End Identification of Stock Certificates

By Calvin H. Johnson

Calvin H. Johnson is a professor of law at the University of Texas. When stock is sold in different lots, current law allows the seller to minimize reported gain by identifying stock with the highest basis as the stock sold. This proposal would require the taxpayer to report stock with the lowest basis and maximum gain as the lot sold.

The proposal is made as a part of the Shelf Project, a collaboration by tax professionals to develop and perfect proposals to help Congress when it needs to raise revenue. Shelf Project proposals are intended to raise revenue, defend the tax base, follow the money, and improve the rationality and efficiency of the tax system. The tax community can propose, follow, or edit proposals at http://www.taxshelf.org. A longer description of the Shelf Project can be found at ''The Shelf Project: Revenue-Raising Projects That Defend the Tax Base,'' *Tax Notes*, Dec. 10, 2007, p. 1077, *Doc 2007-22632*, or *2007 TNT 238-37*.

The proposal to identify stock with the lowest basis as the lot sold is part of a series of proposals arguing that tax accounting reflects economic income only if a taxpayer's remaining basis reflects the value of the remaining investment. Adjusted basis should describe, as closely as possible, the net present value of the remaining investment. Future proposals in the series will argue, for instance, that cash received from a short sale, a future, or writing options should be allocated to unrealized appreciation on the underlying property held by the taxpayer, and will argue that cash from deferred sales should be allocated first to the gain on the sold property. More generally, the relationship between adjusted basis and remaining value also measures the relationship that the real tax rate bears to the statutory tax rate.

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.

This proposal would end the ability of taxpayers under current law to identify which lot of stock they have sold. The proposal would instead minimize unrealized appreciation and bring adjusted basis for the whole block of stock the taxpayer owns after the sale as close as possible to the fair market value of the retained stock. Tax accounting reflects economic income only if the adjusted basis of the investment reflects its remaining value.

Current Law

When a taxpayer buys blocks of stock of the same corporation and class at different times, the different lots can have a different cost basis. When the taxpayer sells some of the shares, the seller may identify which lot will be used to determine basis to calculate gain or loss.[1] The identification can be by delivery of physical certificates[2] and can also be by instructions to a custodian or broker for the shares, as long as the certificates are identified by the sale confirmation documentation received by the seller within a reasonable time.[3] Also, stock held by a trustee can be identified by written instructions to the trustee, and the instructions determine which lot is treated as distributed to the taxpayer and sold, even when the trustee distributes some other block of certificates for sale.[4] If the taxpayer does not sufficiently identify the lots by the above means, the default rule is that the stock purchased earliest in time will be treated as sold.

Identification of certificates allows sophisticated sellers to identify the lot sold to minimize the amount of gain recognized and maximize the unrealized appreciation built into the stock not sold. Assume, for example, that the taxpayer has purchased two 100 share lots of ABC Inc. common stock. The first 100 share block cost $1,000 and the second 100 share block cost $4,700. All have been held for more than a year so that gain will be long-term capital gain benefiting from 15 percent tax rates. Assume the taxpayer sells 100 shares for $5,000 and identifies the high-basis shares, purchased for $4,700, with the proceeds of sale resulting in a $300 capital gain. If the earliest-purchased lot were treated as sold, the default rule when there is no identification, the basis subtracted from the $5,000 would be the $1,000 cost of the earliest lot and the gain would be $4,000. Identifying lots allowed the taxpayer to report $3,700 less gain.

A last-in, first-out rule tends to minimize gain reported and maximize unrealized gain because stock tends to appreciate over time as earnings are accumulated. The default rule, binding in the absence of sufficient identification of certificates, is an earliest-first — or first-in, first-out rule. With steady appreciation, FIFO will maximize the reported gain and minimize the unrealized gain. If the latest lots have not reached the requisite one-year holding period for long-term capital gains,

[1]Reg. section 1.1012(c).
[2]Reg. section 1.1012(c)(2).
[3]Reg. section 1.1012(c)(3) and (4).
[4]Reg. section 1.1012(c)(4).

however, the taxpayer would ordinarily identify the stock with the highest basis held for more than a year to qualify for the 15 percent rate. If the stock has fluctuated in value, the block with the highest basis may not be the most recent purchase.

In the example above, the $3,700 gain avoided by taxpayer identification of a block of stock will bear too low a tax. With volatile investments, a taxpayer will have both gains and losses and can recognize losses selectively to shelter future gains from any tax.[5]

Also, section 1014 provides that heirs restate the basis of stock inherited, so that the basis is equal to the value of the stock when received. Gain that arose while the stock was held by the decedent disappears. Thus, section 1014 allows an heir to consume the proceeds of the ultimate sale of the stock without either the heir or the original investor paying tax on the gain consumed. Estimates indicate that between 50 percent and 90 percent of unrealized gains arising every year are absorbed by the step-up in basis at death or by loss offsets.[6] For an individual taxpayer, the impact of capital gain is further reduced by time lags between accrual of the gain and the tax. For some taxpayers, and at least most of the money at stake, the lure is that gain will be taxed currently with the step-up, or never.

[5]Section 1211 (allowing noncorporate capital losses to be used only against capital gains, except that $3,000 of losses not offset against gains may be used against ordinary income every year).

[6]Jane G. Gravelle, ''Limit to Capital Gains Feedback Effects,'' Congressional Research Service Report for Congress at 4 (1991) (taking out timber, housing, and nonprofit results and finding that 46 percent of accrued gains are realized); Gravelle and Lawrence B. Lindsey, ''Capital Gains,'' *Tax Notes*, Jan. 25, 1988, p. 397 (76 percent of capital gains are held until death). Laurence Kotlikoff and Lawrence Summers argue that most savings, once made, are never drawn down and that only 20 percent of individual wealth is consumed by the household later in life so that 80 percent of wealth is transferred to the next generation. Kotlikoff, ''Intergenerational Transfers and Savings,'' 2 *J. of Econ. Persp*. 41, 43 (Spring 1988); Kotlikoff and Summers, ''The Role of Intergenerational Transfers in Aggregate Capital Accumulations,'' 89 *J. of Pol. Econ*. 706 (1981). The estimate is controversial, although possible. For a sample of the debate, *see, e.g.*, Franco Modigliani, ''The Role of Intergenerational Transfers and Life Cycle Saving in Accumulation of Wealth,'' 2 *J. of Econ. Persp.* 15 (1988); Denis Kessler and Andre Masson, ''Bequests and Wealth Accumulation: Are Some Pieces of the Puzzle Missing?'' 3 *J. of Econ. Persp*. 141 (1989); Alan Blinder, ''Comments on Chapter 1 & Chapter 2,'' in *Modelling the Accumulation and Distribution of Wealth* 68 (Kessler and Masson, eds., 1988); Michael Hurd and Gabriela Mundaca, ''The Importance of Gifts and Inheritances Among the Affluent''; and Kessler, Comment, in ''The Measurement of Saving, Investment and Wealth'' 736, 758 (NBER Studies in Income and Wealth, vol. 52, Robert E. Lipsey and Helen Stone Tice, eds., 1989). If 80 percent of all wealth is held until death, we should expect that wealth to be especially rich in wealth with unrealized gain, given the incentives to hold high-gain property and to rely on loss or low-gain property to support the standard of living.

Reasons for Change

There is no real-word difference between identifying the low-basis block or the high-basis block as the stock sold. Each share of the same class of stock of the same corporation represents the identical fractional interest in liquidation proceeds, dividends, and votes. Stock is fungible, and all certificates are identical. To distinguish whether a taxpayer has $300 or $4,000 gain by identification of certificates is like determining the basis in oil by identifying the drops. In the example above, the taxpayer has received $5,000 cash for 100 shares. There are no nontax facts that would differentiate between taxing $300 gain or $4,000 gain. The identification rule allows knowledgeable taxpayers to identify stock sold in a way to minimize reported gain and to maximize unrealized gain, without any nontax difference.

It is proposed that when 100 shares are sold, the taxpayer be required to use the 100 shares of the same issuer and class with the *least* basis to calculate gain, producing the maximum amount of gain and least unrealized appreciation. To reflect principles of income, it is the unrealized appreciation that must be minimized and the reported gain that must be maximized.

1. Appreciation Is a Real Investment

A realization requirement is justified within the norms of an income tax only as a practicality. Realization avoids making the tax system depend on unreliable appraisals of value and reduces liquidity crunches. In the above example, however, $5,000 worth of cash has been received. The cash received sets the amount realized beyond valuation controversy and provides liquidity for payment of tax. The determination of basis, by whatever rule, is accomplished without reliance on appraisals.

Unrealized appreciation is inconsistent with the economic definition of income. Income is defined under the standard Haig-Simons definition, equating the income with what it is used for: Income equals the sum of amounts consumed and amounts invested. Because cash has value only to claim resources, there is no requirement in the economic definition of income that cash or cashlike things be received. Income is then the sum of resources consumed plus or minus the change in the value of overall wealth.[7] All other things being equal, taxing unrealized appreciation brings the measurement of income closer to equitable norms.

The taxation of the extra $3,700 gain in our example is also largely a matter of now or never, given that most unrecognized gain is never taxed. Because the untaxed gain now will probably be consumed without tax by heirs, the gain should be calculated to reach the $4,000 gain result on receipt of the $5,000.

[7]Henry Simons, *Personal Income Taxation* 50 (1938) (famously defining income as ''the algebraic sum of (1) market value of rights exercised in consumption and (2) the change in value in the store of property between the beginning and end of the period in question''). The term ''algebraic sum'' is necessary to the definition because investments can drop in value as well as increase.

2. Measurement of Financial Return

Minimizing unrealized appreciation is also required by standard financial analysis. In financial economics, all investments are measured by comparing the cash flows expected from the investment with a hypothetical bank account with identical cash flows. Annual income from an investment, under financial analysis, is the internal rate of return of the investment, and the internal rate of return is the interest earned on the hypothetical bank account that is like the investment under scrutiny. The effective rate of tax, in financial economics, is the measure of how much the annual internal rate of return from the investment is reduced by tax. The effective rate of tax measures the real impact of tax under financial analysis.

One can identify the real income from the investment and can subject it to tax according to the intended statutory tax rate only by identifying the internal rate of return from the investment. A tax reaching the internal rate of return comprehensively would reduce the deadweight losses caused by tax by reducing the disparate impact of tax on different investments, as measured by financial analysis.

Identifying the internal rate of return produces a necessary corollary, that is, the bank account balance that is exactly like the investment under scrutiny. On any given cash flows, the bank account balance resulting from calculation of internal rate of return will at any point equal the remaining net present value of the investment using its internal rate of return as a discount rate. The income tax identifies income and reduces it by the statutory tax rate if and only if the adjusted basis of the investment is equal to the hypothetical account balance that is like the investment — that is, equal to net present value of the future cash flows from the investment.

When basis is lower than the investment's real value, it follows that the income tax has failed to identify the real internal rate of return from the investment over time and has failed to reduce the return by the statutory tax rate. Unrealized appreciation or built-in gain on an investment measures the cumulative amount by which tax accounting has failed to identify annual income.

The analysis of investment in terms of its interest-like internal rate of return and corollary bank account balance is also forced by our tax treatment of debt, which allows a deduction for interest. Assume, for example, complete debt financing, such that the cash flows from an investment are the mirror image of the cash flows on the debt. With complete debt financing, there is neither a net cash outflow nor inflow at any point. The tax will describe the zero net economic results if and only if the taxable income is equal to the interest on the debt, and, as a corollary, if and only if the adjusted basis of the investment is equal to the balance of the outstanding debt. Identifying the outstanding balance of the debt used to buy the investment would identify the appropriate adjusted basis of the investment because financial internal rate of return analysis imposes a debt template on investments of a diverse nature.

If the treatment of the investment does not leave an adjusted basis equal to the outstanding balance of the complete debt financing, debt financing will lead to artificial loss deductions without net cash flow cost. The losses will shelter consumption and unrelated income from tax. The shelter will be more valuable to those in higher tax brackets. They will buy up the investments, all other things being equal, and drive out lower-bracket investors who might be a better fit for the investment. In sum, failure to keep the adjusted basis equal to the value makes the tax rate on the investment lower than the intended statutory tax rate, generates shelters when the investment is debt financed, and makes the property more valuable to higher-tax-rate investors.[8] The shelter effect from the deduction of interest and taxation of investments that does not match debt requires remedial legislation that is complicated.

If the taxpayer in the example is able to identify shares and use the $4,700 basis against the $5,000 sale of 100 shares, the basis that the taxpayer has left after the sale is the oldest $1,000 basis. A tax on economic income, under financial analysis, would obey the directive that the basis at the end of the year should equal the fair market value of the investment. Stacking the lowest-basis lot against the sales proceeds leaves the adjusted basis of the shares that remain at $4,700. That is not the ideal $5,000 basis for the 100 shares retained that follows from the financial internal rate of return analysis, but it is closer.

3. Alternatives to the Proposal

A mark-to-market system for publicly traded stock would tax all unrealized appreciation as it arises and leave the taxpayer with a basis equal to current value. Publicly traded stock is as liquid as a bank account, and we tax income of a bank account even if the interest income is not withdrawn. A mark-to-market system applied across the board would be a better step toward level comprehensive tax. Stacking shares sold so that the lowest basis is sold first increases the tax burden on stock investments, but not so far as to reach a 15 percent effective tax rate that Congress has deemed is the appropriate rate for capital gains.

One could also minimize the unrealized appreciation by allowing the basis to be used on the sale only if the basis that remains is equal to fair market value. In the example, the seller held stock with a basis of $1,000 and $4,700, for a total of $5,700. At the end of the sale, the taxpayer has stock worth $5,000. In general, in an income tax, basis is usable only if it is lost.[9] Land and stock, for example, are not depreciable because, absent fluctuations in value, the land and stock endure indefinitely, presumably perpetually. On the norm that recognition of basis requires its loss, the seller should preserve $5,000 to describe his remaining investment and use only $700

---

[8] Paul Samuelson, "Tax Deductibility of Economic Depreciation to Insure Invariant Valuations," 72 *J. Pol. Econ*. 604 (1964), is the pioneering article. *See also* Alvin Warren, "Accelerated Capital Recovery, Debt, and Tax Arbitrage," 38 *Tax Law.* 549 (1985); Calvin H. Johnson, "Kahn Depreciation and the Mintax Baseline in Accounting for Government Costs," *Tax Notes*, Dec. 30, 1991, p. 1523.

[9] *See, e.g.*, Calvin H. Johnson, "Was it Lost?: Personal Deductions Under Tax Reform," 59 *Southern Methodist University L. Rev.* 689 (2006).

basis against the stock sale. The sale would result in recognition of $5,000 less the $700 basis, or $4,300.

Recognizing gain until the seller's basis is equal to the value of the retained investment looks at the taxpayer's entire stock as a single pool and does not identify cost with any specific block of stock. It reaches the result closest to theoretical norms. That scheme, while theoretically justified, is not proposed here. Under the proposal, each block of stock is identified with its own cost. The proposal increases tax less than is justified by good theory, but incremental change is an improvement. The compromise — lessening impact of the change — is offered here to increase the chances of the proposal passing.

4. Arguments Against the Proposal

Lock-in effect. Any increase in the tax imposed on the sale will increase the lock-in effect. Capital gain is a toll charge on moving capital from one investment to a better investment. If the new investment is not worth more than the old stock by enough to pay for the capital gain tax and other transaction costs, the holder will not make the move and is locked in to the old investment.

Lock-in is not a problem for the economy as a whole. Capital subject to the toll charge is only old capital held by taxpaying investors. There is enough new capital coming into the market from individual or corporate earnings, from pension funds that do not pay tax on the rollover of their investments, and especially from foreign sources. The capital that does not pay the capital gain toll charge is adequate enough to supply capital to the better investment. The capital without the toll charge is also adequate to adjust the price of the new investment to be in line with its fundamental value, and so properly signal to the market the allocation of capital according to the underlying merits of the investment.

The holder of old capital who bears an increased toll charge is hurt by the increase, but the equitable case for the status quo is not very strong. Most capital gain not currently recognized is never taxed and is held for tax-free consumption by heirs. Moreover, the efficient market, by adjusting prices quickly, severely diminishes the rationality of a sale for reinvestment, and the diminished rationality means that capital gains sales that do occur are especially lean in sales for reinvestment and especially rich in sales for the purpose of consumption. Sales for consumption can bear tax before the consumption of the capital gain. Even if the sale is for reinvestment, most taxpayers pay tax on invested income that increases their investments. Taxpayers with a lot of appreciating capital are considered wealthy and there is no reason to allow consumption or investment by the rich without tax, not when consumption and investment are generally allowed only out of after-tax dollars.

Diversification. If a taxpayer cannot minimize gain by identifying a particular block of fungible shares, the taxpayer may undertake costly tax planning to achieve the same result. For instance, if a corporation will issue a new class of stock every year — perhaps dyeing the certificates a different color — the holder will have different stock to sell and can pick the stock with the highest basis. The statute can, however, treat substantially identical classes of stock as being of the same class for the purposes of identifying the stock with the least basis to the sale. The statute can delegate to regulations or the courts the problem of identifying the abuse of creating classes of stock with immaterial differences.

However the substantially identical shares are identified, it will be in the taxpayer's interest to buy different stocks each year just so he can sell the stock with the least gain. In general, buying different stocks will not be harmful but constructive. An investor needs to diversify investments to reduce the impact of volatility. If diversification were to become an abuse for some reason, it could be remedied at some future date.

Explanation of the Proposal

It is proposed that when a taxpayer sells stock or other securities, the basis for the sold securities be identified by stacking the shares with the lowest basis against the amount realized.

If a taxpayer purchased 100 shares for $1,000 and 100 shares for $4,700 and sold 150 shares for $7,500, for instance, the taxpayer would be treated as having sold all of the $1,000 basis shares and half of the $4,700 basis shares and would have a total basis of $3,350 in calculating the gain from the sale. If the last block purchased had not achieved long-term capital gain status, the gain would be $2,500 minus $2,350, or $150 of short-term capital gain.

Losses. Identifying the lowest-basis lot as sold will sometimes result in a remaining basis that is higher than the fair market value of the stock, which marks when the tax system has identified the internal rate of return. For example, assume a taxpayer bought 100-share lot A for $1,000 and 100-share lot B for $4,500 and sells 100 shares when the stock is worth $3,000. Stacking lot A as the lot sold will leave the taxpayer with $4,500 basis when the bank account value of the investment is $3,000. Remedy for basis that is too high after the sale should await a more general solution in mark to market for readily tradable stocks, or at least until we look at the entire holdings of the stock as an undifferentiated pool. A taxpayer who has both gain lots and loss lots of the same stock should not be able to use the loss-stock basis unless we look to the overall basis of his entire holdings and determine how to get closest to value for the final basis. If we are going to look to the value and basis of the overall holdings without differentiating between lots, we should probably tax consistently from that premise.

Being conservative about losses is also a reaction to the serious problem of selective loss harvesting in a realization-based tax system. Taxpayers show their losses disproportionately by selling them, and hide their gains disproportionately by holding them. Even when losses may be used only against gains,[10] taxpayers show their losses to fully offset the gains they realize and to maximize unrealized appreciation. Loss harvesting is now accomplished by computer-driven programs, and there are even patents telling investors to invest in volatile

[10]Section 1211.

derivatives and selectively realize all losses. Minimizing the loss by stacking the lowest basis first will counter loss harvesting.

Constructive ownership. If the identification of certificates is ended, a corporate taxpayer might achieve the same effect by buying stock at different times and putting ownership into a different subsidiary. A subsidiary might be created in fact for each lot of stock purchased. The corporate owner would then have the subsidiary with the highest basis sell that subsidiary's lot and distribute the proceeds to the corporate parent. The same effect can be accomplished within a family. A parent with several children could identify stock with the highest basis in the household for sale. It is proposed that the rule that the lowest basis be stacked to the sale be applied on a constructive ownership basis within a corporate family, a partnership, trust, or household. The scope of constructive ownership should probably be confined to dependents and 80 percent owned entities so that it is plausible that the lot identified as having the lowest basis is in a realistic sense owned or reachable by the seller.

CLARIFICATION

In the introduction box for the Shelf Project by Reuven S. Avi-Yonah, ''A Coordinated Withholding Tax on Deductible Payments,'' *Tax Notes*, June 2, 2008, p. 993, Charles Kingson's credentials weren't fully presented. Kingson is an adjunct professor at New York University School of Law and a lecturer at Penn Law.