

Timber!

By Calvin H. Johnson

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With budget deficits of \$1.4 trillion, or 9.9 percent of GDP, we are facing a revenue crisis of epic proportions. Our tax accounting for timber produces an antitax subsidy when it needs to produce government revenue. This proposal would capitalize the costs of reforestation and annual forest maintenance, allowing them to be deducted only against recognized income from the harvest of timber. The proposal would end the treatment of timber as a capital asset because deferral of tax is a rationale for increasing the tax rate rather than reducing it. The proposal would also impute the rental value of the land and capitalize it.

The proposal is made as a part of the Shelf Project, a collaboration among tax professionals to develop and perfect proposals to help Congress when it is ready to raise revenue. Shelf Project proposals are intended to raise revenue without raising rates because the best systems have the lowest feasible tax rates and taxes that are unavoidable. Shelf Project proposals defend the tax base and improve the rationality and efficiency of the tax system. A longer description of the Shelf Project is found at "The Shelf Project: Revenue-Raising Proposals That Defend the Tax Base," *Tax Notes*, Dec. 10, 2007, p. 1077, *Doc 2007-22632*, or *2007 TNT 238-37*.

Shelf Project proposals follow the format of a congressional tax committee report in explaining current law, what is wrong with it, and how to fix it.

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Under current law the combination of tax preferences for timber means that timber investments are subject to less than zero tax. Tax accounting should describe the economic income from timber. This proposal would treat timber as an ordinary asset, require the capitalization of all costs incurred before harvest, and allow the capitalized costs to be recovered only under cost depletion. It would also tax and capitalize the rental value of timber land.

A. Current Law

Timber is a high-yield, long-term investment that is subject to a negative tax rate under current law. The primary benefits of investment in timber are deferral of tax until the timber is harvested, capital gains rates (now 15 percent) for profit from cutting or selling timber, seven-year amortization for reforestation costs, and immediate deduction of annual silviculture costs.

Take a typical timber investment in loblolly pine. A hypothetical taxpayer owns 1,000 acres and pays \$70 an acre or \$70,000 to reforest the land, incurring \$5 an acre a year on maintenance, cutting out brush and overcrowding, fertilizing, insurance, disease, and fire control and the like. Harvest occurs 50 years after reforestation. The investment generates an 11 percent per year internal rate of return (IRR) before tax. The pretax cash flows can be found on Table 1 on the following page.¹ The final \$21,258,000 figure in Table 1 is a derived figure as the profit from the cutting necessary to yield an 11 percent annual return over the 50 years.

The taxpayer in Table 1 is entitled to the following tax benefits, which together drop the effective tax rate on his investment from the 35 percent nominal statutory rate to a negative 5.9 percent rate:

1. Deferral. The most important benefit of investing in timber is that it is not taxed as its value grows. That alone drops the IRR-reducing tax rate from 35 percent to 3.2 percent.

2. Capital gain. The gain from the sale of timber is taxed at the capital gains rate, which is 15 percent for an individual.² A taxpayer may also elect, under section 631(a), to treat the cutting of timber as if it were a sale of the timber for its value at the time of the cutting. The election means that the value of the growth of the timber will qualify as capital gain, even if the taxpayer adds value after cutting by turning logs into boards, pulp, two-by-fours, or wood products, and sells timber or wood products in the ordinary course of a trade or business. Before 1943, a landowner could be taxed at capital gains rates by selling timber in one lump sum to a cutter, but all the gain would be ordinary if the logs were processed into wood products after cutting or the landowner sold to many customers in the ordinary

¹The assumptions of \$70 per acre for reforestation, \$5 per acre maintenance, 50 years to earliest cutting, and 11 percent pretax return are from Rick A. Hamilton, "Reforestation as an Investment: Does It Pay?" N.C. Cooperative Extension Service 1995, available at <http://www.ces.ncsu.edu/forestry/pdf/WON/won08.pdf>.

²Sections 631(a) and (b) and 1231(b)(2).

Year	0	1	2	3	4 . . .	50 (Harvest)
1. Pretax cash flows, harvest value set up to give 11 percent IRR	(\$70)	(\$5)	(\$5)	(\$5)	(\$5) . . .	\$21,258

course of business.³ The section 631(a) election, as adopted in 1943, allows landowners to preserve the capital gain rates for the value of the natural growth of the timber, while paying ordinary income tax on the value added by processing logs or selling to many customers.⁴ Corporations generally receive no rate cut for capital gain, but in a legislative “surprise” for tax years ending after May 22, 2008, and beginning before May 22, 2009, a 15 percent tax rate on their section 631 timber gain will be available for at least a year.⁵ For calendar year taxpayers, the 15 percent corporate rate applies only for 2009, unless Congress extends it.

Advocates of capital gain treatment for the growth of timber say the provision is required as a kind of rate averaging mechanism. Gains accrue by growth over a period of 50 years or more and are bunched under a realization system into a single year when the timber is cut or sold.⁶

3. Reforestation. Before 1980, reforestation expenses were treated as capital expenditures that produce basis that is recovered as the timber is cut. Under cost depletion allowed for the timber, the total costs of planting or acquiring timber are allocated among marketable logs and subtracted from the sales proceeds as each log is sold or treated as sold in 50 years.

In 2004, however, Congress amended section 194 of the code to allow expensing for reforestation expense of \$10,000 per taxpayer per separate property.⁷ The \$10,000 limitation encourages joint ownership of timber property by unrelated individuals, so that many \$10,000 amounts may be deducted every year. The added \$10,000 for each timber property would mean, moreover, that a taxpayer with 1,000 properties would expense \$10,000 x 1,000 or \$10 million of reforestation expenses per year. After the

2004 amendments to section 194, reforestation expenses exceeding the \$10,000 limitations are amortized over 7 years.⁸

4. Annual silviculture. The annual costs of maintaining a timber stand, once established, are treated as ordinary deductions when incurred. As stated by Rev. Rul. 2004-62, 2004-1 C.B. 1072, *Doc 2004-11619, 2004 TNT 107-8*, for example:

[Silviculture] costs include amounts incurred for labor and materials for fire, disease, insect, and brush control. . . . These costs are incurred for the management, maintenance, and protection of the timber stand. These costs are not incurred to materially add value to the timber stand, substantially prolong its useful life, or adapt the timber stand to a new or different use. Accordingly, these costs are not required to be capitalized under section 263.

Like fire, disease, insect, and brush control, post-establishment fertilization promotes healthy development and maximizes timber volume and is performed for the management, maintenance, and protection of the timber stand. There are no significant differences between post-establishment fertilization and the types of post-establishment silvicultural practices, such as brush control, that have previously been held to be ordinary and necessary business expenses deductible under section 162. Therefore, X's costs for post-establishment fertilization are deductible as ordinary and necessary business expenses under section 162.

5. Impact on internal rate of return. With deferral of tax until harvest, expensing of reforestation and annual costs, and a 15 percent tax on harvest, the 11 percent assumed pretax return becomes 11.64 percent. That means a tax system intended to generate revenue for the government gave up revenue and increased the return by 0.4 percent/11 percent or 5.9 percent of the pretax return as an antitax or negative tax.

Table 2, on the following page, assumes that the expensing of reforestation costs is available for all \$70,000 because the property is jointly owned by seven non-related taxpayers. Tax losses are of use only if mated with taxable income, and Table 2 assumes the taxpayer has income in a 35 percent bracket that the losses will shelter from tax. Years 4-49, omitted in Table 2, are identical to years 1-3 except for present value. The finding that the present value of all the posttax cash flow sums to zero at 11.64 percent is proof that 11.64 percent is the post-IRR from the investment after tax.

Table 2 assumes the full \$70,000 reforestation expense can be fit under \$10,000 per property per taxpayer

³Section 1221(a)(1) provides that inventory and property held for sale to customers in the ordinary course of a trade or business are not capital assets.

⁴Congress intended to provide growers that cut their own timber and have many sales to customers with the same capital gain treatment as is accorded to those who sell their timber outright. S. Rep. No. 627, 78th Cong., 1st Sess. 25 (1943), reprinted in 1944 C.B. 973, 993.

⁵Section 1201(b)(1), as added by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246), section 15311(a) and (d). See Robert Willens, “Farm Bill Contains Surprise in Reduction of Taxes on Timber,” DTR, June 10, 2008.

⁶U.S. Treasury, Tax Reform Studies, 91st Cong., 1st Sess. 435-438 (Feb. 1969).

⁷Section 194(b) as amended by American Jobs Creation Act of 2004, P.L. 108-357, section 322(a). Before amendment, section 194 allowed seven-year amortization of reforestation expenses within a \$10,000 per taxpayer and cost depletion as to the excess. An Act to Amend the Federal Boat Safety Act of 1971 to Promote Recreational Boating Safety, P.L. 96-451, section 301(a) (1980).

⁸Section 194(a)

Year	0	1	2	3 . . .	50 (Harvest)
1. Pretax cash flows, harvest value set up to give 11 percent IRR	(\$70)	(\$5)	(\$5)	(\$5)	\$21,258
2. Tax savings from 35 percent tax on annual costs	\$24.50	\$1.75	\$1.75	\$1.75	
3. Capital gains tax on harvest at 15 percent					(\$3,189)
4. After-tax cash flow (row 1 +/- rows 2-4)	(\$45.50)	(\$3.25)	(\$3.25)	(\$3.25) . . .	\$18,070
5. Present value at found 11.64 percent to sum to zero	(\$45.50)	(\$2.91)	(\$2.61)	(\$2.34) . . .	\$73.28

limitations, but the issue is not very important. Under section 194(a) of the code, expenditures in excess of the \$10,000 limitations are amortized over seven years. A spreadsheet (not shown here) with the same assumptions as tables 1 and 2, except giving seven-year amortization of reforestation expenses, would show that the post-tax IRR from the investment is 11.46 percent, up from 11 percent before tax, which represents a negative tax rate of 4.5 percent of income. Seven-year amortization reduces the negative tax rate from timber, from 5.9 percent to 4.5 percent under the given facts, but does not cure it.

6. Passive activity limits. Section 469 of the code was enacted in the Tax Reform Act of 1986 to control tax shelters that produced negative or anti-tax. Section 469 prevents individuals from deducting losses from “passive activities” until the taxpayer has income from this or unrelated passive activities to use the deductions against, or until the investment is abandoned. An activity is not a passive activity in any year, if the taxpayer spends 500 hours on timber, which is about a quarter of a full time year of work.⁹

If the section 469 remedy applied to all of the reforestation and maintenance costs, the costs would be deferred until the cutting of the timber in 50 years and used only against the capital gains upon cutting the timber. Deferral of all costs to the 50-year point would prevent a negative tax rate on the timber investment, but it still allows a very modest IRR-reducing effective tax that is close to zero and much less than the 35 percent nominal statutory tax. Assuming full deferral of all costs because of section 469, a spreadsheet analysis (not shown) for the assumed facts underlying tables 1 and 2, would show that tax reduced the IRR from investment from 11 percent pretax down to 10.62 percent post tax, which represents a modest 3.5 percent IRR-reducing effective tax rate.

Some taxpayers will be able to use the losses from the timber investment in some years but not others. Thus if a taxpayer “materially participates” in timber activities for some years but not others or has outside passive activity income to shelter in some years but not others, some but not all of the reforestation and silviculture expenses of

the timber investment would be deferred and the final impact would be an effective tax rate somewhere between the negative 5.6 percent tax (with all expenses allowed as paid) and the positive 3.5 percent tax with full 50-year deferral of all expenses. Expenses useable early in the investment have more impact on the effective tax rate than expenses in the same amount that are used only later in the investment. Section 469 will thus sometimes ameliorate or eliminate the negative tax given by 50-year deferral, deduction of all expenses and capital gain on cutting, but sometimes it won’t.

B. Reasons for Change

1. Repeal capital gains treatment for all timber. Repeal of sections 631 and 1231 to treat gain on timber investment as always ordinary would barely eliminate the negative tax in the Table 2 scenario. Imposing tax at 35 percent on the \$21,258 gain in year 50 increases the tax in the final year 50 from \$3,189 to \$7,440. That means the posttax IRR is 10.71 percent and the tax has reduced the IRR by 2.61 percent of the pretax 11 percent. A rate of 2.61 percent is a lot lower than the 35 percent tax rate imposed on other business activity, but it is not the negative tax allowed under current law.

Timber should never qualify for capital gain, whether sold in bulk, sold to many customers, or after some processing. Timber is a crop — the fruit of the land — rather than the land itself, which is what capital gain treatment was originally intended to benefit. For capital gains purposes, timber is more like the wheat or corn of the land.

Timber growth also does not fluctuate. Interest, even in the form of original issue discount, and rents, however disguised in form, are taxed as ordinary income because they happen inevitably by the mere passage of time. Likewise, timber grows by the mere passage of time. Capital gain is a fluctuation in value that arises because of changes in the market’s assessment of future cash flows. Growth of timber, like interest and rents, can only go in one direction, which is up.

Also, the lower capital gains rates are appropriate for the increase in the after-tax present value of cash flows, based on the assumption that the cash flows have been subjected to ordinary income tax. So when a bond increases in value, there is true capital gain because the interest on the bond is fully taxed. Farmland becomes more valuable because the value of the crop goes up, but the sale of the crop is taxed as ordinary income. Since

⁹Reg. section 1.469-5T(a)(1) (defining 500 hours of time per year as material participation in a timber investment). If an individual works for 40 hours per week and takes a two-week vacation or 10 days of no work, the annual hours would be 2000.

timber is taxed only on harvest, and only once, the tax needs to be imposed at ordinary rates.

Capital gain is said to be necessary to prevent bunching of income that accrued over a long period of time, such as 50 years in our example.¹⁰ Timber gains, however, are realized predominantly by taxpayers whose economic income would perpetually subject them to the top rates or nearly highest rates, so that a real averaging provision would give them no tax relief. Moreover, the deferral of income from the time that it arose until it was realized by cutting is an extraordinary tax benefit already. To impose a real statutory 35 percent tax in terms of IRR reduction on the Table 1 loblolly pine investment, the nominal tax rate at the time of cutting would have to be more than 80.75 percent. To maintain even a 15 percent reduction in the IRR, the nominal rate on the gain at harvest needs to be 50.32 percent. There needs to be a rate *increase* to react to the gain arising over a long period — not a rate decrease. IRR is the universal yardstick to compare all investments. It is the reduction of IRR that measures the effect of tax in commercial terms. A level playing field means that tax rates need to go up to offset the realization of gains long after they are accrued.

Finally, capital gain treatment combined with deduction of costs from ordinary income at the 35 percent rate is what causes negative tax. No tax accounting that generates a negative tax is legitimate when Treasury needs the revenue so desperately.

2. Capitalization of costs. Reforestation and silviculture costs need to be capitalized and deducted under cost depletion only against the sale price of the timber. Viewing the costs as not an improvement misses the point that the costs give the taxpayer access to the growing value of the timber. In accounting language, the costs need to be matched against the related income. Allowing the costs to be deducted before the related income is taken into effect “unmatches” costs and related revenue and prevents the tax accounting from reflecting real income. The taxpayer’s only business justification for the annual silviculture costs and the reforestation costs is that they will ultimately produce a timber crop.

¹⁰See *supra* text accompanying note 6.

If timber is treated as an ordinary asset, and the costs of the reforestation and silviculture are deducted only against the harvest, the after-tax IRR is 10.65 percent, down from 11 percent, which represents a 3.18 percent tax. Capitalization of costs under the hypothetical represent another 0.57 percent of tax beyond just treating the harvest as an ordinary asset, but it still does not bring the real rate of tax up to the 35 percent that would level the playing field.

3. Deferral. The biggest benefit for the timber investor is deferral of tax for 50 years until the timber is harvested. Deferral, even without expensing of costs and capital gains rates for the harvest, reduced the effective tax from 35 percent to a real IRR-reducing tax of only 3.18 percent.

It is possible but awkward to offset the effect of deferral with a higher tax rate on the harvest. As noted, 80.75 percent tax on the gain from the sale of the timber would yield a reduction of the 11 percent IRR from the hypothetical investment. To maintain a 15 percent reduction of IRR, as noted, the nominal level of tax has to be 50.32 percent. Even this extraordinary rate needs to be higher if, for instance, the pine is harvested at 70 years or longer. The rate needed to maintain any given IRR-reducing effective tax rate also fluctuates with variations in the pretax IRR and in the timing of costs, as well as of harvest. The high nominal rate necessary to achieve IRR-reducing effective tax rates appropriate for a level playing field proves that a lower tax is not appropriate for long-deferred income, but such a high rate is not practical, either.

A proposal for taxing the rental value of a big house (exceeding a \$1 million dollar threshold) should also be applicable to the taxation of timber property.¹¹ The timber investor is using the rental value of the land as input into the timber. Taxing and capitalizing that rental value is not politically attractive, but it may be the only way to ensure fairness.

¹¹See Calvin H. Johnson, “Taxation of the Really Big House,” *Tax Notes*, Feb. 16, 2009, p. 915, *Doc 2009-1224*, or *2009 TNT 30-44*; see also Johnson, “Tax Only What Happened!” *Tax Notes*, Mar. 9, 2009, p. 1271, *Doc 2009-4799*, or *2009 TNT 44-13*.