Embedded Capital Gains, One More Time

Estate of Jelke v. Commissioner

Z. Christopher Mercer, ASA, CFA

There were three valuation issues before the Court in Estate of Jelke v. Commissioner (T.C. Memo 2005-131, filed May 31, 2005).

1. What is the appropriate treatment of the embedded capital gains tax liability within Commercial Chemical Company (“CCC”), a C corporation?
2. What is the appropriate minority interest discount?
3. What is the appropriate marketability discount?

This article focuses solely on the treatment of the embedded capital gains tax liability.

Background

Frazier Jelke III died on March 4, 1999 owning 3,000 (or 6.44% of the 46,584 shares outstanding) of Commercial Chemical Co.

At the date of death, CCC was an asset holding entity whose holdings were comprised primarily of large-capitalization, publicly traded securities and nominal liabilities. Total assets at market values were $190.8 million and stated liabilities were $2.1 million. Therefore, asset value was $188.6 million prior to consideration of the impact of embedded capital gains liabilities resulting from significant capital gains in CCC’s portfolio. The embedded liability for such deferred tax liabilities was $51.6 million. These facts were not in dispute. The taxpayer’s valuation expert was William H. Frazier, ASA, (Howard Barker Frazier Elliott). The valuation expert for the Internal Revenue Service was Professor Israel Shaked (Boston University).

The Court’s Conclusion

In the final analysis, the Court agreed with Professor Shaked regarding a partial consideration of the embedded capital gains liability and chose minority interest and marketability discounts between those suggested by the two experts, although closer to Professor Shaked than Mr. Frazier.
In my opinion the most interesting aspect of this case was the discussion regarding the $51.6 million embedded capital gains tax liability, or the “trapped-in liability.” Mr. Frazier reduced net asset value by the full amount of the embedded tax liability. At the outset, please note that I agree with Mr. Frazier’s treatment. It comports with the analysis presented in an article in the November/December 1998 issue of Valuation Strategies.1 This article discussed two earlier cases, Davis 2 and Eisenberg 3, both of which are cited in the court’s opinion in Estate of Jelke.

Professor Shaked treated the embedded capital gain in the following fashion. First, he examined the historical turnover in the portfolio, which was about 6% per year, indicating a complete turnover of the portfolio in about 16 years. He then divided the $51.6 million embedded gain by 16 to get an annual dollar gain realization ($3.2 million per year). He next took the present value of the gains expected to be realized over the next 16 years at a discount rate of 13.2%, referencing Ibbotson Associates data regarding the long-run (1926-1998) return on large capitalization common stocks. His analysis is presented in Table Two.

There are two noteworthy observations about Professor Shaked’s embedded gains analysis. First, he makes no assumption about the expected growth in value of CCC’s portfolio, which would increase the future tax liability in relationship to the gain in the portfolio today. And second, he considers that the appropriate liability is some 41% of the total liability that existed on the date of death. Professor Shaked suggested that the realization of the tax liability was a) not required on the valuation date; b) uncertain, because stocks go up and down and there was no imminent plan of liquidation. He also cited an academic discussion of embedded gains in closed end mutual funds (most of which have higher turnover rates and lower embedded gains). Professor Shaked’s analysis was accepted by the court.

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3 Eisenberg v. Commissioner, 1998 WL 480814 (2nd Cir.).
Mr. Frazier concluded that treating the embedded liability as a liability in the valuation was appropriate in a C corporation asset holding entity. He did so and reduced net asset value by 100% of the gain.

Mr. Frazier understands the economic reality of purchasing a securities portfolio inside the wrapper of a C corporation. Hypothetical and real world buyers have a choice of purchasing a portfolio (or a piece of a portfolio) of marketable securities on the open market, or of purchasing a similar basket of securities inside a C corporation wrapper. Outside the wrapper there are no embedded capital gains. Inside the wrapper, investors must deal, either today or someday, with the embedded gain existing at the date of purchase.

Mr. Frazier warned the court that Professor Shaked’s analysis did not include expected growth, but the court was swayed by the professor’s argument that embedded gains were something like net operating loss carryforwards.

In addressing this argument [regarding expected growth], Mr. Shaked explained that the need to discount the built-in capital gain tax liability is analogous to the need to discount carryforward losses because they cannot be used until years after the valuation year. It is true that existing tax loss carryforwards must be realized after the date of any valuation. But they do not grow or shelter more income as time progresses. Their values are maximized by generating taxable income for their earliest possible use.

Embedded capital gains in existence in a C corporation as of a valuation date will also be realized in the future. However, if the underlying assets are expected to appreciate, the embedded gain on those existing assets will rise proportionately. This is a point that Mr. Frazier tried to make at trial and that was dismissed, I believe incorrectly, by the court.

Mr. Frazier’s implicit analysis assumed, effectively, that the portfolio would be expected to grow in value in the future, just as it had grown, quite substantially, in the recent past. Another implicit assumption (in the context of Professor Shaked’s analysis), is that the discount rate on the realization of tax liabilities is lower than that on the realization of expected future growth. And this is certainly true.

Professor Shaked proposed a discount rate of 13.2%, which was the long-term return on large capitalization stocks (per reference to Ibbotson Associates data) like in CCC’s portfolio. We assume in Table Three that the expected growth in the portfolio is 13.2% and that the discount rate for the realization of taxes is 11.6%. The result is that the present value of the embedded tax liability is equal to 100% of the embedded tax liability at the valuation date.

While the argument regarding the differential makes logical sense to me, it is not intuitively obvious to everyone. That’s why I wrote the article, noted above, regarding embedded capital gains (even if I couldn’t spell it correctly then). In that article, I prepared a somewhat complex analysis entitled “Analysis of Alternative Purchase Arrangements for Acquiring Appreciating Property in a C Corporation.”

**Table Three**

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The analysis considered five possible arrangements whereby transactions occur with C corporation asset holding entities:

1. Buyer acquires property outright at fair market value.

2. Buyer buys C corporation stock with property basis inside the corporation equal to its fair market value (no embedded gain).

3. Buyer buys C corporation stock with large embedded gain liability and pays price with no reduction for the liability.

4. Buyer buys C corporation stock with about 50% of market value accounted for by embedded gains, and reduces the price by the embedded liability dollar for dollar.

5. Buyer buys C corporation stock with large embedded gain and reduces the price by the embedded liability dollar for dollar.

The alternative purchase analysis concluded as follows:

A rational willing buyer will pay no more than a price for shares of a C corporation asset holding company that recognizes 100% of the embedded gain tax liability in that C corporation. A rational seller will sell for no less than this amount because of the ability to liquidate and achieve this result. Rational negotiations between hypothetical willing buyers and sellers should lead to a full recognition of embedded capital gains tax liabilities in the determination of the price to be paid for the C corporation’s shares (absent any compulsion on the part of the buyer or seller).

The analysis pointed out, in fact, that a buyer of a C corporation asset holding entity with an embedded tax liability of 50% would experience a drag on performance relative to purchasing the underlying assets outright. This situation would be analogous to the CCC situation in Jelke. However, the buyer could not charge more than the actual embedded gain liability because the seller (of 100% of the stock) would have the ability to liquidate and to achieve that result.

So there is a penalty in return to buying 100% of the stock of an asset holding entity with a 50% of market value of assets (plus or minus) comprised of an embedded gain relative to the purchase of the underlying asset outright. If that is the case for a 100% shareholder, it is certainly the case for a minority shareholder. My 1998 article concluded with the following:

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4 This may not be intuitively obvious. However, consider buying an appreciating asset (or portfolio of securities) outright. The basis in the assets is their market values at purchase. The only future tax liabilities that will arise relate to appreciation from this basis. Now consider the same asset or portfolio with 50% of the market value comprised of capital appreciation inside a C corporation. Even if a buyer of the corporation (or an interest in it) reduces the purchase price dollar-for-dollar for the then-existing embedded gain, the future gain on the assets will be taxed at the corporate capital gains rate and the ultimate distribution will also be taxed at personal rates. The result is a permanent diminution in return. However, since the seller has the option of liquidating, a buyer may have to pay a price that implies a permanent drag on returns. Buyers acquiring such C corporations will likely liquidate them in the near-term in order to avoid this drain on returns.
“Our analysis leads to this series of conclusions:

1. Nothing in the analysis supports any concept that the speculative nature of an expected holding period should call for a “sharing” of the embedded tax liability between sellers of C corporations and buyers of those corporations [holding companies].

2. Nothing in the analysis suggests that the lack of an imminent plan for the liquidation of a C corporation with embedded gains is any reason not to consider the existence of the embedded tax liabilities directly in the purchase price of C corporation stock today.

3. In the context of Davis, Mr. Howard’s treatment of the embedded tax liability of ADDI&C as a present liability in his appraisal is the most appropriate treatment of such embedded tax liabilities… [Mr. Howard is one of Mr. Frazier’s partners]

4. The partial treatment of the embedded liability by Pratt and Thomson, while a step in the right direction, falls considerably short of dealing with the true economic impact of the liability from the viewpoint of the hypothetical buyer of ADDI&C shares.

5. This entire analysis has dealt with buyers of 100% of the stock of C corporation asset holding companies.

If the analysis suggests that rational purchasers of control of the entities would require that the price of the stock reflect a reduction for the dollar amount of embedded tax liabilities, it is even more supportive of such consideration for hypothetical buyers of minority interests.

Exhibit One, which is found on Page 8, details the return calculations under four assumptions similar to the analysis found in my 1998 article. In the analysis, which is summarized below, assume that the underlying asset (e.g., a diversified portfolio of publicly traded securities) has an expected growth rate of 10% per year. Next, assume that the corporate capital gains rate is 35% and that the personal capital gains rate is 20%. Other than embedded capital gains, the C corporations have no liabilities.

Annual returns are calculated in Exhibit One assuming a hypothetical sale at each year-end, with the after-tax proceeds being reinvested. We could calculate cumulative returns over the investment horizon, as was done in the 1998 article, but the annual returns give a clearer, visual picture of the impact of embedded gains in C corporation asset holding entities on investor returns. The four scenarios are:

1. An investor purchases the underlying securities portfolio outside any corporate wrapper and owns the portfolio outright. The returns from this scenario provide a benchmark for comparison with the others.

2. There is a mid-range (50% of asset value) embedded gain in a C corporation. The investor acquires 100% of the C corporation and pays a price net of the entire embedded capital gain. The seller accepts this price because he can do no better by liquidating the corporation.

3. There is a large (virtually 100% of asset value) capital gain inside a C corporation. The buyer charges the purchase price for 100% of the embedded tax liability. Again, the seller accepts this price because she can do no better by liquidating the corporation.

4. Like the previous corporation, there is a very large embedded capital gain. In this case, the buyer, for some reason, deducts only 80% of the embedded capital gain as a liability.
Chart One presents annual, after tax (corporate and personal, as appropriate) returns over a ten year period for each scenario above.

Scenario 1 involves the purchase of the underlying portfolio outside any corporation, so the investor pays no corporate taxes. The investor obtains an 8.0% (hypothetical) after-tax return in Year One, and, assuming continuous reinvestment, that return rises to 9.0% by Year Ten. This is the benchmark return expectation for any investor acquiring the same portfolio inside a C corporation asset holding entity.

Scenario 2 involves the payment of a price for the corporation reflective of 100% of the embedded capital gains tax liability. Note that the acquirer of this corporation under these circumstances would accept a permanent diminution in return relative to owning the portfolio outright. This is not a rational, long-term investment strategy, so the acquirer of the portfolio (or other appreciating asset) would likely liquidate the corporation or convert it into another form of corporate organization to avoid this return drain.

Scenario 3 involves a C corporation containing virtually 100% of its asset value in the form of embedded gains (effectively a zero or $1.00 basis in the assets). The price paid is net of the entire embedded tax on the embedded liability, so the investor in Scenario 3 actually puts up fewer dollars than does the investor in Scenario 1. However, the Scenario 3 investor obtains the identical returns on his investment as does the investor in Scenario 1.

Assume for the moment that the purchaser has no intent to liquidate in the near future and that the seller knows this. Isn't the seller providing a windfall return to the buyer? If the asset is appreciating, the answer is no, because the embedded tax liability grows at least proportionately.

Scenario 4 involves the purchase of a C corporation identical to the one in Scenario 3; however, the investor in Scenario 4 pays a price that deducts only 80% of the embedded capital gains tax. He, therefore, assumes the liability for the remaining 20%. Chart One shows a negative return in Year One as the hypothetical liquidation causes the investor to absorb the 20% of the tax liability that was ignored at purchase. There is a diminished return in Year Two while the remainder of the loss is absorbed. Thereafter, the returns are assumed identical to those of Scenarios 1 and 3. This is not a rational strategy for hypothetical investors.
Another question could be asked regarding our assumption of asset appreciation within the C corporation asset holding entity. The main reason for assuming growth is that asset holding entities are generally created to hold assets that are expected to appreciate. Appreciating assets include marketable securities, timberland, or real estate, whether income producing or held primarily for appreciation.

Non-appreciating assets in asset holding entities would seem, at least in my experience, to be the exception. Occasionally, asset holding entities will hold notes payable or mortgages which will not appreciate. Such notes are generally found in entities holding appreciating assets, as well. In the extreme case of an asset holding entity holding a single, large note receivable, logic suggests that prospective purchasers would purchase the note based on the present value of expected interest and principal payments, discounted to the present at their required return for the asset, including a negative charge for the expected taxes to be paid upon any gains realized when principal payments are received.

If the assets are not appreciating, there is no source of return for the buyer other than the lower future tax (in present value terms) plus any negotiated discount necessary to achieve the buyer’s expected return over the expected holding period of the asset holding entity. Why would anyone purchase this entity absent the expectation of a reasonable return? I think this is the exception situation, and not the rule.

So What Happened in Court?

Who knows? I sometimes don’t know what happened when I’ve been present for the entire valuation discussion! But we can hazard a few guesses:

1. Mr. Frazier took the position in his report that the embedded capital gains liability should be discounted 100% in the determination of net asset value. His report, however, provided very little economic analysis to prove his point.

2. Professor Shaked spent some 15 pages of his 39 pages of text discussing the embedded capital gains issue, citing Estate of Davis and numerous articles relating to embedded gains in closed-end funds. He also cited board minutes suggesting that the board of directors was aware that the embedded liability would only have to be paid upon liquidation, which by the way, is irrelevant to the valuation of the subject minority interest. He then provided an economic analysis (summarized above) to reach his conclusion.

3. Mr. Frazier’s report had a two-page discussion of the issue and Professor Shaked’s had a 15 page discussion. It appears that the court went with the weight of the evidence, rather than with the appropriate economic reasoning.5

I hope that this review of a portion of Estate of Jelke provides additional perspective for the proposition that tax liability on embedded capital gains in C corporation asset holding entities should be fully considered when determining their net asset value for valuation purposes. Only by fully tax-effecting such embedded capital gains liabilities can investors achieve returns analogous to those available from identical assets outside a corporate wrapper. Again, the analysis in this article considers investors for 100% of C corporation asset holding entities. If this is true for controlling shareholders, it is equally true for minority shareholders who lack the ability to determine the timing of liquidation.◆

5 I make light with my attempt at a pun. I spoke with Mr. Frazier about this and he informed me that, in addition to the text of his report, the court was provided with an article Frazier wrote for Estate Planning with a detailed discussion on the issue. There was also a several page rebuttal memorandum addressing the issue. In addition, there was extensive cross-examination of Professor Shaked regarding the impact of expected appreciation of asset values on the analysis of embedded gains at the valuation date, as well as his unfamiliarity with the Malkiel article he used to support his position. So, as I said at the start of this section, who knows what happened in court?!
### Corporate Capital Gains Rate
35.0%

### Personal Cap Gains Tax Rate
20.0%

### Growth Rate
10.0%

#### Purchase Underlying Assets

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#### Proceeds of Liquidation

|                      | 1,000 | 1,080 | 1,168 | 1,265 | 1,371 | 1,488 | 1,617 | 1,759 | 1,915 | 2,086 | 2,275 |

#### Expected After-Tax Return by Year

|                      | 8.00% | 8.15% | 8.29% | 8.42% | 8.54% | 8.66% | 8.76% | 8.86% | 8.96% | 9.04% |

### Mid-Range Embedded Gain

#### Market Value

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#### Proceeds of Liquidation

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#### Expected After-Tax Return by Year

|                      | 6.30% | 6.52% | 6.74% | 6.94% | 7.14% | 7.33% | 7.51% | 7.69% | 7.85% | 8.01% |

### Very Large Embedded Gain

#### Market Value

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#### Proceeds of Liquidation

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</table>

#### Expected After-Tax Return by Year

|                      | 8.00% | 8.14% | 8.28% | 8.42% | 8.54% | 8.65% | 8.76% | 8.86% | 8.95% | 9.04% |

### Deduct % of Embedded Liability
80.0%

#### Market Value

<table>
<thead>
<tr>
<th></th>
<th>1,000</th>
<th>1,100</th>
<th>1,210</th>
<th>1,331</th>
<th>1,464</th>
<th>1,611</th>
<th>1,772</th>
<th>1,949</th>
<th>2,144</th>
<th>2,358</th>
<th>2,594</th>
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<tbody>
<tr>
<td>Original Basis</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Embedded Gain</td>
<td>999</td>
<td>1,099</td>
<td>1,209</td>
<td>1,330</td>
<td>1,463</td>
<td>1,610</td>
<td>1,771</td>
<td>1,948</td>
<td>2,143</td>
<td>2,357</td>
<td>2,593</td>
</tr>
<tr>
<td>Corporate Tax on Liquidation</td>
<td>(350)</td>
<td>(385)</td>
<td>(423)</td>
<td>(468)</td>
<td>(512)</td>
<td>(563)</td>
<td>(620)</td>
<td>(682)</td>
<td>(750)</td>
<td>(825)</td>
<td></td>
</tr>
<tr>
<td>Corporate Tax Charged to Value</td>
<td>(280)</td>
<td>(317)</td>
<td>(352)</td>
<td>(393)</td>
<td>(438)</td>
<td>(487)</td>
<td>(542)</td>
<td>(603)</td>
<td>(669)</td>
<td>(741)</td>
<td></td>
</tr>
</tbody>
</table>

#### Proceeds of Liquidation

|                      | 650   | 715   | 787   | 866   | 952   | 1,047 | 1,152 | 1,267 | 1,394 | 1,533 | 1,686 |

#### Payment for Stock
720

#### Outside Gain/Loss

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>13</th>
<th>215</th>
<th>302</th>
<th>397</th>
<th>502</th>
<th>617</th>
<th>743</th>
<th>883</th>
<th>1,036</th>
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</thead>
<tbody>
<tr>
<td>Personal Taxes</td>
<td>0</td>
<td>(27)</td>
<td>(43)</td>
<td>(60)</td>
<td>(79)</td>
<td>(100)</td>
<td>(123)</td>
<td>(149)</td>
<td>(177)</td>
<td>(207)</td>
</tr>
<tr>
<td>After-Tax Proceeds</td>
<td>720</td>
<td>715</td>
<td>760</td>
<td>822</td>
<td>892</td>
<td>968</td>
<td>1,052</td>
<td>1,144</td>
<td>1,245</td>
<td>1,356</td>
</tr>
</tbody>
</table>

#### Expected After-Tax Return

|                      | -0.68% | 6.18% | 8.28% | 8.42% | 8.54% | 8.65% | 8.76% | 8.86% | 8.95% | 9.04% |

#### Notes

1. Purchase Underlying Assets Outside Corp.
2. Charge for Mid-Range Embedded Gain
3. Charge for 100% of Large Embedded Gain
4. Deduct Only 80% of Large Embedded Gain
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