SHELF PROJECT

tax notes

Extend the Tax Life for Acquired Intangibles to 75 Years

By Calvin H. Johnson



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Under current law, a taxpayer may amortize the cost of intangibles acquired in

the taxable acquisition of a business over a composite life of 15 years. The 15-year period is too short. A 75-year period would reflect the economic income of the acquirer and make the tax accounting consistent with debt financing. A 15-year life reduces the effective tax rate on a taxable acquisition of intangibles to 16 percent, and with debt financing, the acquirer's tax becomes negative, adding 19 percent of revenue to the value of the acquisition. There is no justification for a negative tax on acquisitions.

The proposal is offered as a part of the Shelf Project, a collaboration of tax professionals to develop proposals for raising revenue without a VAT or a rate increase. Shelf Project proposals raise revenue while also making the tax system more efficient and reducing deadweight loss. An inventory of prior shelf projects can be found at http://www. utexas.edu/law/faculty/calvinjohnson/shelf_proj ect_inventory_subject_matter.pdf. Shelf Project proposals follow the format of a congressional taxwriting committee report in explaining current law, what is wrong with it, and how to fix it.

Current law allows an acquirer to amortize its basis for the intangible assets it acquires in the taxable purchase of a business over a 15-year tax life. A composite life for all intangibles simplifies the law and avoids wasteful litigation over allocations and lives of specific intangible assets. However, the 15-year amortization period is too short to reflect the buyer's economic income. Combined with debt financing, the short amortization period and the interest deduction create shelters that subsidize acquisitions. The subsidy is especially intense

when passthrough smaller businesses are acquired by bigger corporations. There is no reasonable case for subsidizing those acquisitions.

A 75-year composite tax life would better approximate the economic life of the acquired intangibles and reflect the acquirer's economic income. The 75-year life was reached by calculating the discount rate needed to justify 15-year tax life as revenue neutral under prior law in a large sample of unsettled cases, but with three corrections:

- Aggregate assets like customer or employee bases do not depreciate as individual customers or employees turn over, as long as the base as a whole is expanding or holding steady.
- The composite 15-year life depended on high discount rates used in 1993 that have since dropped.
- The 15-year life depended on aggressive taxpayer claims on allocation value and life that should not be taken at face value.

Correcting the errors as to aggregate assets, discount rates, and allocations to short-lived intangibles means the appropriate amortization life to reflect economic income becomes at least 75 years.

A less demanding standard would be to give amortization deductions with a present value equal to the tax paid by a seller, so that there is no net revenue to the government on sale. That standard would require the amortization period to be lengthened from 15 to 48 years. The no-revenue standard for realization events, however, cannot be consistently maintained for all investments in times of budget demands. A tax based only on realization events must tax realization. Moreover, intangibles are already undertaxed, so that giving the norevenue standard to intangibles would further distort investments. Describing the acquirer's economic income, with a 75-year amortization period, is a better improvement of economic efficiency.

A. Current Law

1. Section 197. Section 197, adopted in 1993, allows a 15-year tax life for amortization of intangibles acquired in connection with the purchase of a trade or business. The 15-year life is a composite life intended to end the extensive litigation under prior law over the allocated cost and tax life of a large number of different kinds of intangibles acquired

when a whole business is acquired.¹ The composite 15-year life liberalized tax treatment of intangibles such as goodwill and going concern value, which were not depreciable under prior law, and it lengthened the tax life of some short-term intangibles including short-term covenants not to compete from key employees. The 15-year life also settled the treatment of aggregate assets like customer base, employee base, bank deposits, and government licenses and avoided whether depreciation should be measured by looking at the aggregate or by the turnover of individual units.

The section 197 composite life does not apply to nondepreciables such as land and financial instruments including, for example, stocks, bonds, currency futures, and swaps. The composite life does not cover computer software or film or intellectual property rights acquired not in connection with the purchase of the entire business.² There are also anti-churning rules to prevent an acquisition from taking advantage of the 15-year life if the acquisition is from a related party or the property already used by a related party.³

The adjusted basis of any property is also recovered, under general tax principles and without regard to the statutory amortization period, whenever an asset is sold or abandoned.⁴ For instance, if an acquirer operates the target business as a separate business or at a separate location, closing down the plant or location would be the occasion to write down the basis not already recovered under the 15-year tax life.

2. Solely from a taxable asset sale. The 15-year amortization period becomes an issue only when a taxpayer buys another business by taxable purchase of its assets. Intangibles subject to the section 197 15-year life upon purchase are treated as ordinary deductions as they are developed internally. Goodwill, for example, is the value of an entire business in excess of the value that can be allocated to accounting assets and it cannot be sold separately. The regulations on capitalization make the costs of developing goodwill deductible immediately.⁵

Once the internal costs are expensed, there is nothing for the original developer to recover by amortization. The costs of developing a company's intangibles might well be treated as capital expenditures producing basis as a matter of good theory — just like any other investment — because they have value beyond the end of the tax year. The investment-like attributes of the internal development costs, however, are considered to be too vague and speculative to be manageable as capital expenditures. Indeed, determining what things the development costs of intangibles achieved and how long they will last could be a herculean task.⁶ There is also no tax on growth in value of the business, and so no gain needs to be recognized and no amortizable basis accorded by reason of mere growth in value of intangibles or the business as a whole. How to treat goodwill and other intangibles thus first arises as a tax issue only when a taxpayer purchases all of another business and pays a price in excess of the value of stated assets. A generous treatment of goodwill thus favors taxable takeovers.

The section 197 life is not at issue when a corporation buys controlling stock of another corporation, nor when the corporation acquires another in a tax-free merger or other acquisitive reorganization. In neither the stock purchase nor the tax-free acquisition does the acquirer get basis in the goodwill above what the target business originally had, which it might amortize over time.

The section 197 life, however, will arise on sales of stock of subsidiaries treated by election of the parties as if they were sales of all the assets of the subsidiary for tax purposes. Section 338(h)(10) allows the parties to treat what was actually the sale of stock of a subsidiary within the seller's consolidated group as if it were a sale of the assets. Consolidated group subsidiaries are those that are more than 80 percent owned by the selling parent or within the group. Under the election, the seller

general rule. Reg. section 1.263(a)-4(b)(1)(v) and -4(b)(3) also gives Treasury the power to require capitalization of costs that create or enhance future value, but only prospectively after publication of the final guidance.

¹See, e.g., Government Accountability Office, "Issues and Policy Proposals Regarding Tax Treatment of Intangible Assets," GAO/GGD-91-88 (Aug. 1991) (discussing \$8 billion of revenue at stake in and sample of 2,166 open audit issues).

²Section 197(c).

³Section 197(f). The anti-churning rules make sense only because the drafters appropriately thought that the 15-year life was more advantageous than holding onto intangible property and avoiding the sale.

⁴Sections 1001 and 165(b).

⁵Reg. section 1.263(a)-4(b)(3)(i), capitalizing cost of intangible assets capable of being sold "separate and apart from a trade or business." Because goodwill adheres to the business as a whole and cannot be sold separately, it is not capitalized under the

⁽Footnote continued in next column.)

⁶While internal development of goodwill is an investment in theory because it has substantial value into the future, the accounting profession will not help determine the life or identity of the investment. There is no market for goodwill apart from sale of the whole business. The accountants cannot comfortably derive the value of goodwill from the value of the whole business because that generates a circularity. The accountants are trying to develop a system that is an independent input that helps a market determine value of the whole business. However, it would not be unreasonable for tax to rely on market appraisals of the whole business. See, e.g., Calvin H. Johnson, "Replace the Corporate Tax With a Market Capitalization Tax," Tax Notes, Dec. 10, 2007, p. 1082, Doc 2007-26347, or 2007 TNT 238-36.

recognizes gain measured by basis in assets rather than basis in stock. The buyer gets a basis for assets equal to its purchase price, and the total purchase price must be allocated among the assets, including the section 197 intangible assets that are given a composite 15-year life.

3. Non-goodwill companies. Some purchased companies will have a high value for intangibles in excess of the value assigned to tangibles assets and financial securities, and some companies will not. A business subject to stiff competition from new capital or new technologies will have a value of the whole business that is less than the reproduction cost of its assets and hence no section 197 intangibles. Even before its bankruptcy, Kodak, for example, would have had no value above the reproduction costs of its accounting assets. By contrast, intangible value in excess of accounting assets will appear in a business in which the accountants have understated the value of the assets developed by the company. A 2008 study of a range of public companies found that some had assets that were only a modest fraction of the stock-marketdetermined value of the company and some companies had no goodwill: Google's accountingrecognized assets were only 20 percent of its market value, so a sale would be 80 percent goodwill or non-balance-sheet other intangible.⁷ Activision-Blizzard and Take-Two, which create computer games, had intangibles worth 68 percent and 67 percent of market value, respectively. Wal-Mart has many tangible assets (including inventory held at year-end, storage depots, and stores), but 47 percent of its market value was in intangibles not considered accounting assets. Macy's overall market value was 4 percent below the balance sheet value of its assets. According to the stock market, Macy's had no intangible value.8 Macy's and Kodak would not raise questions about amortization of intangibles if their assets and business were purchased, but purchase of the business assets of Google, Activism, and Take-Two would be mostly about intangibles.

⁷Time Inc. reported goodwill equal to 80 percent of its value when it was acquired by Time-Warner, but the high allocation to goodwill had no tax effect because the takeover was by tax-free merger.

4. Historical reasons for section 197 composite life. Before the 1993 enactment of section 197,9 the goodwill of a purchased company was treated as a nondepreciable asset for tax purposes, much like corporate stock or land. 10 Goodwill is the value of an ongoing business that is in excess of the value of its specific asset that the accountants are willing to recognize on the balance sheet. The value of a company in excess of listed assets might fluctuate in value, again like stock or land, but it does not inevitably decline in value over time as an asset with necessarily fixed life would. If the purchased company does not decline in value, then a deduction for depreciation or amortization would be an artificial tax loss that would understate income. If the value does decline, we defer the loss until a realization event, usually sale, abandonment, or distribution.

Taxpayers circumvented most of the impact of the pre-1993 rule by allocating the purchase price for the excess value of acquired businesses to intangibles other than goodwill that were claimed to have an ascertainable and relatively short life. A cottage industry grew up with services consisting of providing studies for acquisitions that supported the litigation position that the excess value that they bought was for something other than goodwill. The general strategy was "pigeon-hole stuffing" — that is, creating as many intangibles as possible with as short a life as possible and allocating as much of the overall value as feasible to each of the short-life intangibles. In 1991 the Government Accountability Office published a large sample of taxpayer claims on allocation of purchase price to various intangibles.¹¹ In the sample, the GAO found 175 different intangibles claimed by taxpayers.¹² Goodwill was only 7 percent of the price paid for the target business under the taxpayer claims and was only 23 percent of all costs allocated to intangibles. Over three-quarters (77 percent) of costs of intangibles were thus allocated to intangibles other than goodwill. The non-goodwill intangibles were said to have an average life of only 7.8 years, instead of indefinite life. The taxpayer allocations largely ate

⁸Johnson, "The Effective Tax Ratio and the Undertaxation of Intangibles," *Tax Notes*, Dec. 15, 2008, p. 1289, *Doc* 2008-24799, 2008 TNT 242-46. The ratio of market-determined value of the whole company to book value of assets is a variation of Tobin's Q used for many purposes by financial and economic analysis of corporations. *Id.* at notes 6 and 7.

⁹Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, section 13261. *See* Johnson, "The Mass Asset Rule Reflects Income and Amortization Does Not," *Tax Notes*, Aug. 3, 1992, p. 629 (trying to prevent the adoption of section 197 at 15-year composite life).

¹⁰Reg. section 1.167(a)-3(a) (before amendment to reflect the enactment of section 197) (goodwill not depreciable).

¹¹GAO, *supra* note 1 (looking at a sample of 2,116 cases still open in the IRS in 1989, from tax years 1979-1987, involving acquisitions totaling \$102 billion).

¹²Id. Appendix 2 of id., lists 166 intangibles.

up the goodwill rule with allocations of the purchase price to short-life intangibles.¹³

In 1993 Congress ended the costs of appraisals and litigation over allocation of purchase price by going over to a composite life for all intangibles acquired in the purchase of a business. The composite life — 15 years — covers both indefinite-life intangibles such as goodwill and going concern, as well as all the shorter-term intangibles, claimed by taxpayers as having a 7.8-year life. Payments made to key management of a target business as covenants not to compete were also within the composite life if given in connection with the acquisition of the business, even if the covenant on its face lasted for only two or five years. Going over to a mandatory composite life avoided a lot of unproductive litigation costs, including expert fees. Treasury supported the composite life as a way to end litigation that was not going very well and to avoid unproductive costs for both taxpayers and the government.

The composite 15-year life was projected by Congress to be a mild revenue gainer (or at least not a revenue loser). ¹⁴ During a time of deficits, Congress did not want to raise taxes from some other area to pay for an artificially short composite life. It did not want to subsidize corporate takeovers of small business, and in the past it actually had shown itself willing to penalize takeovers of small business. ¹⁵

¹³There was considerable creativity in the claimed nongoodwill intangibles. Value was allocated to intangibles called under developed market (competition)" and "disadvantage competition," which, I take it, meant the high profitability of the target business was projected to decline at some point in the future due to more effective competition. Taxpayers allocated purchase price to nonunion status, on the assumption, I take it, that a union would eventually be recognized and drive up wages. Fixed lives were claimed for trained staff and training programs, student files, affiliation with TV networks, and magazine subscription lists. Accountants who considered such assets as too speculative to be listed as investments on the balance sheet as they were being developed were nonetheless of assistance in making the assets sufficiently nonspeculative to be treated as assets in the cause of allocation away from goodwill. If the target business had been purchased by buying its stock, all of the "losses" from the amortization of these intangibles would have been considered normal fluctuations in value and recognized only on sale.

¹⁴Introductory remarks of Rep. Dan Rostenkowski, 137 *Cong. Rec.* E2706 (July 25, 1991) (saying 14 years was selected as the shortest period that could avoid producing a negative revenue effect); Technical Explanation of H.R. 4210, section 4501 (1991) (14-year amortization period selected so the bill would be revenue neutral). According to staff, 15 years was selected because of later additions to the sample of acquisitions by which revenue neutrality was decided.

¹⁵Congress has enacted at least five major tax penalties on corporate acquisitions: (1) section 5881 (anti-"greenmail" provisions), added in 1987, imposes a 50-percent penalty that prevents a corporate raider from making his profit by selling back

(Footnote continued in next column.)

5. Nontax GAAP. When section 197 was adopted, nontax generally accepted accounting principles, mandatory for financial statements to shareholders that are subject to SEC reporting requirements, required the firm to amortize acquired goodwill over a period of not less than 40 years. 16 Most firms used the maximum 40-year period because that allowed the least reduction of annual earnings.¹⁷ After the adoption of section 197, however, financial standards were changed to provide that acquired goodwill did not have to be and could not be amortized. The firm, however, was required to write off goodwill when it became impaired — that is, when the value of the goodwill declined to a value less than the asset stated on the balance sheet.18 GAAP and section 197 are now inconsistent in a way that favors the taxpayer in both directions: The firm can report higher earnings to shareholders and potential investors and lower taxable income on tax returns from the same transaction.

While GAAP treatment of section 197 intangibles can be illuminating as a reasoned alternative to 15-year amortization, explicitly requiring conformity of GAAP and tax will put an extraordinary tax burden on GAAP reporting. If firms had to report their taxable income in conformity with GAAP, then firms subject to SEC reporting requirements would face a tax burden as high as 35 percent on their reported GAAP earnings. GAAP is only the messenger for the firm's economic situation and a tax that high that is contingent on GAAP income would be like killing the messenger. The reported GAAP can be expected to be very sensitive to tax. Reported GAAP earnings are a component of the efficient allocation of capital.

a fractional interest in the target corporation to the target; (2) section 163(e)(5)(i), added in 1989, defers and then disallows accrued but unpaid interest in leveraged buyouts if the interest rate is above threshold rates; (3) sections 280G and 4999 (anti-golden-parachute provisions), added in 1984, penalize management that pays itself a large severance pay that might induce it to go along with an acquisition; (4) section 172(b)(1)(E)(h) prevents interest incurred in a leveraged buyout from providing net operating loss carrybacks; and (5) section 279 (acquisition indebtedness), added in 1969, prevents the deduction of interest incurred to acquire another corporation.

¹⁶American Institute of Certified Public Accountants Accounting Principles Board Opinion No. 17, "Intangible Assets," para. 9 (1970).

¹⁷AICPA, Accounting Trends and Techniques 174 (1991) (In a sample of SEC reporting companies, almost half (195 of 399) reported using lives of 40 years and another 21 percent reported using lives "not to exceed 40 years." Another 6.8 percent reported lives of 20 to 30 years, and 4 percent reported lives of 10 to 20 years. The remaining 22 percent reported "other" or amortization over the legal or estimated life.)

¹⁸Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" (June 2001) now codified in FAS Codification, topic 350-335 (2011).

Investors, however, use other channels of information and might well be able to replace the GAAP messenger. ¹⁹ Still, until an alternative is created, a tax on GAAP would make the price of stock less smart and the stock market less efficient. Extending the section 197 life to 75 years, however, would move tax accounting closer to the financial accounting standards treatment.

B. Reasons for Change

1. Economic income. The 15-year amortization period is too short. It overstates the losses the taxpayer can be expected to suffer and so understates the taxpayer's expected economic income. It leads to shelters with a better than zero tax rate when the acquisition is debt financed. A 75-year amortization would better reflect the acquirer's true income, under reasonable assumptions.

The composite life mandated for all intangibles was a necessary simplification of prior law. The composite life avoids the wasteful litigation costs and the expert fees required under prior law to ascertain what specific intangibles were acquired and what their life and value were. The 15-year composite life was intended to be a revenue-neutral composite, giving both a shorter tax life to goodwill and going concern values that were not amortizable under prior law and giving a longer life to those assets claimed under prior law to have less than a 15-year life. If the 15-year life were extended to 75 years, section 197 would simplify by avoiding allocations to various intangibles and achieve a better approximation of true income.

A tax on income would reflect the economic income from an investment if the amortization deductions have a present value equal to the deductions from economic depreciation — that is, the real losses as the asset declines in value. Economic income alone makes the price paid for the property independent of the tax bracket of the purchaser.²⁰ Computing and taxing economic income reduces the pretax return from the investment by the statutory tax rate. Economic income alone is consistent with debt under current law, so only with the calculation of economic depreciation will debt-financed investments not create negative tax subsidizing investments beyond what no tax would do.

Giving amortization over 15 years for tax to an asset appropriately treated as having a 75-year composite tax life reduces the tax on the acquisition of intangibles from a statutory tax rate of 35 percent to an (internal rate of return (IRR) reducing) effective tax rate of 15.8 percent. IRR is the universal yardstick by which various investments are measured²¹ and is the interest on a bank account that matches the cash flows from the investment under examination, as if every investment were a bank account. The drop in IRR, as a percentage of pretax return, is the (IRR-reducing) effective tax, which is a widely used and legitimate measure of the economic effect of tax. The 15-year life reduces the real economic tax rate to under half the statutory tax rate.

When acquisitions are debt financed, moreover, the tax rate becomes negative. Deduction of interest saves tax at 35 percent, and assuming that acquirer can use the tax deductions, debt financing mismatches 15.8 percent tax on the revenue with 35 percent tax savings on the matching interest cost borne in the borrowing needed to finance the acquisition. The mismatch entails that there is a negative tax — that is, tax adds 19.2 percent of revenue to the transaction.²² The 19.2 percent is a subsidy that would cause acquisitions that would never occur in absence of tax and are not justified

Excel spreadsheet calculations, using the "goal seek" function to find the after-tax return and effective tax rate, are available from the author.

 ¹⁹Johnson, "GAAP Tax," *Tax Notes*, Apr. 19, 1999, p. 425.
 ²⁰The basic equations are from Paul Samuelson, "Tax Deductibility of Economic Depreciation to Insure Invariant Valuations," *72 J. Pol. Econ.* 604 (1964). *See also* Alvin Warren, "Accelerated Capital Recovery, Debt, and Tax Arbitrage," 38 *Tax L.* 549 (1985) and Johnson, "Soft Money Investing Under the Income Tax," 1989 *Ill. L. Rev.* 1019, 1039-1053 (1990) for lawyers' explanations of economic depreciation.

 $^{^{21}}$ The exact IRR-reducing effective tax rate depends on what discount rate is chosen. Calculations here assumed a 6.41 percent pretax return. The after-tax IRR is 5.4 percent because if t is 35 percent and i is 5.4 percent, the present value of the after-tax cash flows is zero:

 $^{0 = -100 + \$6.47 * (1-}t) * [(1-(1+i)^{-75}]/i + (100/15) * t * [(1-(1+i)^{-15}]/i]$

The first term is the arbitrary assumed unit of investment. The \$6.47 in the second term is the annuity for 75 years needed to give a 6.41 percent pretax return on \$100. The pretax \$6.47 is reduced by tax at rate t, but then the third term adds back the value of the tax savings from the 15-year amortization of \$100. If an investment has a pretax IRR of 6.41 percent and after-tax IRR of 5.4 percent, then the investment is subject to a tax that has reduced the return by (6.41 percent-5.4 percent)/6.41 percent or 15.8 percent, which represents the IRR-reducing real or effective tax rate on the investment.

²²There is nominal tax picked up by the recipients of interest, but investors organize themselves into constituencies under which low-tax entities receive interest and high-tax entities pay the interest. My estimates were that tax on interest is in the single digits in 2001, "A Thermometer for the Tax System: The Overall Health of the Tax System as Measured by Implicit Tax," 56 *SMU L. Rev.* 13, 16 (2003). Tax paid is also not reflected in interest rates, as best indicated by changes in pretax interest that reflect only inflation, and so tax is not passed back to affect the behavior of borrowers. Johnson, "Tax Shelter Gain: The Mismatch of Debt and Supply Side Depreciation," 61 *Texas L. Rev.* 1013, 1044-1046 (1983).

Table	1.1. Assump		site Life of 15 Years (s in billions)	1991 GAO Sample)	
Total asset price: \$102.10		(1) Amount Allocated	(2) TP Claimed Life in Years	(3) Deduct/Year [Cols. (1)/(2)]	(4) Present Value of Col. (3) at 10% Over Col. (2) Years ^a
Goodwill		\$7.15	indefinite	\$0	\$0
Non-goodwill customer base		\$10.5	8.8	\$1.19	\$6.76
Contracts		\$3.7	6.3	\$0.59	\$2.65
Technology		\$2.1	6.4	\$0.33	\$1.50
Statutory		\$3.4	10.6	\$0.32	\$2.03
Workforce		\$1.2	6.6	\$0.18	\$0.85
Organization and finance		\$1.3	7.5	\$0.17	\$0.88
Unidentifiable		\$1.2	8.9	\$0.13	\$0.77
Sum: non-goodwill total	\$23.40		weighted average: 7.8	Sum PV:	\$15.43
Sum intangibles		\$30.55			
Equivalent composite life		\$30.55	15	\$2.04	\$15.43
^a All the present values in colu	ımn (4) are c	omputed with the	standard present value	of an annuity formula	a. For the

by the real nontax demand. The subsidy warps investment toward corporate acquisitions of other businesses and away from alternatives that would generate greater good. Given debt financing and the interest deduction, the treatment of debt — a negative tax of 35 percent — forces a treatment of investment that yields a symmetrical 35 percent IRR-reducing effective tax rate to prevent a subsidy better than no tax.²³

composite life, the present value is \$2.04 billion * $[1-(1+10\%)^{-38}]/10\% = 15.43 .

In 1981 Congress gave real estate a 15-year tax life.²⁴ The 15-year tax life combined with debt with long terms produced generous deductions not requiring cash cost, which sheltered salary and other unrelated income. The 15-year-life tax shelters were an important component of what made the tax

Official revenue estimates used to determine whether the section 187 tax life was neutral are made by the Joint Committee on Taxation, not the GAO. Apparently, the JCT did its own sampling, not dependent on either IRS challenges or open cases. It is legitimate to use the GAO sample as a proxy for the unpublished JCT sample, however, because as shown by Table 1.1, the GAO sample is consistent with the 15-year composite life chosen for section 197, under the assumptions in the table.

reform so necessary. So similarly, the 15-year tax lives for long-lived good will and other intangibles call for reform.

For the purpose of the Shelf Project, economic income is the paramount standard. Transactions with negative subsidies tax are especially worthy sources of revenue.

The 75-year life recommended for economic depreciation is derived by computing the discount rate needed to justify the 15-year composite life, using a large sample of unsettled claims published by the GAO in 1991. This article then corrects three errors: (1) the claims in the GAO report depreciated aggregate assets such as customer or workforce base as individual customers or workers departed, but such aggregate bases do not in fact decline in value as long as the base as a whole is holding steady or expanding; (2) the 10 percent discount rate needed to justify the 15-year composite life is too high for current interest rates; and (3) taxpayer claims about value of short-life intangibles and their short life cannot be taken at face value. Correcting those errors — even using the same sample yields an appropriate composite life of 75 years.

Table 1.1 explains the current 15-year composite life using the 1991 GAO report of allocations of total purchase price to intangible assets as claimed by taxpayers. Table 1.1 incorporates three erroneous assumptions (as to aggregate assets, discount rate, and accuracy of taxpayer allocations).

a. Aggregations. The most important question in evaluating the 15-year composite life is whether to look at aggregate assets as a revenue-generating pool that continues as units are replaced or as shorter-lived constituent units of the pool, which disappear after some time. A pond of water can be

²³Even for advocates of a consumption tax, which calls for a zero effective tax rate on all capital investments, second-best analysis requires that the tax treatment of debt needs to be a baseline by which to evaluate depreciation schedules. A consumption tax calls for zero tax on investment, not a negative tax subsidy. One of the advantages of a consumption tax is uniform tax rates on capital (of zero) and a system in which some investments get zero tax on return and some investments get high tax on return does not satisfy the consumption tax idea of tax neutrality among investments.

²⁴GAO, supra note 1.

looked at drop by drop or as a pool; a base of trained employees can be viewed employee by employee or by the employee base as a whole; and a customer base can be looked at overall by size or as small units by identity of the customers. Looking at the aggregate asset leads to accounting that reflects economic income. Looking at the asset unit by unit does not. A taxpayer does not lose any capital as smaller units disappear and are replaced, as long as the overall pool remains steady or increases. Looking at the assets as small, short-lived units would give the acquiring taxpayers deductions even when they are not suffering any economic losses when viewed overall. Giving deductions when the taxpayer is not suffering economic losses results in an economic tax rate on takeovers that is lower than the statutory tax rate.

Newark Morning Star Ledger v. Commissioner²⁵ involved the 1976 purchase of all the assets of several small city Midwestern newspapers, including the Ann Arbor Times and the Kalamazoo Gazette. The taxpayer allocated the total acquisition cost of \$328 million among assets, including \$71 million to an asset it called "existing subscribers." Subscribers eventually move, die, or just drop the paper. According to the taxpayer studies, resident turnover in Bay City is relatively low, with an average subscriber lasting for 23 years. In Ann Arbor turnover is higher, with the average subscriber lasting for 14.7 years. The acquirer amortized the cost it allocated to existing subscribers over the average subscriber life for that paper. The Third Circuit held against the taxpayer on the grounds that the subscription lists were just continued patronage and not distinguishable from general goodwill for a paper. The Supreme Court reversed 5-4 in favor of the taxpayer, with the majority accepting looking at the expected life of existing subscribers subscriber by subscriber, as in the taxpayer study. The majority held that the rationale for denial of amortization of goodwill was absence of proof of a definite life, and the taxpayer's studies had established a definite expected life for subscribers as individual units.

The Supreme Court erred in *Newark Morning Star Ledger*. The subscriber base of the acquired newspapers was growing during the years in question, not declining. The subscribers that dropped off during those years were replaced by new subscribers. Amortization and depreciation are supposed to represent loss of capital invested, and a newspaper does not lose capital or investment as subscribers turn over. Newspapers sell to porches. Assume, for instance, the newspaper delivers to porches at 4:30 a.m. One morning for one porch, a Smith is replaced

by a Jones. Who cares? The paperboy still throws one paper up on one porch. He never meets either Smith or Jones. For those years, the papers were adding porches.

The Mississippi River continues to have water in it. It is possible to view the Mississippi as just gallons of water that go by in two hours. Under that perspective the Mississippi would have a tax life of two hours. But of course the Mississippi is not dry after two hours. It is still the same river.

It is not an arbitrary decision whether to count by porches or subscribers. Counting porches — the number in the overall base — gets it right, and counting the identity of individual subscribers as if it mattered gets it wrong. The assumption of short life for a steady or appreciating customer base is just cherry-picking short-lived units out of an overall increasing aggregate asset and does not reflect the taxpayer's true economic income. As noted, giving amortization over 15 years for tax to an asset appropriately treated as having a 75-year composite tax life reduces the real tax rate on the acquisition of intangibles by more than half the statutory tax rate, from 35 percent to 15.8 percent. Corporate acquisitions are not economic activities encouraged by Congress with a lower tax rate when it knows what it is doing. Takeovers tend to be big octopus conglomerates swallowing up small hometown newspapers and the like.²⁶ The reduced rate seems to arise from mis-analysis because it is not what Congress usually wants to do.

The principle that would allow depreciation on a subscriber-by-subscriber basis would allow crop land and corporate stock to be depreciated harvest by harvest or dividend by dividend. The purchase price of land or stock is nothing but the present value of the annual cash flows — that is, the harvest or rents or the dividends and redemption proceeds. Professor Douglas Kahn has proposed a form of accelerated depreciation under which an acquirer could deduct the original present value purchase price of a cash flow like rent or dividend year by year, after the rent or dividend was received.²⁷ Land and stock are not depreciable, however, either under current law or as a matter of economics, because the stream of cash flows from the land and stock is infinite. After one year's cash flow goes by, there is

²⁵507 U.S. 546 (1993), rev'g 945 F.2d 555 (3d Cir. 1991).

²⁶Note 15, *supra*, lists the statutory provisions written to punish takeovers.

punish takeovers.

²⁷Douglas Kahn, "Accelerated Depreciation — Tax Expenditure or Proper Allowance for Measuring Net Income?" 78 Mich. L. Rev. 1 (1979). In Citizens and Southern Corp. v. Commissioner, 91 T.C. 463 (1988), aff'd, 919 F.2d 1492 (11th Cir. 1990) (per curiam), the taxpayer succeeded in applying the accelerated depreciation of Kahn's method to bank deposits, which were not declining as a whole.

no loss because the other future cash flows are now closer and have an appreciating present value. Looking at the land and stock unit by unit would allow the cost to be written off year by year under an accelerated schedule, even for land and stock that is getting more valuable because the cash flows are increasing.²⁸ Like the Mississippi River, land and stock continue.

If the costs of acquisition of new customers were treated as capital expenditures that increase basis, then it would be possible to keep the adjusted basis up to equal the value of the whole river by simultaneously deducting the cost of the old customers who leave and capitalizing — adding back into basis — the costs of new customers. It is now settled, however, that the costs of acquiring new customers is not a capital expenditure, because the costs create an asset that cannot be sold apart from the business as a whole.29 Indeed, a small city newspaper got new customers in the years at issue by running more comics or hiring more reporters for the garden show — that is, by all the ordinary and necessary expenses of running a good newspaper. The only way to capitalize the costs would be to mark the paper to market as it increased in value and find expenses enough to capitalize to get the basis up to value. The newspaper expenses that expire by year-end and are lost are indistinguishable from the expenses that sustain the current customer list and make it grow.

Companies without any goodwill or similar intangibles will tend to have contracting customer bases, and contracting employee workforces to go along. But companies have significant goodwill with a value over the value of tangible assets because customers are expanding. The more the goodwill at issue, the more likely that the customer base is expanding, not contracting. Within any sample in which there is significant goodwill, the safest assumption is that the customer base is growing, or at least that it is not contracting. The larger the percentage of intangible value of the firm over accounting-identified assets, the more likely the probable growth.

What is true of newspaper subscribers and other customer bases is also true of other aggregate assets. Trained employees quit or retire and have to be replaced by less-experienced employees. Still, we do not capitalize the increase in value of the employee base as replacements are hired and as employees as a whole become more experienced:

While the assembled work force might be subject to temporary attrition as well as expansion through the departure of some employees and the hiring of others, it would not be depleted due to the passage of time. . . . The turnover rate of employees represents merely the ebb and flow of a continuing work force. An employee's leaving does not interrupt or destroy the continuing existence of the whole. To the extent the leaving of any employee reduces the value of the assembled work forces as a whole this value would be restored by the hiring of a new employee.³⁰

Given that we do not (and perhaps cannot) capitalize the added value that new employees and added experience give to the employer, allowing a deduction for employees who leave over some average life of employment, or when they leave, would drop the adjusted basis for the employer's adjusted basis below its value. That would misdescribe income and yield too low an effective tax rate.³¹

To show the error in another way, assume that the average tenure of a professional baseball player is four years and that an investor buys an entire team and depreciates the cost of the franchise that is allocated to existing players' contracts over four years. After four years, the books report that the team has no players. How then does the team put nine men on the field every game?³²

Table 1.2 shows that if we correct the error of looking at small, short-lived units rather than the continuing aggregate, even taking taxpayer allocations and high discount rates as true, the appropriate composite life for intangibles in takeovers becomes

²⁸Johnson, "Kahn Depreciation and the Minitax Baseline in Accounting for Government Costs," *Tax Notes*, Dec. 30, 1991, p. 1523.

²⁹Reg. section 1.263(a)-4.

³⁰Ithaca Industry Inc. v. Commissioner, 97 T.C. 253, 267 (1991). ³¹Similarly for deposits in the bank, a bank does not lose anything as depositors turn over as long as the amount of deposits remains constant or grows. Taxpayers have both won and lost on the bad argument that a bank could amortize the core deposits purchased from another bank over the average life of deposits. See AmSouth Bancorp. v. United States, 681 F. Supp. 698 (N.D. Ala. 1988) (holding that core bank deposits were not amortizable); Contra Citizens & Southern Corp. v. Commissioner, 91 T.C. 463 (1988), aff'd, 900 F.2d 266 (11th Cir. 1990) (holding that core deposits were amortizable by accelerated method over average period deposit remains). See also Ithaca Industry, 97 T.C. 253 (arguing that amortization of bank deposits, deposit by deposit, ignores the replacement deposits in the same way that finding a declining asset in appreciating pools ignores the replacements). When deposits are increasing, however, looking only at the withdrawals but not the additions misdescribes the economic income of the bank.

³²Rev. Rul. 67-379, 1967-2 C.B. 127 (professional baseball player contracts depreciable); Rev. Rul. 71-137, 1971-1 C.B. 104 (professional football player contracts depreciable), allowed depreciation of the cost of a franchise allocated to existing players, but should not have.

Table 1.2. Aggregate Assets Have Indefinite Lives (Taxpayer Allocations) (dollars in billions)						
Total asset price: \$102.10		(1) Amount Allocated	(2) TP Claimed Life in Years	(3) Deduct/Year [Cols. (1)/(2)]	(4) Present Value of Col. (3) at 10% Over Col. (2) Years	
Goodwill		\$7.2	indefinite	\$0	\$0	
Non-goodwill customer base		\$10.5	indefinite	\$0	\$0	
Contracts		\$3.7	6.3	\$0.59	\$2.65	
Technology		\$2.1	6.4	\$0.33	\$1.50	
Statutory		\$3.4	10.6	\$0.32	\$2.04	
Workforce		\$1.2	indefinite	\$0	\$0	
Organization and finance		\$1.3	7.5	\$0.17	\$0.89	
Unidentifiable		\$1.2	8.9	\$0.13	\$0.77	
Sum: non-goodwill intangibles	\$23.40			Sum	\$7.85	
Total intangibles		\$30.55				
Total asset price						
Equivalent composite life		\$30.55	38	\$0.81	\$7.85	

38 years, not 15 years, as allowed by section 197. Table 1.2 treats customer and workforce base as non-depreciable because they have an indefinite useful life in the aggregate. When intangibles are significant, the customer and employee bases are expanding. When the customer or employee base is contracting, there is no value in excess of accounting assets. Taxpayers claimed the customer base lasted only 8.8 years and the employee base lasted only 8.8 years and the employee base lasted only 6.6 years, but for firms with significant goodwill, the better assumption is that the customer and employee base assets are growing and not depreciating. Table 1.2 uses the same, high 10 percent discount rate and takes taxpayer allocations and lives as to other intangibles as true as in Table 1.1.

b. Discount rates. Interest rates have plummeted since 1993 when section 197 was adopted. Lower discount rates lengthen the appropriate composite life. The 10 percent discount rate derived in Table 1.1 is 157 percent of the risk-free, long-term applicable federal rate (AFR) in August 1993 when section 197 was adopted.³³ With lower AFRs in March 2012, the same 157 percent of AFR is 4.1667 percent.³⁴ Table 1.3 derives a 23-year composite life, continuing the erroneous assumption that aggregates depreciation as individual units turnover, with the lower 4.1667 percent discount rate. Table 1.4 uses both the 4.1667 percent discount rate and nondepreciability of aggregates that are not depre-

ciating to derive a 71-year composite life. Tables 1.3 and 1.4 continue to take taxpayer claims on value and life of other short-life intangibles as true.

With the drop in discount rates and the correction as to aggregate assets, the appropriate composite life for intangibles becomes 71 years.

The discount rate used in the analysis will make a difference as to the appropriate composite life. Risk-free, long-term interest rates are now at 2.65 percent a year.³⁵ For a taxpayer in a 35 percent tax bracket, the risk-free rate translates into after-tax returns of 1.72 percent, that is, (1-35 percent) * 2.65 percent. Using the 1.72 percent for the analysis in Table 1.4, assuming mass assets do not depreciate, the appropriate tax life is 151 years, not 71 years. The discount rate used in Table 1.4 is, at 4.1667 percent, almost 2.5 times the after-tax safe discount rate per year. Table 1.5 shows the composite life under the logic of Table 1.4 for a range of discount rates.

The "updated" 4.1667 percent discount represents an annual interest cost that is 271 percent of the after-tax risk-free rate of 1.72 percent. While there is some risk that the acquirer will not be able to use future amortization deductions or that tax rates on the acquirer will go down, those risks seem sufficiently covered by a high rate that is more than 2.5 times higher than after-tax risk-free interest. This article will assume the 4.1667 percent rate.

If discounts rise again — because of economic recovery, inflation, or an increase in historically low interest rates — then we may need to return to the examination of the section 197 amortization life. We do not, however, need to maintain a discount rate

³³Long-term AFRs were 6.36 percent in August 1993 when section 197 was adopted (Rev. Rul. 93-51, 1993-2 C.B. 262); 10

percent divided by 6.36 percent is 157 percent.

34Long-term AFRs were 2.65 percent in March 2012 (Rev. Rul. 2012-9, 2012-11 IRB 475, *Doc 2012-3626, 2012 TNT 35-32*), and 157 percent of 2.65 percent is 4.1667 percent.

³⁵Rev. Rul. 2012-9 (long-term AFRs for March 2012).

Table 1.3. Discount Rates Drop to 4.16% From 10% (dollars in billions)						
Total asset price: \$102.10		(1) Amount Allocated	(2) TP Claimed Life in Years	(3) Deduct/Year [Cols. (1)/(2)]	(4) Present Value of Col. (3) at 4.166% Over Col. (2) Years ^a	
Goodwill		\$7.15	indefinite	\$0	\$0	
Non-goodwill customer base		\$10.5	8.8	\$1.19	\$8.64	
Contracts		\$3.7	6.3	\$0.59	\$3.20	
Technology		\$2.1	6.4	\$0.33	\$1.81	
Statutory		\$3.4	10.6	\$0.32	\$2.70	
Workforce		\$1.2	6.6	\$0.18	\$1.03	
Organization and finance		\$1.3	7.5	\$0.17	\$1.10	
Unidentifiable		\$1.2	8.9	\$0.13	\$0.99	
Sum: non-goodwill total	\$23.40			Sum PV:	\$19.47	
Sum intangibles		\$30.55				
Equivalent composite life		\$30.55	23	\$1.34	\$19.47	

^aAll of the present values in column (4) are computed with the standard present value of an annuity formula. For the composite life, the present value is \$2.04\$ billion * $[1-(1+10\%)^{-38}]/10\% = 15.43 .

Total asset price: \$102.10		(1) Amount Allocated	(2) TP Claimed Life in Years	(3) Deduct/Year [Cols. (1)/(2)]	(4) Present Value of Col. (3) at 4.166% Over Col. (2) Years ^a
Goodwill		\$7.15	indefinite	\$0	\$0
Non-goodwill customer base		\$10.5	indefinite	\$0	\$0
Contracts		\$3.7	6.3	\$0.59	\$3.20
Technology		\$2.1	6.4	\$0.33	\$1.81
Statutory		\$3.4	10.6	\$0.32	\$2.70
Workforce		\$1.2	indefinite	\$0	\$0
Organization and finance		\$1.3	7.5	\$0.17	\$1.10
Unidentifiable		\$1.2	8.9	\$0.13	\$0.99
Sum: non-goodwill total	\$23.40				
Sum all intangibles		\$30.55			\$9.79
Equivalent composite life		\$30.55	71	\$0.43	\$9.79

^aAll of the present values in column (4) are computed with the standard present value of an annuity formula. For the composite life, the present value is 2.04 billion * $[1-(1+10\%)^{-38}]/10\% = 1.43$.

Table 1.5. Composite Life With Various Discount Rates (aggregates not depreciable)							
Discount Rate Argument Discount Rate Composite Life With Infinite Life for Aggregates							
After-tax risk-free rate	1.72%	151 years					
Update 1993 10% for new AFR	4.167%	71 years					
5% for debt plus 2.9% current inflation ^a	7.9%	44 years					
7% for long-term equity plus 2.9% for current inflation	10%	38 years					
^a Bureau of Labor Statistics, "Economic News Press Release" (Feb. 17, 2012) (Consumer Price Index for January 2012)							

that is 271 percent of the after-tax risk-free rate. This proposal uses that high rate primarily to maintain continuity with the decisions of 1993, including a 10 percent discount rate. If we ever go back to an appropriate 10 percent discount rate, however, then

we would be talking about 38-year amortization rather than the 71-year composite life calculated in Table 1.5.

c. Taxpayer allocations and lives. Tables 1.1-1.5 are based on taxpayer allocations of the purchase price among intangibles in the sample in the 1991

GAO report. The allocations were reported by the acquiring taxpayer without an adverse party. The sellers were not hurt by allocations of the purchase price away from goodwill and over to short-life intangibles.³⁶ The cottage industry of experts organized to justify allocations away from goodwill were doing advocacy work, pushing the envelope as far as they thought they could. The experts were implicitly paid because of the value that they added to the allocations, shortening the overall life.

In retrospect, we can see gross overvaluations of short-term assets that survived not only IRS challenge but also litigation all the way through the Supreme Court. In Newark Morning Star Ledger, for example, the acquirer allocated \$71 million of acquisition cost to existing customers for each acquired newspaper, which was the asset at issue in the case. The taxpayer hired four sophisticated experts to justify the allocation of \$71 million away from goodwill. Those experts determined the value of the customer base by determining a present value for the gross revenues from the subscribers' fees, subtracting only the modest costs of collection. The valuation method ignored all the costs of running a newspaper. Customers do not pay unless they get a newspaper.

For those small city newspapers, there was a non-subtle difference between revenues and net income. In 1991 the newspaper industry reported a net profit margin of 3.3 percent for the entire business, and between 1988 and 1991, the profit margins varied from 3.3 to 7.8 percent.³⁷ New investors apparently were willing to accept such low profit margins because the newspapers gave the owner voice and influence as well as monetary returns. On the basis of those profit margins, net profit could be expected to be between 3.2 and 7.2 percent of the revenues.³⁸

Investors who buy assets pay for the present value of net income, not gross revenues, because

they cannot get the revenue without paying the expenses. Thus, if we take the taxpayer's assumption on all issues but move from a revenue to a net profit figure, the true value for the existing customer base was between \$2.3 million and \$5.5 million.³⁹ The taxpayer's experts thus overvalued the subscriber asset by between 14 and 31 times the true present value of the net profits and avoided correction of the error all the way through the Supreme Court. That is well in excess of the four times valuation that is labeled gross overvaluations and subject to penalties of 40 percent of the tax.⁴⁰ Given the results in litigation at the highest level, when the taxpayer allocations are not challenged, we cannot assume that they are reasonably accurate, especially when the taxpayer has hired experts to make his case.41

Table 1.6 has the same assumption as Table 1.4 (for example, using that 1991 GAO sample, 4.1667 percent discount rate, and nondepreciability of aggregate assets), but it follows the IRS recommendations recharacterizing some part of the shorter-term intangibles as goodwill and lengthening some asserted tax lives. ⁴² The GAO sample is of unsettled, open audit issues. As shown by the customer base in *Newark Morning Star Ledger*, even the postlitigation results can be gross overvaluations.

As shown in Table 1.6, if we take the IRS reallocations as closer to the real allocations, then the appropriate composite tax life becomes 82 years. We should be skeptical that IRS adjustments were sufficient to reach the appropriate composite life to describe the intangibles economically, given the litigation history of the *Newark Morning Star Ledger*.

The Joint Committee on Taxation does the revenue estimates that are used by Congress to make legislative decisions. The 15-year life adopted in

³⁶For sales before 1986, as in *Newark Morning Star Ledger*, a corporate seller recognized no gain on sale of intangibles, no matter what the life of the intangible. For sales after 1986, the corporate seller paid the same tax rate whether the asset was considered ordinary or capital, or short- or long-term gain. For sellers that were passthrough entities, intangibles were capital assets regardless of whether the intangible had indefinite life.

assets regardless of whether the intangible had indefinite life.

3747 Value Line Investment Survey No. 38, at 1806 (June 5, 1992).

^{1992).} 38 Profit margins are conventionally stated as profit as a percentage of costs. The formula to convert to profit as a percentage of revenue is:

profit/revenue = profit margin/(profit margin + 100 percent).

The 100 percent in the formula represents the costs. Profit margin plus 100 percent represents revenue, or costs plus profit margin.

³⁹3.2 percent of the \$71 million claimed on the basis of gross revenue is \$2.3 million present value for the existing customers, and 7.2 percent of the \$71 million is \$5.5 million. The IRS at trial offered proof that it was possible to reproduce the existing subscribers by expenditures; for instance, for advertising and circulation drives of \$3 million (734 F. Supp. at 183-184), which is within range of the net present value of net profit.

⁴⁰Section 6662(h).

⁴¹The gross over-valuation that the taxpayer got away with in *Newark Morning Star Ledger* also shows the wisdom of composite lives. Allocations between goodwill and customer base or any other intangible is subject to gross misvaluations. The system is not able to handle sophisticated proofs. If such gross overvaluations survive in Supreme Court litigation, then the valuations claimed on a tax return are limited only by the clear blue sky.

⁴²The IRS challenges depreciability as to some fraction of the intangible assets and the lives, but it apparently did not have enough information to challenge the value allocated to short-life assets — or at least it is difficult to see revaluations in the sample as presented.

Table 1.6. IRS Recharacterizations (4.16% discount) (dollars in billions)							
	(1) Percentage of Asset IRS Recharacter- ized as Goodwill	(2) Goodwill After Recharacter- ization	(3) Not Goodwill After Recharacter- ization	(4) Tax Life	(5) Amortization/ Year	(6) Present Value at 4.16%	
Total goodwill including recharacterization		\$13.32		indefinite	\$0	\$0	
Non-goodwill customer base	45.70%	\$4.80	\$5.70	indefinite	\$0	\$0	
Contracts	19.60%	\$0.73	\$2.97	7.2	\$0.41	\$2.53	
Technology	8.20%	\$0.17	\$1.93	6.8	\$0.28	\$1.65	
Statutory	7.10%	\$0.24	\$3.16	11.9	\$0.27	\$2.45	
Workforce	10%	\$0.12	\$1.08	indefinite	\$0	\$0	
Organization and finance	6.40%	\$0.08	\$1.22	9.1	\$0.13	\$1	
Unidentifiable	2.70%	\$0.03	\$1.17	7.6	\$0.15	\$0.98	
Sum:		\$6.17	\$17.23			\$8.60	
Sum all goodwill	Nw GW	\$13.32					
Equivalent composite life	composite		\$30.55	82	\$0.37	\$8.60	

1993 was revenue neutral — not under the 1991 GAO sample — but under a JCT sample that was never published. The 1991 GAO sample is used here only as a proxy for the unpublished JCT sample by which it did its revenue estimate. The JCT took prior law as a base, so if prior results were more generous than economic depreciation, that would be reflected in the 15-year life. Then again, tables 1.5 (based on taxpayer claims on allocations) and 1.6 (based on IRS claims) take the then-current law as a given. The 75-year composite life recommended here is between the 71-year life (if taxpayers prevailed in full) and the 81-year life (if the IRS prevailed in full), leaning in favor of the taxpayers' claims.

An alternative source of data would be how firms report goodwill under the current GAAP standards, which do not require amortization over any period unless the intangible asset becomes impaired, meaning that its fair market value drops below its cost. One would expect that self-serving firms reporting under SEC rules would ordinarily overestimate the value and life of intangibles to bolster earnings reported to their shareholders and potential investors. Conformity to GAAP would then probably require tax lives longer than 75 years, perhaps considerably longer. The real tax lives of acquired intangibles is in some sense unknowable, since all tax lives are statements about a future that has not happened. The 1991 GAO study with adjustments as explained is used here as the best proxy for composite economic life under prior law.

The 75-year composite life is overall quite protaxpayer. It uses a relatively high discount rate, an allocation to short-life assets closer to taxpayer claims than to IRS claims. It does, however, correct *Newark Morning Star Ledger* as to overall aggregates and would not result in a loss as customers turn over.

2. The alternative 'no net revenue by sale' standard.

a. 15-year flunks. An alternative standard by which to judge the 15-year life is whether the life imposes zero tax on the sale, looking to both the seller's tax on the sale and the buyer's tax savings via amortization. If the composite life is set to ensure that the present value of the amortization deduction just offsets the tax paid by the seller, then there is zero revenue from the sale, with neither a subsidy nor a tax burden on the sale transaction.⁴³

The "no net tax on sale" standard would require extending the composite tax life for acquired intangibles from 15 years to 48 years, at least when the selling entity passes capital gains tax through to individual owners. The 48-year life is not as long as the 75-year life to reach a description of the buyer's economic income, which is defended next as the superior goal, but is a significant extension of the current 15-year life.

At current discount rates, the present value of the added amortization deductions over 15 years, added on the buyer's side, will ordinarily exceed the tax taken out on sale. Table 2.1 shows a corporate buyer

⁴³See Jane Gravelle and Jack Taylor (Congressional Research Service), "Tax Neutrality and the Tax Treatment of Purchased Intangibles," 40 *Nat. Tax J.* 77 (Mar. 1992) (arguing that purchased assets must catch up with developed assets for economic efficiency).

Table 2.1. Value-Added by Tax With 15-Year Amortization and 4.16% After-Tax Discount Rate						
(1)	(2)	(3)	(4)	(5)	(6)	
Basis: Assumed Unit	Amortization Per Year: ½15 of Col. (1)	Tax Savings Per Year to Corporate Acquirer: 35% * Col. (2)	Present Value of (3) for 15 Years at 4.16% Under Standard PV of Annuity: Col. (3) * [1-1/ (1+4.17 ⁵]/4.17%	Less Tax on Other Side: 15% * Col. (1)	Net Tax- Provided Subsidy: Cols. (4) - (5)	
\$100	\$6.67	\$2.33	\$25.61	(\$15)	\$10.99	

Table 2.2. No Negative Tax on Sale From Passthrough to Public Corporation						
(1) Discount Rate Argument	(2) Discount Rate	(3) Amortization Period for No Subsidy to Sale	(4) Economic Depreciation and Match Buyer Debt (Table 1.6)			
After-tax risk-free rate	1.72%	117 years	175 years			
Update 1993 10% for new AFR	4.167%	48 years	82 years			
5% for debt plus 2.9% current inflation ^a	7.9%	28 years	52 years			
7% for long-term equity plus 2.9% for current inflation	10%	20 years	44 years			
^a Bureau of Labor Statistics, "Economic News Press Releas	e" (Feb. 17, 2012) (Cons	umer Price Index for Jan	nuary 2012)			

with a 35 percent tax rate and an individual or a passthrough entity seller with a 15 percent tax rate. It assumes the 15-year composite tax life from section 197 and uses the 4.1667 percent discount rate. As Table 2.1 shows, tax will add value of 11 percent of the purchase price under the assumptions.

Adverse parties selling the business will increase the purchase price to share the value of the 11 percent subsidy by some fraction between them. We should expect the purchase price of intangibles to settle between a range of 117 and 134 percent of the price paid with stock in an acquisitive reorganization where no section 197 asset is created. At the top of the range, the seller will get all the value of the subsidy, and at the bottom of the range, the buyer will get all the value.⁴⁴

Section 197(f) tries to prevent the presumptively advantageous 15-year amortization when the buyer and seller are related or when the property is already used by a related party, but as shown, the valuable 15-year amortization can and will be used

even in sales between strangers adverse as to price who still share the tax benefits in some proportion. With the 15-year amortization period, we should expect the negative tax subsidy to induce large corporate takeovers of small mom-and-pop businesses that would not occur absent tax.

We could stop the negative tax and reach zero net tax on a sale by extending the amortization period. Table 2.2 shows the break-even amortization period, with a corporate acquirer (35 percent rate) and a passthrough seller (15 percent capital gains rate), and a 4.1667 percent discount rate. For comparison, column 4 of Table 2.2 brings over the lives supporting 75 year lives at a 4.166 percent discount rate, but using other discount rates.

The life necessary to prevent a subsidy to a taxable takeover is 48 years, at the preferred 4.1667 percent discount, extended from 15 years under section 197. The life to prevent negative tax is longer than 15 years for the full range of discount rates, but is not as long as the lives necessary to reach economic depreciation and be compatible with debt under the best estimate of life.

When the acquirer is another corporation bearing tax at 34 percent or 35 percent and not a passthrough entity owned by individuals, there is no lower rate on capital gain because corporations are not eligible for it. With buyer and seller paying at roughly the same rate, recovery of basis over 15 years cannot catch up with the immediate tax on the seller's side, except by immediate expensing of the

 $^{^{44}\}text{To}$ make the seller prefer a taxable sale instead of a reorganization or keeping the business, the purchase price will need to be grossed up to include the extra capital gains tax on the extra purchase price. If we use \$100 as pretax value, the seller must get amount x such that x - 15 percent * x = \$100. So x * (1-15 percent) = \$100. So x = \$100/(1-15 percent) or \$117.65. More generally, if the seller's tax is at rate ts, the grossed up amount is \$100/(1-ts). The buyer will get amortization deductions in a taxable purchase with present value of the amortization deductions over 15 years of 25.61 percent of the purchase price (see Table 2.1, col. (4)). The buyer will prefer a taxable purchase to a tax-free acquisitive reorganization with \$100 of stock, if it pays less than y, such that y - 25.61 percent * y = 100. So y = \$100/(1-25.61 percent) = \$134.43.

acquirer's costs of the intangible.⁴⁵ In general, then, the subsidy for a taxable sale event measured by the standard of net present value of the buyer's tax savings less the seller's tax is available for large corporations swallowing small businesses that are eligible for passthrough treatment, but not for sales from one large corporation to another.

b. Inappropriateness of zero revenue standard. Extending the section 197 tax life to prevent a subsidy to a taxable sale is a necessary, but not sufficient, goal. Intangibles are already oversubsidized in comparison with other investments. Giving zero net-tax on-sale treatment to section 197 intangibles would worsen the over-subsidization of investment in intangibles relative to competing investments and increase the distortions that tax causes to rational (pretax) economic investments.

Investments in the development of section 197 intangibles are not taxed as they are made. Indeed, the ability to get into an investment with an exclusion or deduction of the costs ordinarily means that tax does not reduce the pretax IRR from the investment. Combining an ordinary deduction for the inputs into an intangible investment with capital gains for the return will turn a 10 percent pretax rate of return into a 25 percent post-tax rate of return.46 To accomplish a mere zero tax rate on investments in intangibles and avoid the negative tax subsidy, it is necessary to tax all returns from the sale of goodwill and other intangibles at the full, ordinary tax rate.47 Indeed, another Shelf Project proposal has recommended that sale proceeds of intangibles must always be considered ordinary to prevent the negative tax rate. Investments in intangibles are also commonly eligible for a 20 percent tax credit for the expenses and an exclusion of 9 percent of revenue as domestic manufacturing.48 Even taxing the full proceeds at 35 percent would not then avoid a negative tax rate.

If we combine ordinary income tax on sale proceeds of goodwill with the no-net tax on sale standard, then all purchases allocated to section 197 intangibles must be expensed when made — an amortization period of zero — to refund the tax collected from the seller. Under the Cary Brown thesis, expensing is equivalent to ensuring that tax does not reduce the purchaser's pretax IRR from the investment. The standard thus would force no tax on investments in intangibles ever, even on realization on sale of the investment. Indeed, if we recapture some of the research and experimentation credit on sale to prevent a negative tax for the seller, then reaching zero net tax on sale would mean the purchaser would have to be given a position better than no reduction of pretax returns. If the seller combines the interest deduction from debt financing of a corporate acquisition with a tax treatment that does not reduce the pretax return, those acquisitions become an extraordinary tax shelter.⁴⁹ Those investments are not especially or demonstrably meritorious enough to deserve subsidy. Indeed, creation of computer games with dubious externalities such as Dead Zone IV and Doom III turns out to be among the most heavily subsidized industries in America.⁵⁰

We do not generally try to reach zero net tax on sale for other assets. The American tax system is a realization system under which real economic gains in terms of the taxpayer's command on resources are not recognized by the system until realization, and realization is the only source of revenue for the federal government. A zero net tax on sale would give up tax at the only event by which the tax system recognizes economic values the taxpayer has achieved. In 1982 the American Law Institute recommended to Congress that it allow a corporation to pay no tax on a sale of its assets as long as the buyer took a carryover basis in the assets and the corporate seller's shareholders recognized tax.⁵¹ Congress rejected the proposal in 1986 as "not consistent with an income tax,"52 although it did adopt other, revenue-raising parts of the 1982 ALI report. There is no talk of imposing shareholder tax on section 197 intangible sales, so that the standard would give intangibles (and only intangibles) a tax

⁴⁵There is still some negative tax available on sales between corporations, because taxable sales of businesses for buyer debt obligations are eligible for installment sale treatment. Under section 453, a seller may defer tax until buyer "installment" notes are paid, reporting the fraction of the total gain equal to the fraction of total payments that are received in any period. With buyer debt obligations over a 15-year duration, the buyer's 15-year amortization can be worth more than the seller's tax even though they pay tax at the same rate. Section 453A, however, imposes an interest charge on the tax deferred after an exemption for the first \$5 million of installment notes, and for a taxable takeover of all the assets of a company, a \$5 million exemption will not usually cover all the gain.

⁴⁶Johnson, "Sale of Goodwill and Other Intangibles as Ordinary Income," *Tax Notes*, Jan. 14, 2008, p. 321, *Doc* 2008-331, 2008 *TNT* 10-31.

 $^{^{47}}Id.$

⁴⁸Johnson, "Capitalize Costs of Software Development," *Tax Notes*, Aug. 10, 2009, p. 603, *Doc 2009-15569*, 2009 *TNT 151-9*.

⁴⁹Johnson, "Tax Shelter Gain: The Mismatch of Debt and Supply Side Depreciation," 61 *Texas L. Rev.* 1013 (1983).

⁵¹ALI, "Federal Income Tax Project: Subchapter C," 169 (1982) (allowing a corporate seller to drop assets to be sold into a selling-vehicle subsidiary and selling the stock).

⁵²See, e.g., JCT Chief of Staff David Brockway, "Corporate Acquisitions," in *Corporate Tax Reform: A Report of the Invitational Conference on Subchapter C*, 81-127 (1988) (arguing that carryover basis rules are not consistent with an income tax).

treatment even more generous than the one Congress rejected in 1986 for corporate assets in general. Current law imposes net positive taxes on sales of assets in general.

Both section 368 corporate reorganizations and section 1031 like-kind exchanges give zero net tax on sale. The seller need not recognize the gain built into the transferred assets, but basis does not increase so that built-in gain will be recognized eventually. Other Shelf Project proposals would repeal or mostly repeal the nonrecognition from reorganizations and like-kind exchanges and impose positive tax on those transactions, at least at capital gains rates.⁵³ Revenue for the impending budget catastrophe needs to be imposed on the no tax or negative tax transactions before the tax rate is raised on transactions already bearing tax.

We could both get more revenue from intangibles for the benefit of the impending budget catastrophe and create no added tax on sale by using more mark-to-market techniques. For publicly traded companies, the data on the value of corporate assets to run a mark-to-market system are readily available.⁵⁴ With that kind of system, ownership could pass freely to the highest bidder without a tax on the transfer. But a zero tax on sales of intangibles, without a mark-to-market collection of the revenue, reduces revenue at a time in which the country desperately needs it.

C. Explanation of the Provision

The proposal would amend section 197(a) to provide that the adjusted basis of section 197 intangibles shall be amortized over 75 years instead of over 15 years.

⁵³Johnson, "Impose Capital Gains Tax on Like-Kind Exchanges," *Tax Notes*, Oct. 27, 2008, p. 475, *Doc 2008-21521*, 2008 *TNT 209-22*; Johnson, "Taxing the Publicly Traded Stock in a Corporate Acquisition," *Tax Notes*, Sept. 28, 2009, p. 1363, *Doc 2009-20143*, 2009 *TNT 188-13* (but allowing nonrecognition for mergers and acquisitions with stock of non-publicly-traded corporations).

⁵⁴See, e.g., Joseph Dodge, "A Combined Mark-to-Market and Pass-Through Corporate-Shareholder Integration Proposal," 50 Tax L. Rev. 265, 194 (1995); David Weisbach, "A Partial-Mark-to-Market System," 53 Tax L. Rev. 95 (1999); Johnson, "Replace the Corporate Tax With a Market Capitalization Tax," Tax Notes, Dec. 10, 2007, p. 1082, Doc 2007-26347, or 2007 TNT 238-36.