Timber Income Tax

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Timber Income Tax

- Instructor and Author (See Figure 1.1)
- Educational materials
- Course purpose is educational, rather than legal or accounting advice – tax decisions should be based on specific facts in your situation
- Introductions -- please give name, firm, location, and one unrelated “fact” about yourself
Taxes – Some of Timberland Owner’s Greatest Expenses

• Federal and state income taxes
• Federal estate and gift taxes
• Property and severance taxes
• Sales tax
• Excise taxes
Overview of the Federal Income Tax

- It is a tax on “net” gain, or profit
- Investments in the business or investments are offset against gross income in computing gain
- Expenses required to earn a profit are deducted in computing gain
- Capital gains taxed @ 5%, 15% and 20%
- Ordinary income is taxed @ a max of 39.6%
- Tax thresholds make tax planning imperative
Federal Income Tax Process

Chapter 1
Federal Income Tax Process
Chapter 1

• Authorized by 16th amendment to the U.S. Constitution, began with Tariff Act of 1913; all revenue acts comprise the IRC

• Revenue bills originate in House; Ways and Means Committee which does most of work

• Then bills go to Senate; Finance Committee, after House completes its work
1986 Tax Reform Act and After

- Due to massive changes in the Internal Revenue Code (IRC) it was recodified as the IRC of 1986.
- Health Care and Ed. Reconciliation Act – P.L. 111-152 has 2 taxes impacting forestry.
Taxpayer Relief Act of 1997

- Contained $152 billion in tax cuts before 2002
- Most benefits attributable to:
  - Child credit
  - Expanded IRAs
  - Educational tax relief
  - Estate tax relief
  - Reduction in long-term capital gains rates
- Scope paled in comparison recent bailouts
IRS Restructuring and Reform Act of 1998

• Focused on restructuring the IRS
• Taxpayers given new rights
• It contained technical corrections to 1997 Act
• Confusion caused by modifications to holding period for non-corporate long-term capital gains
  – One year for 10 and 20 percent tax rates
  – Longer periods for the 8 and 18 percent rates
Economic Growth and Tax Reconciliation Act of 2001

- Signed into law on June 7, 2001
- Numerous changes in Federal income tax, but few directly related to timber operations
- A 10% tax bracket was added
- Reductions in the other five ordinary brackets were to be gradually phased in through 2008 when the maximum bracket declines to 35%
Ongoing Tax Acts

- 2003 Tax Act accelerated changes made by 2001 Act
- Major hurricane relief legislation in 2004 and 2005
- Economic Stimulus Act of 2008 (ESA) PL 110-185
- Health Care and Economic Reconciliation Act of 2010 – PL 111-152 imposes additional hospital insurance tax
- Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 (P.L. 111-312)
Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 (P.L. 111-312)

- Extended other provisions that expired at the end of 2009, but it carries a price tag of $850 MMM
- Bonus depreciation allowance extended to 100%
- Sec. 179 expensing increased to $125 M in 2012 with the investment limit extended to $500,000
American Taxpayer Relief Act of 2012

- Preserves existing lower rates on capital gains and dividends for low- and middle-income individuals, but increases rates for higher-income individuals
- Locks in 40% estate and gift tax rates with inflation-adjusted $5 million exemption
- Includes permanent AMT relief
- Extends bonus depreciation and §179 limits
Income Tax: Administration

• IRS is responsible for implementation of IRC – it both interprets and enforces the statutes

• IRS Regulations, both statutory and interpretive, are rules prescribed by the Service which have the force of law

• Revenue Rulings cover specific fact situations, but have less force than regulations
Administration Continued

- Revenue procedures -- published to announce new or changed IRS practices
- Private letter ruling -- official IRS reply to taxpayer inquiry concerning tax; may not be used as precedent by others; useful to understand IRS position on issues
- Technical Advice memorandum -- official after-the-fact ruling by IRS; may not be used as precedent by others
- IRS also issues General Counsel Memorandums, issue papers and field advices
The Courts

- If administrative appeals to IRS are exhausted, a taxpayer has option of going to court.
- But, IRS is not bound by case law, except in the case of U.S. Supreme Court decisions.
- When the IRS loses several decisions on a point, it may acquiesce, but not always.
- Taxpayers may choose among three courts of original jurisdiction.
Courts Available to Taxpayers

- Tax Court -- tax deficiency does not have to be paid before going to court
- Court of Claims – landowners must pay tax deficiency before court and sue for refund
- Federal District Court – landowner pays deficiency and sues for refund; landowner may have a jury
- Appeals from all three courts go to federal appeals courts; then to U.S. Supreme Court
Useful Tax Publications


Other Resources

- National Timber Tax website @ www.timbertax.org – developed at Purdue University with U.S. Forest Service funds, has been transferred to UGA
- The IRS Audit Manual
- Hardwood Timber Industry Guide
- 2013 U.S. Master Tax Guide
Some Timber Tax Websites

- USFS – www.fs.fed.us/spf/coop (Cooperative Forestry, Washington, DC) and www.r8web.com/spf/coop/taxation (Cooperative Forestry, Atlanta, GA)
- IRS -- www.irs.gov
- UGA -- www.uga.edu/soforext
Forest Activity Schedule
Form T (Timber) – Rev. Dec. 2013

- Form T -- contains 5 Parts (in Appendix A)
- Part I – Acquisitions
- Part II – Timber depletion
- Part III – Profit or loss from land and timber sales
- Part IV – Reforestation and TSI
- Part V – Land ownership
Forest Production and Tax Planning

- Effective tax accounting is essential for successful forestry investment returns
- Keep in context of owner goals:
  - Financial, wildlife, aesthetics, recreation, sentimental
- Economic returns are driven by:
  -- timber growth (inherent productivity)
  -- markets (stumpage prices)
  -- cost of capital (interest rates)
Timber Productivity

- Yields depend on inherent site quality
- Timber volumes are predictable for any species, site index, stocking, and age
- Figure 1.3 shows yields for various sites of native, unimproved loblolly pine in the south
- Outputs are affected by investment in cultural practices – genetics, thinning, fertilizer and vegetative control
Height/Age for Loblolly Pine

Height Growth Curves for all the Clones

Clonal
Timber Markets

Prices are Affected by Supply and Demand

- Stumpage prices shown as averages for South in $ per ton from 4Q76 to 3Q10 -- Figure 1.4 – alternate (Source: Timber Mart-South)
- Note differentials by product class
- Short run prices are affected by weather, inventories, public policies, competition
- Long run prices are affected by investment, technology, public policies, competition
South-wide Stumpage Prices
4th Quarter 1976 – 3rd Quarter 2010

Source: Timber Mart-South
Timber Value Growth

- Financial returns based on physical growth, in-growth and quality measures
- Physical growth as illustrated in Figure 1.3; it is the same as a constant price per unit (ton)
- In-growth due to product differentiation with size – e.g., pulp to chip-n-saw to sawtimber
- Value appreciation is due to increasing size, quality, specification, volume, operability – see Effects of Thinning on Value Growth – Fig. 1.5
Cost of Capital

• Generally, land owner’s alternative rate of return is a weighted cost of equity and debt (COC)
• Opportunity costs include holding land, value of growing stock, and annual management costs
• A simple capital decision rule: hold growing stock as long as annual percentage changes equal or exceed landowner’s cost of capital or alternative rate (does not account for thinning $)
Financial Decision Rules

- Net present value (NPV) – gives residual land value after discounting cost and revenues to present at COC for one investment cycle (rotation) – e.g., NPV @ 6% real, Fig. 1.7
- Land expectation value (LEV) – gives NPV for perpetual rotations of timber (not shown)
- Internal rate of return (IRR) – rate of return at which the discounted costs and revenue are equal in percent -- Fig. 1.8
Real and Potential Values

- **Liquidation curve** – current merchantable volume x timber price at any point -- real terms
- **Cost curve** – establishment costs + annual costs are compounded to any year -- potential terms
- **Income curve** – expected harvest revenues - annual costs discounted to any year -- potential
- **Hybrid** – solve for IRR and use as discount rate -- cost and income curves are the same
Timing of Harvest Decisions

- Optimum harvest values occur at tangency of liquidation and cost curves
  - (i.e., marginal cost = marginal revenue)
- A decision window occurs at + or - 3 to 5 years of an optimum rotation
- Permits a focus on various goals – marketing, need for funds, personal objectives, value accumulation with minimum potential loss