money goes back to your employer, so predict your needs accurately**
  - Get your teeth fixed and new glasses in December

Defined contribution plan

- Make contributions to your employer sponsored retirement plan (401k)
  - Your contribution is not on your W2 as taxable income and you employer matches (full or partial) your contribution up to a max
- **Let's repeat that - your share is pretax and your employer matches your share – this is huge**

Looks good to me

- Assume 30% tax rate, $60,000 income, 10% return, 6% contribution, 50% match
- You contribute .06 x 60,000 = 3,600
  - Would have paid .30x3,600=$1,080 in taxes
  - You really put in $2,520 and the gov't $1,080
  - Employer matches .50 x 3,600=$1,800
- Do this every year

Move over Donald Trump

Year	You	Uncle Sam	Employer	Value
1	2,520	1,080	1,800	5,400
2	2,520	1,080	1,800	11,340
10	2,520	1,080	1,800	86,062
30	2,520	1,080	1,800	888,267
40	2,520	1,080	1,800	**2,390,000**

Let's check that wow

- Your initial $2,520 is worth $5,400
- Rate of return is (5400-2520)/2520 = 114%
- $FV_n = PMT(FVIF_a - i\% - n)$
- $FV_{40} = 5{,}400(FVIF_a\text{-}10\%\text{-}40)$
  - 5400=>PMT 10=> i 40=> n FV = 2,390,000
- But can you come up with the $2,520 each year?

Strategy
Tax-sheltered investments

- Roth IRA: Contribution of up to $5,000 per year grows free of income taxes and withdrawals are tax-free
- IRA: Contribution of up to $5,000 per year is an adjustment to income but taxes must be paid at withdrawal

The Boss

- Supposedly Bruce Springsteen keeps his money in munies
  - Bonds issued by city and state governments to finance public projects
- Interest from munies (and from mutual funds that invest in munies) is tax-free
  - Rates appear to be lower than on regular bonds but are better for investors in high tax-brackets

Summary

- Understand the basics of tax law
  - Marginal tax rate
  - Itemized vs. standard deduction
  - Don't be a wimp - do your own taxes
- Withhold a lot from your paycheck unless you are very disciplined
- Tax evasion is stupid
- Tax avoidance is smart