The Incredible Shrinking Domain of Corporate Stock

By Calvin H. Johnson

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Twenty-five years ago, Johnson notes, the best tax vehicle for a business enterprise was clearly growth stock, in which the corporation accumulated its earnings. The growth stock strategy was so advantageous that shareholders could tolerate managers taking rents out of the corporation in excess of the value they added. With the drop in individual rates, however, using a corporation subject to section 11 tax is getting very hard to justify. Corporate stock is clearly rational only as an estate-planning device for investments that will benefit from the step-up in basis at death. For very-long-term investments, Johnson explains, corporate stock might be justified if it causes sufficiently higher pretax return to the enterprise, if it convinces investors to accept sufficiently lower after-tax returns, or if corporations have sufficiently better access to tax shelters. As the term of the investment gets shorter, however, the tax barriers to use of corporate stock get higher. At investment terms of, say, five years, Johnson concludes that the barriers to use of the corporate form look insurmountable.

Twenty-five years ago it was well known that the way to get rich was to form a growth corporation for a profitable business enterprise and exploit the accumulation-bailout strategy. The section 11 corporate tax is a double tax, in addition to shareholder tax, but “bailout” means the shareholder tax on the termination of the investment is at capital gains rates. Individual tax rates were so high 25 years ago that the double-tax combination of corporate and capital gains tax would be two to three times better than a single individual tax for a long-haul investment. Corporate managers loved the growth stock strategy because accumulating earnings increased their domain. All tax students learned, down to their marrow, that the “growth stock” or “accumulation-bailout” strategy was best. All the teaching and practitioner books were written that way.

The days of easy accumulations of earnings are over. Individual rates have dropped so much that the domain in which growth stock strategy is tax minimizing is modest, maybe even uninteresting. Corporate stock is clearly rational only as an estate-planning device for investments that will benefit from the step-up in basis at death. For very-long-term investments, Johnson explains, corporate stock might be justified if it causes sufficiently higher pretax return to the enterprise, if it convinces investors to accept sufficiently lower after-tax returns, or if corporations have sufficiently better access to tax shelters. As the term of the investment gets shorter, however, the tax barriers to use of corporate stock get higher. At investment terms of, say, five years, Johnson concludes that the barriers to use of the corporate form look insurmountable.

For most investment needs, the best advice now is to avoid the corporate tax. The rule of thumb is that new enterprises should use a pass-through entity taxed as a partnership. A publicly traded vehicle cannot be a pass-through entity, but when the enterprise gets big enough to go public, it needs to have enough debt that interest payments zero out all the income that would otherwise be subject to corporate tax. Established corporations need to buy back their stock with debt from shareholders ready to sell. The wisdom of avoiding section 11 does not cover all the ground of investment needs, but it covers most of it. In any event, the glory days of the C corporation, when accumulation gave managers an easy tax cushion, seem to be over. It is no
longer credible for managers to tell their shareholders, “Just trust me, and leave your earnings to accumulate,” because the tax system no longer supports it. The tax changes that have so shrunk the rational domain of corporate stock seem to be underappreciated. President Reagan, for instance, said that corporations should not pay tax, and yet he presided over a change to the tax-rate system that should have exterminated the regular C corporation had it lasted. President Clinton’s official position was that corporations should pay more taxes, but his administration presided over an increase in individual rates that saved the corporation from extinction, at least for estate planning. The parties who debated the legislation that caused the flips in best choice of entity seem clueless as to what is about to happen.

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Analysis itself seems subject to both inertia and self-serving biases. Advisers trained more than 25 years ago learned that accumulating earnings was best and when that learning became terrible advice, the old ways of thinking did not disappear. Corporate managers have not been eager to explain to their shareholders when accumulating earnings within the corporation was a bad economic decision, nor indeed when corporate stock as a whole is a decidedly inferior investment given the strong influence of tax. Tax professors have kept teaching the same old tax doctrines on accumulation-bailout, even when the economic rationale for the game has been sucked out of it. Indeed, given the presumption of the economics profession that investors maximize their after-tax income and adjust rapidly to new information, the economic reactions to the changes seem surprisingly sluggish.

1Wilbur Parker, “Reagan Says Reform, Corporate Tax Rise May Not Mix,” Tax Notes, Feb. 18, 1985, p. 625 (quoting President Reagan that businesses should not pay more tax because “only people pay tax”).

2Cf. Democratic Study Group, House of Representatives, “DSG Calls Proposed Corporate Tax Rate ‘Historically Low.’” Tax Notes, May 29, 1993, p. 1077 (supporting President Clinton’s call for an increase in corporate tax rates to 36 percent).


Movements by corporations responding to tax planners may even have been in the wrong direction. The devastating shifts against the corporation have been against a background of dramatic drops in statutory and effective tax rates. All three of the progressive taxes on capital that influence choice of entity — corporate, individual, and capital gains tax rates — have dropped significantly over the last 25 years. But because it is the relationship between tax rates, and not the overall level of rates, that matter for entity choice, changes in the choice have commonly been counterintuitive.

The choice of optimal tax entity has also been unstable over the last 25 years, at least for very-long-term investments. If we assume a long 35-year period before the investment is turned into cash and assume that dollars of taxable income are subject to maximum tax rates at the margin, there have been five flips in the optimal tax entity. Avoiding corporate tax was sometimes the best choice for postdeath or dynasty savings and sometimes not. Still, the overall trend is unambiguous. Twenty-five years ago, the growth stock strategy gave a dramatic advantage in after-tax terminal value, which allowed much room for manager rents, and now the growth stock strategy has become largely a tax disadvantage.

What a tax planner needs to know now, of course, is not history but the future. The future is, unfortunately, harder to describe. If the turbulence on this issue of the last 25 years is any indication, things will be very different in 25 years and will vary widely in the interim.

The instability of the recent past seems to reinforce the wisdom of avoiding section 11, at least to keep options open. Investors can go into section 11 corporations tax-free, but they can pull assets out of the reach of section 11 only by recognizing gain on stock and gain, if any, on the distributed assets. The wisdom of keeping your options open weighs heavily on the side of avoiding the corporate form.

This report adopts terminal value of an investment as a yardstick to measure choice of entity and distribution decisions. The report assumes an underlying business enterprise that makes a dollar a year. The owners reinvest the entire after-tax proceeds of the dollar and draw out the entire terminal value at once at the end of the period. The first, baseline assumption is for an

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2Alvin Warren, “The Timing of Taxes,” 29 Nat. Tax J. 499 (1986) uses terminal value to compare corporate decisions, and this model varies only in using an assumed annuity instead of a single payment.
investment of 35 years until the terminal point, which means we are talking about investing roughly for one’s entire working career, say from 35 years old to 70. Savings for retirement, covered by the 35-year assumption, is not the only reason people save, but it is an important part of saving.

The pretax terminal value of an annuity of $1 a year reinvested for n periods at rate R is \( \frac{1 - (1+R)^{-n}}{R} \) per dollar. It is assumed initially that the pretax return or interest rate for both the owner (rate R) and the enterprise (rate R) on reinvestment of the business income will be 10 percent per year. In absence of tax, the terminal value with n = 35 and R of 10 percent would thus be $271. The 10 percent rate was once a fair market value rate, but with the drop in inflation, the 10 percent rate is now just a simple baseline assumption used to judge all other computed rates. The assumption of what is now a high rate of interest favors use of the corporation, so the assumption is adverse to the conclusion reached here that corporate stock is hard to justify.

It is assumed initially that both corporations and individuals are subject to maximum statutory rates. Variations in the tax rates, period n, and rate of return R, and R will be brought in after looking at the baseline case. The report will first trace a history of the corporate form over the last 25 years using maximum statutory tax rates for the $1-a-year enterprise. It will then map when the accumulating corporation might catch up with forms that avoid corporate tax under current conditions, including real or effective marginal tax rates that are considerably lower than the maximum statutory rates.

### I. Twenty-Five Years of Corporate History

#### A. Growth Stock in the Classical Period

At the start of the 25-year period in 1979, the “accumulation-bailout” or “growth stock” strategy was clearly the best for tax purposes. Pre-1981 is the “classical” system. Much of tax law was formed around use and abuse of the accumulation-bailout strategy. The growth stock strategy also provided the framework for tax professionals’ intuition or judgment about tax strategy. That intuition suited corporate managers just fine, so it was built into institutions and attitudes.

Table 1, above, shows the terminal value of $1 a year of profit invested for 35 years, and this text explains its rationale. In Table 1 and throughout, the best strategy for savings needed during life is marked in bold, and the best strategy overall, including for distributions to heirs, is marked in italics.

<table>
<thead>
<tr>
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<th>(1) Immediate Dividends</th>
<th>(2) Zero Out</th>
<th>(3) Accumulation-Capital Gain During Life</th>
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<td>Algebraic description</td>
<td>( \frac{S^1(1-Tc)(1-t)^r}{(1+r(T-R))^{n-1}} )</td>
<td>( \frac{S^1(1-t)^r}{(1+r(T-R))^{n-1}} )</td>
<td>( \frac{S^1(1-Tc)}{[[1+R^*(1-Tc)]^{n-1}]} )</td>
<td>( \frac{S^1(1-Tc)}{[[1+R^*(1-Tc)]^{n-1}]} )</td>
</tr>
<tr>
<td>Pre-1981</td>
<td>$9.79</td>
<td>$18.14</td>
<td>$38.17</td>
<td>$53.01</td>
</tr>
<tr>
<td>As percent of zeroing out</td>
<td>54%</td>
<td>100%</td>
<td>210%</td>
<td>292%</td>
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#### Table 1. Comparison of Terminal Values Before 1981 for $1 a Year of Profit

(1) Corporate tax rate T, of 46%, individual tax rate t of 70%, capital gain rate cg of 28%, and n of 35 years investing until terminal value.

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8If the enterprise makes $1 a year, it will invest the first dollar for n-1 periods, the second dollar for n-2 periods, and the last dollar for no periods. Algebraically, under the logic of compound return, the terminal value of $1 a year reinvested at rate R, after n years is

\[
(1)\quad S\frac{(1+R)^{n-1} + S^1(1+R)^{n-2} + \ldots + S^1}{R}
\]

Series analysis reduces expression (A1) to a single algebraic expression with no unstated terms if we both multiply and divide expression A1 by \([1+R]-1\), which does not change the value of expression A1. The multiplication of expression A1 by \((1+R)-1\) creates two parallel series in which the negative of the original series (reached by multiplying by \(-1\)) cancels out the positive term that immediately precedes in the parallel second series (reached by multiplying by \((1+R)\)). The result is two terms \((1+R)\) and \(-1\) with no unstated terms. Then the divisor \((1+R)-1\) simplifies to R and the whole terminal value of $1 a year is \( S\frac{1}{[1+(1+R)-1]} R \).

9Shareholder double tax commonly tips the balance in favor of avoiding the corporate form, but shareholder tax can be delayed by delaying sale of stock or distributions with respect to stock. The present value of the delayed shareholder tax is smaller with high discount rates, and 10 percent is now a high discount rate.

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Algebraically, $1 of earnings is subject to tax at corporate rate, \( T_c \), leaving $1*(1-T_c). The $1*(1-T_c) is distributed to shareholders who pay tax at the maximum individual rate, \( t \), leaving $1*(1-T_c)*(1-t) after tax. The individual shareholder thereafter invests the after-tax proceeds in a publicly available investment paying rate \( r*(1-t) \) after tax. The terminal value of an annuity is \([(1+R)^n-1]/R, for period n and rate R, so that the after-tax terminal value of the dividend from the $1-a-year enterprise is

\[
(1) \quad \$1 \cdot (1-T_c) \cdot (1-t) \cdot \frac{[(1+r \cdot (1-t))^n-1]}{r \cdot (1-t)}
\]

In 1979-1980 the maximum tax rate \( T_c \), under section 11 was 46 percent and the maximum individual tax rate on investment income was 70 percent, so that expression (1) becomes

\[
(1A) \quad \$1 \cdot (1-46\%) \cdot (1-70\%) \cdot \frac{[(1+10\% \cdot (1-70\%))^{35}-1]}{10\% \cdot (1-70\%)}
\]

\[
(1B) \quad 54\% \cdot 30\% \cdot \frac{[(1+3\%)-3]}{3}\%
\]

\[
(1C) \quad 16\% \cdot 60.46 = \$9.79
\]

which is shown in column (1) of Table 1. Forming a C corporation and distributing the proceeds as dividends currently was the worst tax choice you could make before 1981.

b. Avoiding corporate tax. Column (2) (zeroing out) assumes that the enterprise avoids section 11 corporate tax, but that individual owners pay tax on the income from the enterprise immediately. Income of the enterprise will pass through to the owners if the enterprise is a sole proprietorship, a partnership, a limited liability company taxed as a partnership, or an S corporation. Real estate investment trusts avoid section 11 almost entirely because they get a deduction for dividends paid to owners, and they distribute their earnings currently to take advantage of the deduction and to maintain their eligibility as a real estate investment trust.

Enterprises that cannot avoid section 11 in full can nonetheless avoid section 11 to the extent that they can get amounts out to owners in the form of deductible expenses. Pass-through treatment for the entire enterprise is not available if ownership interests are publicly traded — indeed, even if the shares are traded only on a loosely organized market of broker quotations.\(^\text{9}\) S corporation status that avoids corporate tax altogether is not available for corporations at a level now set at more than 75 shareholders.\(^\text{11}\)

Even enterprises that cannot be passthrough tax entities by status, however, can avoid section 11 tax to the extent that they can get the earnings out of the corporation in the form of deductible interest, rents, or salary. If the factors of production — capital, land, and factory and services — are owned by the shareholders, then tax-deductible expenses for use of those factors can take up most, perhaps all, of the corporation’s taxable income. For the usual case in which taxable income describes less than all of the economic income of the enterprise, the enterprise can zero out its income that would be subject to section 11 tax with interest deductions that are well within the ceiling on debt that its creditors allow. Even if the corporation cannot zero out everything, section 11 can be avoided on most of the revenue. The “zero out” column, in any event, covers many very different legal vehicles and legal forms that, however, share the same tax regime: ordinary income tax at the owner level, but none at the entity level.

Under the column (2) zero-out regime, the $1 a year earned by the enterprise bears no corporate tax, \( T_c \), but it is reduced by individual ordinary income tax to $1*(1-T_c) every year. The after-tax proceeds are invested in a publicly available investment paying rate \( r*(1-t) \) after tax. Substituting \( r*(1-t) \) in the formula for terminal value of an annuity \([(1+R)^n-1]/R, the terminal value of a $1-a-year enterprise becomes, under the zero-out column:

\[
(2) \quad \$1 \cdot (1-t) \cdot \frac{[(1+r \cdot (1-t))^n-1]}{r \cdot (1-t)}
\]

With the pre-1981 maximum individual tax rate on investment income at 70 percent, \( r \) of 10 percent, and \( n \) of 35 years, expression (2) becomes:

\[
(2A) \quad 30\% \cdot \frac{[(1+10\% \cdot (1-70\%))^{35}-1]}{1+10\% \cdot (1-70\%)}
\]

\[
(2B) \quad 30\% \cdot \frac{[(1+3\%)-3]}{3}\%
\]

\[
(2C) \quad 30\% \cdot 60.46 = \$18.14
\]

which is shown in column (2) of Table 1.

Before 1981 the terminal value of the zero-out regime was almost twice as good as the terminal value of the dividend regime. But individual tax only was also only roughly a third to half as good as the growth stock strategy, discussed next.

c. Growth stock. Column (3) (Accumulation-Capital Gain During Life) assumes that the enterprise incorporates and pays corporate tax on its earnings, that it accumulates its earnings within the corporation, and that it pays out its accumulated earnings at the termination of the investment in a transaction that will qualify for capital gains. “Bailout” means that the earnings qualify for capital gain when distributed and that the shareholder avoids the ordinary income tax applied to dividends. Under Column (3), the $1 earned by the enterprise bears corporate tax, at \( T_c \), reducing the corporation’s post-tax earnings to $1*(1-T_c), which is accumulated at the corporation’s after-tax return rate of \( R_c*(1-T_c) \) for period \( n \), and then is distributed in a form in which it bears capital gains tax of \( cg \):

\[
(3) \quad \$1 \cdot (1-T_c) \cdot \frac{[(1+R_c \cdot (1-T_c))^n-1]}{R_c \cdot (1-T_c)} \cdot (1-cg)
\]
With the pre-1981 maximum, corporate tax rates of 46 percent, and capital gain at 28 percent, expression (3) becomes:

\[
(3A) \ 54 \times \{(1 \times 5.4\%)^{35-1}/5.4\% \times 72\% \ or \ \\
(3B) \ 54 	imes (1+5.4\%)^{35-1}/5.4\% \times 72\% \ or \\
(3C) \ 54 \times 98.1 \times 72\% = 33.17,
\]

which is shown in column (3) of Table 1. The terminal value of the accumulation-bailout strategy at n of 35 years is more than twice, or 210 percent of, the terminal value with individual tax only.

The accumulation-bailout strategy was more than twice as good as avoiding section 11, even though it accepted a double tax. The individual tax rates were so high, at 70 percent before 1981, that the combination of corporate tax and shareholder capital gain was better than the single individual tax. Even with no deferral in the shareholder tax — that is, n=0 in expressions (2) and (3) — the combination of $1 \times (1-46\%) \times 50\%$ was 39 cents per dollar of pretax earnings, whereas the after-tax earnings from avoiding section 11 were only 30 cents. Deferral of the capital gains tax, which is captured by expression (3), increased the advantage of accumulation-bailout over the individual tax to double the value of avoiding section 11.

The accumulation-bailout strategy was not and is not available without restriction. Accumulations are allowed if the accumulated funds are committed to the business enterprise or reasonably needed in the foreseeable future by the enterprise. Excessive accumulations in the form of passive or portfolio investments are subject to a penalty, which at worst is equivalent to an immediate imposition of shareholder dividend tax. Moreover, to qualify distributed amounts for the lower capital gains tax, a shareholder must dispose of enough of his fractional interest in the corporation that it resembles a real sale. A mere shuffling in the number of stock certificates without a corporation that it resembles a real sale. A mere shuffling in the number of stock certificates without a corporation that it resembles a real sale. A mere shuffling in the number of stock certificates without a corporation that it resembles a real sale. A mere shuffling in the number of stock certificates without a corporation that it resembles a real sale.

Postdeath bailouts. Finally, the capital gains tax in the accumulation-bailout strategy will go away for sale or exchange redemptions made after the death of the shareholder. Section 1014 gives a step up in basis for stock acquired through death of the shareholder so that gain built up over the life of the shareholder will disappear in the hands of the shareholder’s heirs. Column (4) (Accumulation and bailout after death) assumes a zero capital gain. Expression (4) is just like expression (3), except for the zero capital gain:

\[
(4A) \ 5 \times (1-46\%) \times (1-46\%)^{35-1}/10\% \times 28\% \times 28\% \ or \\
(4B) \ 5 \times (1+5.4\%)^{35-1}/5.2\% \ or \\
(4C) \ 5 \times 98.1 \times 53.01,
\]

which is shown in column (4) of Table 1. Accumulating for heirs after the death of the founding shareholder reached a terminal value that is 292 percent of the terminal value of the no-section-11 strategy. Accumulating earnings within the C corporation until death was the best tax strategy before 1981.

Shareholders commonly do not know whether they will withdraw their investment during life (expression (3)) or after death (expression (4)). But before 1981 both kinds of accumulation did better than avoiding section 11, by 210 percent to 292 percent for the 35-year investment. Investors commonly save for both kinds of distributions simultaneously. Much of saving is undertaken for a cushion against sickness or adversity and then passed on to the heirs when the cushion turns out not to be needed.15

2. Consequences of the growth stock advantage. The advantage of accumulation for either life-use or postdeath withdrawals was large enough that the growth stock strategy was a fine rule of thumb for a profitable enterprise without need for meticulous calculations. Tax lawyers and other advisers could rely on instinct and did not have to do numbers.

The wisdom of accumulation-bailout was not restricted to the closely held corporation. Managers of publicly held corporations could legitimately tell their shareholders, the nominal owners of the corporation, to leave their earnings with the corporation. Dividends were a tax disaster, and accumulation-bailout had a dramatic advantage, at the level of nearly four to almost six times better than a policy of distributing earnings each year as dividends. Corporations could rationally broadcast that they were growth stock investments that would never pay a dividend.

Indeed, accumulating earnings within a corporation was such an advantage before 1981 that the shareholders could tolerate the managers of the corporation

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12See, e.g., section 302(b)(2) and (3): United States v. Davis, 397 U.S. 301 (1970).

13See, e.g., section 304 (redemptions through related corporations), section 306 (redemptions of preferred stock through accommodating middlemen); section 355(a)(1)(B) (distribution of subsidiary to be sold).

extracting extraordinary salaries or rents from the corporate profits. The corporation could match passthrough regimes with modest return rates. Sometimes shareholders and managers are the same, but managers have an interest different from that of the shareholders as the managers own less than 100 percent of the corporation, and the differences become extreme for corporations that are widely held. When managers and owners have different interests, we should expect the managers to extract as much from the profits of the enterprise as they can get away with. Table 1 assumed the corporation made 10 percent before tax, because that was the publicly available fair market value interest rate. If the corporation made only 3 percent before tax per year, however, then both the zero-out regime (column 2) and the accumulation-bailout strategy during life (column 3) would yield $18.14 after 35 years after tax. Managers could thus match the passthrough regime even if they took the difference between 10 percent and 3 percent, or 70 percent of the investment profits per year out of the corporation as rents, excessive salary, perquisites, inducements, pet projects, and the like.

Indeed, once it was given that the enterprise was a C corporation, shareholders would tolerate a lot to avoid dividends. If a shareholder had a choice of a dividend now or a bailout distribution to his or her heirs in 35 years, the shareholder wanted the delayed distribution even if the corporation lost 4.5 percent on reinvestment of the $1-a-year enterprise every year for 35 years. That allowed and probably explains many executive perks.

The end of the world that could tolerate so much management waste is undoubtedly a good thing. Top management has also been remiss in explaining to their shareholders when the tax rate changes took away the tolerance for accumulation, as explained next.

B. The End of the Classical Regime

Maximum statutory tax rates have dropped dramatically over the last 25 years. Maximum individual rates have dropped from 70 percent to 36 percent,17 maximum corporate tax rates have dropped from 46 percent in 1979 to 35 percent currently,18 and maximum capital gains rates for individuals have dropped from 28 percent to 15 percent.19 The drop in rates has increased after-tax terminal value for every entity choice, as shown by going down the columns of Table 2, above. Under the same assumptions of 35-year savings and a pretax 10 percent return, terminal value of the immediate dividends strategy rose by over seven times, from $9.79 to $68.10 for the $1-a-year enterprise. Avoiding section 11 corporate tax has increased in terminal value by over four times, from $18.14 to $77.69. Accumulation-bailout almost doubled from $35.35 to $71.10. But the important point for choice of entity is that accumulation bailout was no longer such a clear winner, two to three times better than avoiding the corporate form.

Choice of entity depends on the relationship between the rates, and fluctuations in the relationship of corporate, individual, and capital gains rates have led to fluctuations in what is the best corporate form. Table 2 follows the same logic as developed for Table 1, and summarizes the fluctuating choice of entity over the last 25 years for the 35-year investment case. Numbers

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18Revenue Act of 1978, P.L. 95-600, section 301, reducing maximum tax on corporations from 48 percent to 46 percent. Section 11 now imposes a maximum tax of 35 percent on taxable income over $10 million.
19Revenue Act of 1978, P.L. 95-600, section 1201, reducing the tax rate on capital gain for individuals to 28 percent. Section 1(h)(1)(C) now imposes a maximum tax rate on capital gain of 15 percent.
income from 70 percent to 50 percent, 20 and that change of life.
The Economic Recovery Tax Act of 1981 cut the maximum tax rate on investment income dropped from 70 percent to 50 percent. 21 But the big cut in the individual tax rate from 70 percent down to 50 percent meant the corporate tax rate, at 46 percent maximum, was too close to the individual tax rate to tolerate any significant tax detriment from using the corporation form. Capital gains tax, even as reduced, usually made up the difference between 46 percent and 50 percent and meant that avoiding the C corporation was better strategy.

As shown by Tables 2 and 2A, accumulation-bailout started as the optimal choice in the “classical period” in 1979. After that, however, there have been five important changes in the optimal tax vehicle. From 1979 until the Tax Reform Act of 1986, a passthrough regime was better than a C corporation for distributions during life. Then with the passage of the Tax Reform Act of 1986, avoiding section 11 yielded the best result, whether savings were taken out during life or after death. But tax increases in individual rates in 1993 meant the corporation with accumulation-bailout was again best for postdeath distributions, but not for distributions during life. Cutting the capital gain to 20 percent in 1997 made accumulation-bailout again best for life-use savings in 1997, and, finally, the reduction in individual rates in 2003 made the individual-tax-only zeroing-out system better for life-use savings. The classical regime gave a strong incentive to accumulations within a corporation, and that regime is dead. Corporate managers do not seem to have adjusted to that change of life.

1. Change 1: The 1981 act turns the corporation into an estate-planning tool. The Economic Recovery Tax Act of 1981 cut the maximum tax rate on investment income from 70 percent to 50 percent, 20 and that change meant the growth stock strategy was no longer the best for life-use savings. The 1981 act improved accumulation-bailout compared with prior law, but not by enough to make accumulation-bailout better than avoiding section 11 altogether. The capital gains tax rate dropped from 28 percent to 20 percent automatically under the law in 1981 when maximum rates on investment income dropped from 70 percent to 50 percent. 21 But the big cut in the individual tax rate from 70 percent down to 50 percent meant the corporate tax rate, at 46 percent maximum, was too close to the individual tax rate to tolerate any significant tax detriment from using the corporation form. Capital gains tax, even as reduced, usually made up the difference between 46 percent and 50 percent and meant that avoiding the C corporation was better strategy.

If the capital gain followed the corporate tax on the earnings immediately, the combined tax left $1*(1-146%) * (1-20%) or 43 cents per dollar of profit. Running the enterprise with a passthrough form, after passage of the 1981 act, would have left the owners 50 cents per dollar of profit. Delaying the bailout reduced the impact of the capital gains tax, but not by enough until there was a very long delay. Under Tables 2 and 2A, with n at 35 years, the terminal value of an individual-tax-only or passthrough regime was $45.16, and the terminal value of the accumulation-bailout regime was only $42.41, or 94 percent of what investors could achieve with individual tax only. A corporation could not be counted on for the best result for life-use savings.

If the investors’ capital gain came more than 55 years after the enterprise started, then the small advantage in the corporate rate at 46 percent versus 50 percent meant the C corporation could catch up with the passthrough regime, even with the capital gains tax. But 55 years hence is a long time to wait to enjoy one’s profits from an enterprise. Also, although managers could not be expected to mention it, the thinning of the difference between corporate and individual tax rates meant the shareholders should have tolerated less of the managers’ taking rents out of the corporation.
Section 11 had a bracket structure in 1981 that gave corporations a lower-than-46 percent tax rate if they made less than $100,000. The lower section 11 brackets were like getting another set of low brackets at the office, once one had run through the individual tax rate brackets of section 1 at home. Lower corporate rates make the accumulation-bailout strategy easier to justify. In 1981 the corporation paid 15 percent on the first $25,000 in taxable income per year, then 18 percent on the next $25,000, then 30 percent on the next $25,000, then 40 percent on the next $25,000. But the total tax savings from the lower tax brackets were only $4,050 below what tax would be if all $100,000 were taxed at 46 percent. The $4,050 benefit from the lower corporate tax brackets is not nothing, but it’s not much. That is only 4 percent on $100,000, and I would speculate that most of the $4,050 would be eaten up by transaction costs of the corporation on its first $100,000.22

The shareholder capital gains tax goes away on death of the shareholder. As shown by Table 2 for 1981-1986, the zero-out column is $45.16 and the accumulation strategy with postdeath distributions is $53.01. That means the corporation was the better form for saving for heirs than the pass-through. Still, saving for heirs is not ordinarily the primary motivation for entrepreneurs. Entrepreneurs tend to want some benefit personally during life, even if they are fond of their children. Heirs tend to get only the remainder of savings that occur because the entrepreneur died sooner than he would have liked. If planners had understood that the only function of a C corporation was as an estate-planning instrument, in any event, the C corporation would have been used less often.

At least in theory non-tax considerations exist. A publicly traded corporation has some business opportunities that a pass-through entity does not. Investors will give up substantial capital to appropriately suspect strangers like corporate managers only if they can sell their stock and get out at the first sign of trouble. That extra ability to amass capital from unknown investors allows the publicly traded corporation to grow large, and largeness allows the corporation some opportunities that smaller enterprises cannot exploit. Publicly traded enterprises must be C corporations.23 The advantage of the large corporation for mean the pretax return R of the corporation is large enough to justify the corporate form. For annuity in which the corporation makes $1 a year for 35 years and bails out at the end, the corporation could match the pass-through entity making 10 percent, if it can make 10.55 percent before tax. That is not an impossible barrier, although in the razor-sharp competition for funds, rates over the very long term of 35 years will tend toward a common mean. Moreover, even publicly traded corporations can use the individual-tax-only column for debt, and debt at the levels necessary to zero out the corporate income will not prevent the massing of capital within the corporation. Publicly traded corporations should have been using enough debt to zero out after 1981.

The shifting of the advantage away from the C corporation was an undebated consequence of the 1981 act. The Economic Recovery Tax Act of 1981 was perceived overall as a very pro-business act.24 The act reduced the capital gains tax, which affects accumulation policy, from 28 percent to 20 percent. Terminal value of accumulations within a corporation increased as a result of the 1981 act, from $38 to $42 for life-use distributions. Elsewhere the act adopted the ACRS depreciation system, and ACRS, combined with the investment tax credit, reduced the effective tax rates on equipment investments to zero or to the negative range.25 Corporate managers were pleased by the lower tax rates and the ACRS system. They did not oppose the rate reductions for individuals that turned the corporate form into an exclusively estate tax tool. As far as I can tell, no one at the grand negotiation table asked for the 1981 act to so disfavor the corporate form.

2. Change 2: The Tax Reform Act of 1986 and rate inversion. The Tax Reform Act of 1986 created “rate inversion,” meaning corporate rates were for the first time higher than individual tax rates. Rate inversion meant that it was not tax-advantageous to use the corporate form for enterprises facing maximum statutory tax rates. The Tax Reform Act reduced the maximum corporate tax rate from 46 percent to 34 percent, but it also reduced the maximum tax rate on individual income from 50 percent to 28 percent.26 The act also added to the burden of accumulation bailout by increasing the tax rate on capital gains from 20 percent to 28 percent. Table 3, next page, repeats enough of Tables 2 and 2A to show the comparative terminal values after passage of the Tax Reform Act of 1986.

Rate inversion meant that accumulation-bailout was disadvantageous even with the step up in basis at death. The pass-through regime was optimal for both life-use and after-death investment withdrawal. Even if the tax planners won all the bailout games and got the money out as capital gain, taxpayers lost in the winning by playing the accumulation game.

22See, e.g., Donald Regan, Secretary of the Treasury, “Regan Says that ERTA and TEFRA Combined Provide a ‘New Relationship Between the Governed and the Governing,’” Tax Notes, Sept. 27, 1982, p. 1130 (saying that 1981 act provided across-the-board tax rate cuts and established new depreciation schedules to encourage capital investing and the rebuilding of our industrial base).


dividends were better than accumulation for life use if the dividend came out early. A corporate manager loyal to the shareholders should have been getting out its earnings to the shareholder annually, as a dividend if not as a corporate-deductible expense, just to get the compounding investment out to a low-tax environment—that of the individual. To add insult to injury, the 1986 act set both ordinary income and capital gains rates at 28 percent, so that there was no rate advantage in deferring distributions until a bailout opportunity came along. As far as I can tell, no corporate manager announced that the growth stock strategy was worse for shareholder wealth than immediate dividends of all the corporation’s earnings.

The disadvantage of the accumulation strategy meant not only that the managers should not have been taking rents out of the enterprise, but also that they needed extraordinary returns just to justify accumulation. Assuming that the shareholders could make 10 percent on their own before tax, the corporation had to make 13.73 percent pretax to justify accumulations at n=35 years. Assuming returns that are 137 percent better than prevailing interest rates year after year for 35 years is a heroic assumption, because extraordinary returns tend to regress toward the middle, and far sooner than 35 years. As we look at investments lasting less than 35 years, the pretax returns that the corporation had to make to justify accumulation became even more extraordinary. With a terminal value that is 10 years away, the corporation return had to be 24 percent per year to catch up with the shareholder’s 10 percent. With a terminal value that is 5 years away, the corporation had to make 43 percent a year to catch up with the shareholders’ 10 percent. Even 5 years is a long time for some investment needs, and 43 percent per year is a high hurdle indeed in a competitive world.

Adjustment to the new world was and had to be slow. The “wisdom” of the growth stock strategy was wrong after 1981 for life-use savings and dramatically wrong after 1986, whether the savings were drawn out during life or after death. Optimal planning meant using a passthrough entity or deductible expenses. That does not mean, however, that an enterprise formed as a corporation could flip over to avoid corporate tax without cost. The Tax Reform Act of 1986, for instance, both increased the profit from avoiding corporate tax and also increased the cost of liquidating a C corporation.27 Still, even established and publicly traded corporations could avoid section 11 prospectively by buying back old stock with new debt from shareholders willing to sell. The leveraged buyout movement of the late 1980s by which corporations borrowed to buy back stock is best understood as a tax-driven movement.28 New projects by old corporations could be funded with debt, moreover, and new enterprises could and should have been started from 1981 onward largely as LLCs or other passthroughs.

In the long term, it is difficult to see how the long-familiar C corporation form could have survived the rate regime of the Tax Reform Act of 1986. Increases in individual tax rates in 1993, however, ended rate inversion and allowed the corporation to be used again for estate planning, and then the reduction in capital gains rates in 1997 allowed the corporation to be used even for long-term lifetime savings.

3. Change 3: the 1993 end of rate inversion. The Revenue Reconciliation Act of 1993 ended rate inversion by increasing the individual top rate to 41 percent. The act created a new 39.6 percent bracket in section 1 of the code,29 and then section 68 of the code, which “phases out” itemized deductions, added what usually amounted to a 1.2 percent surtax.30 The act also added a new 35 percent rate for corporations with taxable income.

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Table 3. Rate Inversion Under the Tax Reform Act of 1986, Terminal Value for $1 a Year of Profit

<table>
<thead>
<tr>
<th></th>
<th>(1) Immediate Dividends</th>
<th>(2) Zero Out (individual tax only)</th>
<th>(3) Accumulation-Capital Gain During Life</th>
<th>(4) Accumulation and Distribution After Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986-93</td>
<td>$69</td>
<td>$104</td>
<td>$60</td>
<td>$84</td>
</tr>
<tr>
<td>As percent of zero out</td>
<td>66%</td>
<td>100%</td>
<td>58%</td>
<td>80%</td>
</tr>
</tbody>
</table>

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27Sections 311, 336 as amended by the Tax Reform Act of 1986, section 631, require the corporation to recognize gain on distribution of appreciated corporate assets.


29P.L. 103-66, section 1321(a).

30Section 68(a)(1) increases taxable income by 3 percent of adjusted gross income over a threshold amount that is adjusted for inflation. When 3c per dollar of income is added to taxable income, the taxpayer pays as much as 39.6 percent + 3 percent or 1.19 percent more tax. In theory, the section 68 phaseout disappears when 80 percent of some itemized deductions (e.g., charitable deductions, state taxes, and home mortgages) have been absorbed into income, but in practice high-income taxpayers keep increasing their itemized deductions as income increases, and that prevents the ceiling from coming into effect in all except unusual cases. See Calvin Johnson, “Simplification: Replacement of the Section 68 Limitation on Itemized Deductions,” Tax Notes, Jan. 5, 1998, p. 89. There is also a phaseout of personal exemptions in section 151(d)(3), but it only rarely raises the maximum tax rate, and then only for a small and accidental range. There are other phaseouts in the tax code, e.g. section 469(i) (phaseout of exemption for passive activities), but plausibly they are not predictable enough to act as a maximum tax rate for investor behavior. The other ceilings, in any case, were not
return on capital is 10 percent. A corporation when the baseline fair market value and 25 percent annual return is too much to expect of catch up with the shareholders’ baseline 10 percent, percent annual pretax return for the corporation to instance with n of five years (a medium-length invest-. for accumulation-bailout still remained very high. For the time needs for investment got shorter the hurdle caught up with the avoidance of section 11 tax. But as the tax advantages of the corporate form might well have tax disadvantages of accumulation also decreased enough to allow some glimmer of hope for life-use savings. If we assume an enterprise that makes the corporate accumulation became viable, at least for estate-planning purposes. Table 4, above, shows the terminal values resulting from dividends, zeroing out, and accumulating earnings.

The tax disadvantage of accumulation also makes a dollar a year and accumulation to the terminal value then bailout, the C corporation can catch up with the no-section-11 regime in 47 years — not much of a glimmer, but a glimmer. With distribution at n=35 years, the corporation can also catch up with the pass-through regime if shareholders make 10 percent before tax and the corporation makes 10.46 percent. At that level, non-tax advantages of the corporate form might well have caught up with the avoidance of section 11 tax. But as the time needs for investment got shorter the hurdle for accumulation-bailout still remained very high. For instance, with n of five years (a medium-length investment), accumulation needed to be justified by a 25 percent annual pretax return for the corporation to catch up with the shareholders’ baseline 10 percent, and 25 percent annual return is too much to expect of a corporation when the baseline fair market value return on capital is 10 percent.

The 1993 change benefited corporate managers of preexisting corporations. Immediate dividends of corporate earnings were no longer rational! At least the C corporation worked as an estate-planning tool again. Managers could also project without provoking total disbelief that they will get pretax returns that might justify accumulations for very-long-term investments.

### Table 4. End of Rate Inversion in 1993, $1 a Year Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>Immediate Dividends</th>
<th>Zero out</th>
<th>Accumulation-Capital Gain During Life</th>
<th>Accumulation and Distribution After Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-97</td>
<td>$42</td>
<td>$64</td>
<td>$60</td>
<td>$84</td>
</tr>
<tr>
<td>As percent of zero out</td>
<td>66%</td>
<td>100%</td>
<td>94%</td>
<td>130%</td>
</tr>
</tbody>
</table>

### Table 5. Capital Gain to 20% in 1997, Terminal Value of $1 a Year Profit

<table>
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<tr>
<th>Year</th>
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<td>130%</td>
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comes exceeding $10 million per year, which usually does not affect the beginning enterprise. The terminal value of accumulation was not changed for smaller corporations, since both their corporate rate remained at 34 percent and the capital gain rate remained at 28 percent. The rise in the individual tax rate, however, reduced the advantage of the individual-tax-only regime by enough that the corporate accumulation became viable, at least for estate-planning purposes. Table 4, above, shows the terminal values resulting from dividends, zeroing out, and accumulating earnings.

The tax disadvantage of accumulation also decreased enough to allow some glimmer of hope for life-use savings. If we assume an enterprise that makes a dollar a year and accumulation to the terminal value then bailout, the C corporation can catch up with the no-section-11 regime in 47 years — not much of a glimmer, but a glimmer. With distribution at n=35 years, the corporation can also catch up with the pass-through regime if shareholders make 10 percent before tax and the corporation makes 10.46 percent. At that level, non-tax advantages of the corporate form might well have caught up with the avoidance of section 11 tax. But as the time needs for investment got shorter the hurdle for accumulation-bailout still remained very high. For instance, with n of five years (a medium-length investment), accumulation needed to be justified by a 25 percent annual pretax return for the corporation to catch up with the shareholders’ baseline 10 percent, and 25 percent annual return is too much to expect of a corporation when the baseline fair market value return on capital is 10 percent.

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### 4. Change 4: The drop in capital gain rate to 20 percent.

In the Taxpayer Relief Act of 1997, Congress lowered the maximum tax rate on capital gains from 28 percent to 20 percent. The terminal value of individual tax only and of immediate dividends remained the same, but accumulations improved enough to be justified for some long-term savings to be used during life, including the n=35 year case. Table 5, above, shows the terminal values, again, of dividends, zeroing out, and accumulations.

With the drop in the capital gain rate from 28 percent to 20 percent, accumulation caught up with the pass-through regime with n=27.4 years. With n=35 years, the corporation could catch up with the pass-through’s 10 percent pretax return by offering only 9.7 percent pretax. Managers could once again extract some rent more than they added to the corporation, at least for the long-term investment.

### 5. Change 5: Flip back against accumulation.

In 2003 Congress lowered the maximum tax rate on individuals from 41 percent to 36 percent, and the capital gains rate from 20 percent to 15 percent. The drop in capital gains rates favored accumulations, but the drop in individual tax rates overwhelmed that advantage and caused a flip once more, against the corporate form for life-use savings.

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32Section 1(h)(1)(E) as amended by P.L. 105-34, section 311.
33Jobs and Growth Tax Relief Reconciliation Act of 2003, P.L. 108-27, section 105, amending section 1(i)(2), cuts the maximum tax rate stated in section 1 down to 35 percent, and then section 68 imposes an extra 35% * 3% or 1.05 percent tax. See supra note 32.
As shown by Table 6, above, for large corporations facing the 35 percent tax rate, the 35-year terminal value with capital gain would be $71.10 or 92 percent of the no-section-11 regime. The postdeath terminal value would be $83.65 or 108 percent of avoiding section 11.

The corporate form is once more disadvantaged for life-use savings, but perhaps nontax advantages can allow it to catch up. A 10.6 percent pretax return from the enterprise, using the corporate form can match a 10 percent pretax return from the pass-through entity, with the assumption of an enterprise that makes $1 a year and distributes the accumulation at the end of 35 years. The larger, 35 percent maximum-rate corporation must achieve 10.89 percent compared to the base of 10 percent for the full 35 years. For shorter-term investments the premium return necessary for the corporation to catch up with shareholders’ 10 percent was higher, even still prohibitive: The 5-year terminal value return for the corporation to make 19 percent in an assumed 10 percent pretax interest-rate world.

Congress also defined dividends as capital gain, allowing them to benefit from the now 15 percent capital gain rates. The 2003 act favors dividends by comparison to prior law. Still, dividends achieve a terminal value at 86 percent of what can be achieved avoiding section 11, but that is not as high as capital gain. Expression (5) shows no shareholder tax on dividends or reinvested proceeds, but it does show the corporate tax on the original $1-a-year enterprise before the money is distributed. With our usual assumptions, $r=34\%$, $T_c=10\%$, $t=36\%$, $n=35$ years, expression (5) becomes

\[
(5A) \quad 1 \times (1-0.34) \times \frac{(1.1)^{35}-1}{0.10} \times (1-0.36) = 86\%.
\]

A pension fund that avoids section 11 by investing in debt, rental property, or a pass-through will achieve

\[
(6) \quad 1 \times \frac{(1+r)^n-1}{r} \times (1-t)
\]

Accumulation bailout achieves a terminal value of

\[
(7) \quad 1 \times \frac{(1-T_c) \times [(1+R)^n-1]}{R} \times (1-t)
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A pension fund received after death of the employee is still ordinary income. Since there is no step-up in basis at death on distributions from qualified pension plans, expression (7) describes both accumulations paid out during life and those paid out after death of the employee. Table 7 summarizes the choices of tax entity.

A pension fund’s choice to go into corporate stock rather than debt is a tax disaster. For the career-long investments that pension funds need to make, the terminal value of the return from the enterprise if the

As percent of individual tax only 88% 100% 92% 108%

II. Can Corporations Survive?

A. Not for Pension Fund Shareholders

One very important group of investors, pension funds, should hate stock of a C corporation. Pension funds own roughly half as much stock as households do. Pension funds are taxed on neither dividends nor on capital gains, but the money distributed to the beneficiaries in retirement is ordinary income to them when they get it. Pension funds also get no step up in basis at death.

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The conclusion that corporate stock is a tax disaster for pension funds seems to hold even if we presume high pretax returns that have been available historically. Over the last 75 years, it is said, the average growth rate on stock of large American corporations has been 10.76 percent annually, while the pretax return on long-term corporate bonds has been only 5.8 percent annually. Those findings of 11 percent return on stock have come under serious attack. They are a result, it is said, of sampling error. The long-term returns on stock since 1900 look like they are 5 percent returns before tax and transaction costs, not 11 percent.

Even if the extraordinary 11 percent annual returns on stock were true, that would not be a very good explanation for why accumulation and the corporate form have survived. The decision to accept or avoid section 11 is a mere change of form having nothing to do with the real underlying profits of the enterprise. The underlying fundamentals in the model are that the enterprise makes $1 a year. The decision to use one column rather than another is a mere form that does not affect the pretax money that is available. For closely held corporations, the holders of debt and the holders of stock are the same people, who are deciding how to get the largest possible amount of terminal value out to themselves. Even for corporations in which the holders of debt and the holders of stock are different people, still they are dividing the same $1-a-year pie, and the pie does not get bigger except for differences in tax results when one column or the other is used. There is no magic rabbit in one form that is not available to the other.

Given that form does not improve the underlying fundamentals, the high returns available on stock historically, if truly available, should be explained in terms of stuffing the rabbit into the hat beforehand. A high return can be explained as just the inverse of a high discount rate. Investors require a high return from stock because stock is so volatile and because they distrust what managers will do with accumulated earnings. Investors pay low amounts for the stock because stock is so volatile and because they high return can be explained as just the inverse of a high discount rate, because the volatility risk and distrust have less time to operate. Pension fund investments are made when volatility and distrust still hurt and, given those noxious elements of stock, one cannot advise pension funds that stock is undervalued, even pretax. Then the tax differences come in and truly punish the pension fund for buying stock.

B. Corporate Survival With Low-Effective Tax

The 25-year history of corporate tax law constructed so far assumed the maximum statutory tax rates for individual stakeholders and near maximum rates for the corporation. It seems clear, however, that neither

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corporations nor individuals have to pay anything like maximum statutory tax rates. The real marginal tax rate that they now face, at least on long-term capital investments, is down around 10 percent of income. Effective tax rates on the order of 10 percent do not alone justify the corporate form, but they make it feasible that the corporation might catch up with the no-corporate-tax forms, at least for very-long-term investments, with other advantages.

1. The 10 percent effective tax rate assumption. There is a publicly available index or thermometer that measures the maximum effective tax rates that taxpayers face on long-term investments. Municipal bonds are tax-exempt, but in reaction to the exemption, the issuers of the bonds give pretax interest rates that are lower than the prevailing interest rates on taxable-interest bonds of the same risk and term. Investors accept lower interest rates on municipal bonds because they are tax-exempt. The drop in what investors accept is sometimes called the implicit tax on the bonds. The implicit tax measures how much investors have to bear and are willing to bear to avoid tax on capital, perfectly legally. Municipal bonds compete on the margin with other investments and, indeed, all investments compete in a common pool, at least at the margins. Thus the implicit tax on municipal bonds is a fair measure of the implicit tax available throughout the economy — the implicit tax is less visible.

For the last five years, the implicit tax on 20- to 30-year bonds has been on the order of 10 percent with dips to half that rate.41 No investor willing to commit to a marketable 20- to 30-year investment needs to pay more than 10 percent marginal rates, no matter what the statutory rates say, as long as they can get 10 percent implicit tax on municipal bonds.

Table 8 follows the same logic as the prior tables, except it assumes that the $1-a-year enterprise will be taxed at an effective tax rate of 10 percent on its operating income and that both individuals and corporations get access to the same 10 percent real marginal tax when they reinvest the operating income until the terminal point 35 years later.

Table 8 shows that column (2), avoiding the corporate form, is the better strategy under the assumptions, whether the corporation distributes or accumulates its money. With the 2003 act giving a 15 percent tax rate for both capital gains and immediate dividends, there is no longer a tax advantage for a corporation to defer payments to the shareholders — both give a terminal value of $165 after 35 years. Managers can no longer justify accumulating earnings for tax purposes. But even the low 15 percent tax on capital gain or dividends reduces the terminal value of the corporate form to an amount less than can be achieved by avoiding the 15 percent tax. Death and step-up in basis do avoid the 15 percent tax, but that requires death and it just returns the shareholders to the position they would have achieved had they avoided the C corporation in the first place.

Table 8, above, assumes that operating income is subject to only a 10 percent rate of tax because the index from municipal bond rates indicate that that is what the market is demanding, but it is easy to rationalize why operating income on many, perhaps most, enterprises might be subject to a marginal rate of only 10 percent on weighted average. Some operating assets are subject to zero effective rate of tax. If an investment is deducted as soon as it is made, that reduces the effective tax on the returns from the investment to zero because the present value of the tax savings from the investment then is equal to the present value of the tax on revenues using the internal rate of return of the investment itself as a discount rate.42 Immediate deductions are allowed, for example, for brand-name development, for advertising, and for research and development investments.43 Investments for development of goodwill, workforce, or customer base inter-

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41Calvin Johnson, “A Thermometer for the Tax System: The Overall Health of the Tax System as Measured by Implicit Tax,” 56 SMU L. Rev. 13, 23-24 (2003). As of April 1, 2004, the implicit tax on 20-year AAA insured municipal bonds was (4.77 percent to 4.55 percent)/4.77 percent or 4.6 percent. http://www.federalreserve.gov/releases/h15/data.htm (showing federal 20-year bonds at 4.55 percent on April 1, 2004); http://www.fmsbonds.com (showing AAA insured 20-year tax-exempt bonds at 4.77 percent on April 1, 2004).


43Revenue Ruling 92-80, 1992-2 C.B. 57 (advertising); section 174 (research and development).
nally are deducted immediately. Professional services industries have large immediately deductible investments because they create intangible investments in workforce or customer relations that are not alienable.\textsuperscript{44} Immediate deductions are also allowed for industry-specific investments, including oil well drilling, mining development, and planting of crops and improving soils.\textsuperscript{45}

Many other business assets also get effective tax rates at 10 percent or below. Equipment, eligible since 2003 for an immediate deduction of half of basis, typically achieves an effective tax rate of 8 percent or under.\textsuperscript{46} Some business investments are capitalized. FIFO inventory accounting is about as effective as anything in keeping basis at the real value of the investment, so that investments in inventory are taxed at effective rates close to the statutory rates. A business will typically have a mix of investment assets, some taxed at zero rates and some at statutory tax rates. Given the state of the implicit tax on municipal bonds, however, it is not unreasonable to assume that many businesses will have access to the 10 percent rate for their business income. All businesses have access to the 10 percent effective tax rate for reinvestment of the operating income between the time the $1 a year is earned and the time it is withdrawn 35 years later because the public market for municipal bonds gives that as an implicit tax.

Table 8 shows that avoiding the corporate tax is the best strategy under the assumption that real effective rates are at 10 percent. The shareholder tax on dividends or capital gains, even at 15 percent, makes the zero-out strategy better.

2. Can the public corporation survive? The assumption underlying Table 8, that avoiding section 11 allows individual shareholders access to 10 percent effective tax rates, means the individual-tax-only column no longer describes corporate debt. Corporate debt bearing fair market value interest is taxed to the shareholder at effective tax rates equal to the full statutory tax rates because the interest is taxed currently at ordinary rates and because the investor’s adjusted basis for debt accurately describes the outstanding balance that remains an investment. It follows that Table 8, column 2, does not describe publicly traded corporations, which cannot be passthroughs. Publicly traded corporations cannot give their owners 10 percent effective tax rates and simultaneously use interest deductions to zero out their income.

A publicly traded corporation might be rational in the current anticorporate world, however, under other assumptions favorable to the corporation. A publicly traded corporation may have higher pretax rates of return, or make lower posttax returns acceptable to shareholders. A public corporation might have better access to tax shelters. Those factors or some combination of them might increase the rational domain of the corporation so that it is not as trivial as the statutory tax rates imply.

a. Higher pretax rate of return for publicly traded corporations. Publicly traded corporations may have pretax advantages because they can mass capital more effectively than corporations whose shares are not traded on a readily available market. Strangers will trust managers only if they can sell their stock and get out quickly. The advantage of massing capital may allow public corporations to keep up with the vehicles that avoid corporate tax, at least for the long-term investments. For the 35-year investment of the $1-a-year enterprise, the accumulation-bailout during life can catch up with the individual-tax-only form if the corporation can make 10.76 percent pretax for the full period while the shareholders are making only 10 percent pretax. Returns will regress toward the mean for long periods, but not if marketability of shares is a real advantage to the business.

As the owner’s time horizon gets shorter than 35 years, however, the pretax return rate that the corporation needs to make to match the owners’ 10 percent gets higher and higher and at some point becomes impossible. Table 8A shows the pretax return rate (R\textsubscript{c}) that a corporation must make for the accumulation-bailout-during-life column to catch up with the no-section-11 column. The break-even T\textsubscript{c} increases dramatically for short periods.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
Years of Accumulation & Catch Up Corp. Return Rate as a Percentage of 10% \\
\hline
35 & 108\% \\
30 & 110\% \\
25 & 112\% \\
20 & 116\% \\
15 & 123\% \\
10 & 138\% \\
5 & 191\% \\
2 & 510\% \\
\hline
\end{tabular}
\caption{Pretax Rate a Corporation Must Make for Accumulation to Catch Up With Individual Tax Only and 10 Percent Returns}
\end{table}

For very long investments, it seems plausible that the corporate form might indeed catch up with the owners’ 10 percent when owners avoid section 11. There is an extra 15 percent tax on using a corporate stock form, but if the corporation has a long enough time, then

\textsuperscript{44}Treasury reg. section 1.263-4(c)(3) (saying that intangibles acquired from an employee are not capitalized); section 1(b)(3)(i) (intangible investments that cannot be sold are not capitalized unless and until the IRS publishes guidance requiring them to be capitalized).

\textsuperscript{45}Section 263(c) (allowing immediate expensing of the costs of drilling oil wells); section 616 (allowing immediate deduction of mine exploration and development); section 180 (allowing deduction for fertilizer or other materials to enrich or improve land); Treasury reg. section 1.162-12 (allowing deduction of costs of planting and of animal feed).

relatively small advantages in pretax returns can make up for the 15 percent. But as the number of years of investment decreases in Table 8A, the catch-up return rate becomes prohibitive.

The “years of accumulation” in column (1) of Table 8A refers to the shareholder’s investment term and not to the corporation’s. Thus, if an investor sells stock to a third party, recognizing capital gain in 5 years, it is the 191 percent rate that the corporation must get to match the shareholder’s 10 percent, even if the corporation keeps the original investment for many more years. If the investor planned to stay for 35 years, but ended up selling after 2 to 5 years, it is the catch-up rates applicable to the short-term investment that count: In retrospect, an investor who wanted to stay in for the long term, but ended up realizing capital gain for an emergency or because his child wanted a horse in a shorter term, will regret having gone into a corporate tax form. For some investors 2 years is a long time, and for them the section 11 form seems impossible.

b. Investors accept lower returns for liquidity.

Another theory that might justify continuation of the corporation is that investors will accept lower returns after tax to have the advantage of being able to sell their interest on a publicly traded market. Indeed, investors in our stock market economy can and do trust strangers to manage their business equity investments only because they can bail out of the investment when clouds turn gray just by calling their stockbrokers. Even investors who plan to invest for 35 years have the option to turn their investment into cash immediately in case of change or emergency. For the 35-year investments, the lower after-tax rate that the investor must accept to get public trading seems to be within the range of plausibility. In Table 8, the accumulation-bailout regime gave $165.02 after 35 years, and that means that the dollar a year grew at an after-tax rate of 7.8 percent per year. The no-section-11 forms achieved $194.14, which means the $1 a year grew at 8.53 percent per year. A shareholder might well accept the lower rate to have the option of ready sale.

As the time of sale gets less distant, however, the penalty for liquidity gets more severe. The terminal value of the accumulation-bailout and the no-section-11 regime are different at each different assumed number of years of accumulation and Table 8B, above, restates each terminal value as an annual growth rate on the dollar a year that the enterprise makes before tax. Table 8B also shows the after-tax return the investor must make to use the accumulation-bailout regime. Table 8B restates the same information treating the individual-tax-only after-tax return as 100 percent and the accumulation-bailout as some lesser percent.

Once again for long-term investments, the penalty on the corporate form using accumulation-bailout during life is plausible for the very-long-term investments, but the penalty looks unacceptable for short-term horizons. The shareholder who wants his money in five years would do better to keep his reinvested cash under the mattress than invest it in an accumulating corporation. Once again, it is the actual period n that counts, so that an investor who sells earlier than anticipated should have used the break-even rates for the shorter, at least with 20-20 hindsight.

Successful enterprises, moreover, tend to get their returns back-end-loaded because they grow as the terminal value gets nearer. This model assumed a constant $1-a-year return. If it had assumed some rate of annual growth of pretax earnings, then more of the money from the investment would be near the terminal point. With money back-end-loaded to the terminal point, the weighted average of n, the time between investment and liquidation, gets shorter.

A corporation with better than generally available market rates (10 percent in the model) and shareholders accepting lesser after-tax returns are not mutually exclusive possibilities. Indeed, a corporation can be expected to do better on its projects than prevailing interest would indicate, because shareholders are willing to take less return after tax to get stock that can be sold on an available market. A map of the break-even after-tax shareholder for all of the possible pretax corporate returns with variations over the range of n periods until the terminal point would have a three-dimensional boundary. With variations in corporate effective rates, discussed next, the display of break-even rates would be a curving volume rather than a sheet. For a model with so many variables to be useful,
some better assumptions about what the corporation might achieve seem necessary.

c. Better corporate sheltering. A final theory that might allow the accumulating corporation to catch up with avoiding section 11 is that corporations are better able to avoid tax with tax shelters. Arguably, even the assumed 10 percent effective tax rate for $T_c$ used in Table 8 is too high.

Corporations can certainly shelter when individuals cannot. A tax shelter is an artificial tax-loss generator. In a tax shelter, the tax deductions are worth more than the tax collected on the revenue from the transaction. A shelter provides not just internal shelter against revenue from the investment, but tax losses usable against unrelated income. A shelter has a higher rate of return after tax than it has before tax.\footnote{Calvin Johnson, “What’s a Tax Shelter?,” Tax Notes, Aug. 14, 1995, p. 879.}

The passive activity loss provisions of section 469 have proven surprisingly effective in preventing shelters from erasing the tax on salaries and portfolio investments for individuals. Under section 469, losses generated by one shelter may be used only against income from another shelter, and cannot be used against salaries, portfolio returns, or active business income until the end of the investment when real dollar losses are added up. Deduction of real dollars lost has never been a tax shelter. Section 469, however, does not apply to widely held corporations. That has meant that corporations have been able to purchase billions of dollars of shelters.\footnote{See, e.g., Coleman Hearing Exposes High Profile Accounting Firm’s Shaky and Illegal Tax Shelter Costing Taxpayer Billions (Press Release Nov. 18, 2003) http://govt-aff.senate.gov/index.cfm?Fuseaction=PressReleases.View&PressRelease_id=682&Affiliation=C; Minority Staff of the U.S. Senate Gov. Affs Comm., Permanent Subcom. on Investigations, U.S. Tax Shelter Industry: The Role of Accountants, Lawyers and Financial Professionals (Nov. 18 and 20, 2003), http://govt-aff.senate.gov/_files/spri0834tax_shelters.pdf.}

Table 8C assumes that the enterprise makes $1 a year before tax and that individuals bear 10 percent effective tax both on their operating income and on their reinvestment of after-tax profits. The table assumes that individuals will continue to bear 15 percent tax on their dividends and capital gains from sale of stock because individuals cannot generally shelter from tax. Table 8C shows the corporate rate that will enable the corporation to match an individual-tax-only regime on its accumulation-bailout strategy as the period $n$ of accumulation varies.

<table>
<thead>
<tr>
<th>Years of Accumulation</th>
<th>Necessary Corporate Tax Rate</th>
<th>Stated as Percent of Owners’ 10% Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>5.15%</td>
<td>51.50%</td>
</tr>
<tr>
<td>30</td>
<td>4.49%</td>
<td>44.90%</td>
</tr>
<tr>
<td>25</td>
<td>3.66%</td>
<td>36.60%</td>
</tr>
<tr>
<td>20</td>
<td>2.59%</td>
<td>25.90%</td>
</tr>
<tr>
<td>15</td>
<td>1.12%</td>
<td>11.20%</td>
</tr>
<tr>
<td>10</td>
<td>-0.63%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>-3.15%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>-5.12%</td>
<td></td>
</tr>
</tbody>
</table>

Even negative tax rates are not impossible, but the necessary assumptions for short-term investments become heroic.

It is difficult to guess whether the advantages publicly traded corporations have achieved in sheltering will remain a durable feature of the income tax over the coming years. Corporations are able to move to Bermuda and the Cayman Islands, when individuals have trouble doing that. Shelter promoters are able to amass the expertise to construct a better loss generator for large shelters, where a great deal of tax is at stake, than they can for smaller transactions. On the other hand, the corporate tax rates are pretty low, perhaps lower than the political system as a whole can accept.

III. Conclusions on Survival of the Corporation

Corporate stock probably should be avoided as the vehicle for short-term and medium-term investments. The assumptions needed to justify accumulation-bailout are heroic, assuming the investor will realize her gain within 10 years or less. At 10 years, shareholders must be willing to accept an after-tax rate of return of less than half of what they could get with a passthrough regime, or the corporation must make almost twice the return per year before tax compared to the passthrough entity, or the corporation must pay less than zero tax per dollar of income. A combination of all three factors would moderate the demands made of any one factor, but the necessary catch-up assumptions create an extraordinary hurdle for a corporation to overcome. For investments needed to ripen in less than 10 years, the assumptions get worse. For an enterprise that is going to grow, and not just maintain the $1-a-year pattern, the assumptions get worse.

For a pension fund, the barriers against investment in stock are even higher. Pensions investing in corporate stock bear a corporate tax, as high as 35 percent, which they could avoid with debt or direct investments or a passthrough entity. Pension funds accept biased manager decisions to accumulate. Managers accumulate earnings to avoid a dividend tax the pension fund does not pay, and in doing so make the pension fund suffer a corporate tax that the pension fund then cannot avoid. It is difficult to see how any game, even a poker game, can be a winning game if tax takes 35 cents on the dollar off the table. Good, bad, and indifferent
players would do better if they played a game — avoiding section 11 — in which the 35-cent corporate tax is left on the table.

For taxable individuals, the optimal entity entails avoiding section 11 unless the individual’s time horizon is very long. Long-term investments also will face rate changes, which will upset the current optimum. If the future is anything like the last 25 years, it will have surprises and many counterintuitive twists. Even if you know whether overall tax rates will go down or up, that will not help because it is the relative impact of individual, corporate, and capital gains rates that will govern. As philosopher Yogi Berra has said, the future is hard to predict, because it has not happened yet.

The uncertainty of the future favors avoiding the corporate form for as long as possible. An investor can go from a passthrough or debt, which avoids section 11, into a section-11-tax-bearing entity without a tax cost. Section 351 allows the incorporation of a partnership without recognition of gain. Debt may be converted into stock under a conversion feature without tax. An exchange of bonds for equity is a tax-free recapitalization on both sides of the exchange. But while it is tax-free to put your investments into the corporate equity form, there is at least a 15 percent tax on pulling them out because both dividends and capital gain bear 15 percent tax. If there is gain built into distributed assets, then the corporation must also pay tax on the gain, at rates of up to 35 percent. The asymmetry of the tax treatments means that in the face of uncertainty you should lean toward avoidance of the corporate form initially. Getting into section 11 later is easy; getting out once you are in involves a toll charge.

A final note of modesty is appropriate to the model used here. Any model must strip out some facts about the world. This report assumed that the sole goal was to maximize the after-tax terminal value to the investor after given years of investment. In the real world, the goal is confused by managers of corporations who are serving themselves and may not even be trying to maximize the investor’s after-tax return. The real world is not so simple as a $1-a-year enterprise. Still, “all models are wrong,” it is said, “but some are interesting.”

51Section 368(a)(1)(E).
53Attributed to George Box of the University of Wisconsin, Madison, at http://aris.ss.uci.edu/econ/personnel/kawa/aphorism.html.