VALUATION

Case Study: The Impact of DLOM on an Estate

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What happens when experts use the same study to evaluate an estate? In the case of *John F. Koons III v. Commissioner*, both the valuation expert hired by the estate to determine the amount of taxes owed, and the Internal Revenue Service (IRS) expert who testified for the court used the same study to support their findings. The court favored the IRS expert. This article will explain how and why this occurred.

THE FACTS OF THE MATTER

In Estate of *John F. Koons III v. Commissioner*,[1] there were two issues before the Tax Court. The first was whether or not the estate was entitled to a deduction of claimed interest expense related to a loan between the decedent's trust and Central Investment LLC (CI LLC), a company owned in part by the decedent. The second issue was the fair market value of CI LLC. Both issues are addressed in this case study. However, the second issue, and, in particular, the selected discount for lack of marketability (DLOM) in the valuation of CI LLC, is the emphasis of this case study.

John F. Koons III was the CEO of Central Investment Corp. (CIC), a bottler and distributor of Pepsi soft drinks. CIC was also in the business of selling food and drinks from vending machines. Koons owned a 46.9 voting percentage interest and a 51.59 non-voting percentage interest in CIC. His children owned (either directly or through trusts established for their benefits) a substantial portion of the remaining interest in CIC.

In 1998, PepsiCo, Inc. and CIC initiated lawsuits against one another regarding the manufacture and sale of PepsiCo beverage products in CIC's territories. By December 2004, CIC was in discussions to sell its soft drink business and vending machine business to PepsiAmericas, Inc. (PAS), an affiliate of PepsiCo. The consummated sale would resolve the ongoing lawsuits.

Shortly before the sale of certain assets to PAS, CIC formed Central Investment LLC (CI LLC) as a wholly owned subsidiary of CIC. CIC became the sole member of CIC LLC and contributed all CIC assets that weren't subject to the PAS sale to CI LLC. Koons and his children owned the same percentage in CI LLC as they owned in CIC.

Since the Koons children owned a substantial portion in CI (and in CI LLC), their approval of the transaction was required before the PAS transaction could be consummated. The children's agreement to the transaction was conditional on the CI LLC agreement to offer to redeem their interests in CI LLC within 90 days of the PAS transaction, which was ultimately provided.

The PAS sale closed on January 12, 2005. The proceeds of the sale netted CI LLC approximately $352.4 million. In addition, PepsiCo paid $50 million to settle the ongoing lawsuit. CI LLC also owned the assets of CIC that were not part of the PAS sale

By February 27, 2005, all of the children had agreed to redeem their interest in CI LLC. The redemptions were completed on April 30, 2005. Upon completing the redemptions, the Koons ownership interest in CI LLC (through the trust) was increased to a 70.42 voting percentage interest and a 71.07 non-voting percentage interest.

Koons died on March 3, 2005, shortly before the redemptions were completed. As of that date, the members' equity of CI LLC was $318 million, on an accounting book value basis. This included cash of $322 million and a $20 million note payable to Koons, among other assets and liabilities.

1 *Koons v. Commissioner*, T.C. Memo. 2013-94

By late February 2006, nearly a year after Koons' death, CI LLC loaned the trust $10.75 million to make a payment toward the estate's various tax liabilities. The loan carried an interest rate of 9.5 percent and required semi-annual payments of principal and interest between August 31, 2024, and February 28, 2031. No payments were due prior to August 31, 2024.

Since the payment of the loan was deferred for 18 years, the interest component of this loan was high relative to the principal. The total interest component of the $10.75 million loan was $71.42 million. The trust anticipated repaying the loan using distributions from CI LLC.

The estate hired a valuation expert to estimate the fair market value of the estate's interest in CI LLC as of the date of death in order to determine the amount of estate taxes owed. The estate's expert estimated the value of the subject interest at $117.2 million. This estimated value included a deduction of $71.4 million for the interest of the loan from CI LLC to the trust.

THE SUBJECT OWNERSHIP INTEREST

On April 8, 2013, the Tax Court ruled in favor of the IRS on both issues in this decision. The Tax Court concluded that (1) the estate was not permitted to deduct the $71.4 million of interest expense from the value of the gross estate, and (2) the value of the subject interest was calculated based on the IRS expert's estimated 7.5 percent DLOM instead of the estates expert's estimated 31.7 percent DLOM. Both of the Tax Court's rulings in this decision were influenced by the amount of control inherent in the subject interest.

The valuation analysis performed by the estate's expert assumed that the subject interest had the rights of an approximate 50 percent owner. The estate's expert considered the ownership interest as it existed on the date of death.

Alternatively, the IRS expert assumed the subject interest had the rights of an approximate 71 percent owner. The IRS expert assumed that the stock redemptions that were planned but not completed as of the date of death would eventually occur. This would give a hypothetical owner of the subject interest substantial control over the CI LLC, including the ability to distribute most of the CI LLC assets.

The Tax Court[2] agreed with the IRS expert for the following reasons:

- The redemption agreements were signed prior to the date of death.
- The redemption price could be easily ascertained (most of the CI LLC assets were cash).
- The CI LLC could have successfully sued the other stockholders for breach of contract if they reneged on the redemption.
- The stockholders had expressed interest in selling their interests in the CI LLC.
- The CI LLC manager wanted the stockholders removed from the CI LLC.
- A 70 percent voting interest in the CI LLC would enable the owner to make certain amendments to the LLC agreement and change the board of directors (and cause CI LLC to distribute most of its assets).
- The Tax Court also considered the motivations of a hypothetical willing buyer of the CI LLC stock.

It is noteworthy that neither expert applied an ownership control price premium. The estate's expert argued that even if the subject interest was a 71 percent ownership interest (he believed it should be analyzed as an approximate 50 percent ownership interest), it was still a non-controlling ownership interest.

The estate's expert reached this conclusion for the following reasons:

- The operating agreement limited the discretionary distributions of assets by the board of managers.
- The stock purchase agreement between PAS and CIC (the SPA) prevented CI LLC from dissolving and distributing all its assets until after January 10, 2012.
- A supermajority vote of the members was required for some actions.

Although he believed the subject interest was a controlling ownership interest, the IRS expert did not apply a control premium. He did not apply a control premium for these two reasons:

- The majority of the CI LLC assets were cash.
- A controlling owner in CI LLC would be unlikely to extract value above its pro rata ownership of the CI LLC assets.

THE DLOM

As in many Tax Court disputes over the value of a closely held company, the IRS expert and the estate's experts disagreed over the magnitude of the DLOM. The estate's expert contended that the DLOM was 31.7 percent, and the IRS expert contended that the DLOM was 7.5 percent.

THE ESTATE'S EXPERT ANALYSIS

The estate's expert valued the subject interest as a non-controlling ownership interest. Understandably, he relied on

2 *Koons v. Commissioner*, T.C. Memo. 2013-94, pages 46 to 51.

the DLOMs implied from transactions in non-controlling interests in restricted stocks to estimate the DLOM for the subject interest.

The methodology to estimate the DLOM used by the estate's expert was consistent with his opinion about the level of control in the subject interest. The estate's expert relied on a 2001 study of restricted stock transactions to estimate the DLOM—a study that he conducted.[3] This study provided a regression formula to estimate the DLOM for non-marketable stock. The estate's expert applied this formula to the subject interest (assuming a 50.5 percent subject ownership interest) and computed a DLOM of 26.6 percent.

The estate's expert then added an additional seven percent to account for factors that were unique to the subject interest. Specifically:

- CI LLC could not be dissolved until January 10, 2012.
- Its employees were bound by non-compete agreements.
- CI LLC was a closely held, small, unknown limited liability company.
- An interest in CI LLC could not be sold to persons who were not direct descendants without a 75 percent vote of the members.
- PAS had the right to purchase services from CI LLC.
- CI LLC was liable (1) to pay the costs of carbon-dioxide compliance at the Riviera Beach facility under the SPA, (2) for environmental representations and warranties made under the SPA, and (3) for insurance claims.

3 Mukesh Bajaj, David J. Denis, Stephen P. Ferris & Atulya Sarin, "Firm Value and Marketability Discounts", 27 J. Corp. L. 89 (2001).

THE IRS EXPERT ANALYSIS

Although he believed that the subject interest was a controlling ownership interest, the IRS expert relied on data from transactions of non-controlling interests to estimate the DLOM.

The IRS expert relied on the same study as the estate's expert, among other studies. However, the IRS expert used the study results in a different way. Instead of relying on the regression formula to estimate a DLOM for the subject interest, the IRS expert reviewed the data in the study and determined that a DLOM between five percent and ten percent was appropriate.

Based on this range, the IRS expert selected a 7.5 percent DLOM. The decision does not specify how the IRS expert determined the appropriate range of discounts based on the data in the study.[4]

The factors that the IRS expert considered relevant in his selection of a DLOM included the following:

- There was only a small risk that the redemptions would not be completed.
- There were obligations imposed on CI LLC by the SPA, including those related to potential environmental, health, and safety liabilities.
- It was reasonable to expect that CI LLC would make cash distributions.
- There were transferability restrictions in the operating agreement.
- The owner of the trust's interest would have had the ability to force CI LLC to distribute most of its assets once the redemptions closed.
- Most of CI LLC's assets were liquid.

4 Mukesh Baja, David J. Denis, Stephen P. Ferris, and Atuyla Sarin, "Firm Value and Marketability Discounts," *Journal of Corporation Law* (Fall 2001): page 27.

THE TAX COURT'S OPINION

The Tax Court concluded that the IRS expert's testimony was more persuasive. The court was persuaded by the fact that the IRS expert analyzed the subject interest as a controlling ownership interest. It also identified several weaknesses with using a regression analysis to estimate the DLOM for the subject ownership interest.

The court listed the following weaknesses of the estate expert's regression analysis:[5]

- The subject companies that comprised the regression analysis data set were mostly operating companies, and the subject company was more comparable to asset-holding companies.
- The regression equation only explained one-third of the variation in the valuation discounts among the ownership interests in the data set.
- The regression erroneously attributed the discount to one factor instead of another.

The court also gave little emphasis to the transfer restrictions in the CI LLC operating agreement because (1) the subject interest had the ability to distribute most of the CI LLC assets, and (2) the CI LLC was—and was projected to remain—a cash-rich company.

ANALYSIS OF THE DECISION

The ruling that had the biggest impact in this case was the decision to treat the subject interest in the CI LLC like a controlling ownership interest. This affected both issues that were deliberated in this case—i.e., the DLOM as well as the

5 *Koons v. Commissioner*, T.C. Memo. 2013-94, page 55.

interest deduction. The Tax Court treated the subject interest like a controlling interest because redemptions that were planned, but had not happened as of the date of death, were expected to occur.

One important lesson from this case is that if a post-valuation date event is likely to occur as of the valuation date, then it should be considered in the valuation analysis.

The Uniform Standards of Professional Appraisal Practice (USPAP) provided guidance to business valuation experts regarding the consideration and reliance on subsequent events. "Based on USPAP, it is reasonable for a valuation analyst to consider data subsequent to the valuation date but only to confirm historical trends and market expectations as of the valuation date."[6]

The relevant post-valuation date events in this case were stock redemptions, but the issue of post-valuation date events is certainly more far reaching than that. Other post-valuation date events that valuation analysts may want to consider relate to merger or acquisition transactions, distributions, capital projects, partnership amendments, or uses of cash. Whether or not the foreseen event actually happens is another important point for the expert to consider. Here, the redemptions did actually occur. This factor certainly held some weight with the Tax Court. Based on the facts included in this discussion, the decision to treat the subject ownership interest as a controlling ownership interest appears to be reasonable.

There are also lessons to be learned in the Tax Court's selected DLOM of 7.5 percent. First, the Tax Court considered the ability of the owner of the subject interest to benefit from the subject company's assets (either from distributions or the liquidation of assets) as one of the most important DLOM factors, and more important than the transfer restrictions placed on the company's stock.

It is appropriate to give considerable weight to the ability of the owner of the non-marketable stock to realize a short- to intermediate-term return on his or her investment—whether that return comes from distributions, liquidation, or a sale of the underlying company. DLOM studies consistently find that the subject company's distribution policy is one of the more highly correlated factors with the size of the DLOM.

Second, the Tax Court sided with the valuation expert who reviewed DLOM data from multiple restricted stock studies and, from that analysis alone, precisely selected a DLOM (rounded to the nearest one-tenth of one percent). The Tax Court rejected the DLOM analysis from the expert that reviewed much of the same data and estimated a DLOM based on a regression formula.

The fact that the Tax Court sided against the expert that used a formula to estimate the DLOM suggests that analysts should be careful how they use regression models in their valuations for gift or estate tax purposes.

It is hard to observe from recent Tax Court decisions any clear pattern regarding which methods to estimate the DLOM the Tax Court finds the most acceptable. In the recent past, Tax Court decisions appeared to trend toward relying on more quantitative methods to estimate the DLOM. However, in this case, the Tax Court did the exact opposite. The change regarding what the Tax Court considers to be a generally accepted method to estimate the DLOM is as much of a random walk as it is an evolution.

Prior to the mid-1990s, valuators frequently selected a DLOM that was equal to the average discount from restricted stock studies or pre-initial public offering studies. In the *Estate of Peracchio*[7] in 1993, the Tax Court rejected this approach. In that decision, Judge Halpern wrote that the valuation expert:

> ...makes no attempt whatsoever to analyze the data from those [restricted stock] studies as they relate to the transferred interests. Rather, he simply lists the average discounts observed in several such studies, effectively asking us to accept on faith the premise that the approximate average of those results provides a reliable benchmark for the transferred interests. Absent any analytical support, we are unable to accept that premise, particularly in light of the fundamental differences between an investment company holding easily valued assets (such as the partnership) and the operating companies that are the subject of the restricted stock studies.

The Tax Court in *Estate of Charlotte Dean Temple v. United States*[8] reached a similar conclusion regarding the reliance on average discounts.

After the *Peracchio* and *Temple* decisions, many valuation analysts began to estimate the DLOM using more quantitative methods. These methods use one of the following procedures:

- Analyzing the price discount from a smaller, hand-picked subset of one or

6 Jim Rabe, "Subsequent Events and Multi-Level Valuation Discounts—Ringold Telephone Company v. Commissioner," Insights, Autumn 2010, 71.

7 *Peracchio v. Commissioner*, T.C. Memo 2003280

8 *Temple v. U.S.*, 423 F.Supp.2d 605 (E.D. Tex. 2006)

more restricted stock study databases.

- Using a regression model (like the estate's expert in the *Koons* case).
- Using an option pricing model.
- Consideration of other similar methods.

In spite of the trend toward more quantitative methods to estimate the DLOM, in the 2013 decision in the *Koons* case, the Tax Court sided with the more subjective methodology. The Tax Court's decision to rely on more subjective methods to estimate the DLOM may be a reflection of the skepticism that exists regarding the use of regression models to estimate the DLOM.

A 2002 *Business Valuation Review* (BVR) article by Stanley Feldman[9] described several potential problems that exist in the regression models of (1) Silber[10] and (2) Hertzel and Smith.[11] This critique would presumably apply—at least in part—to more current regression models.

According to the BVR article, the regression models:

- Suffer from weak explanatory power.
- Were developed to test the explanatory power of certain variables on the DLOM, and not necessarily to produce a formula to estimate the DLOM.
- May allow for significantly different DLOMs that are not statistically different from one another.
- May suffer from heteroskedasticity and, therefore, the forecast confidence interval by these models may be either too wide or too narrow.
- May not consider all variables that affect the DLOM.
- May incorrectly assume that the models are time invariant.

The article also notes that the models may break down if the subject company has different characteristics than the companies in the study.

Another example of the issues that exist with regression models can be illustrated using an example from the spring 2011 issue of BVR. That BVR issue presented two articles that analyzed regression models. In one article, the authors wrote, "Our model showed that changes in SEC Rule 144 holding periods have had a *significant* impact on private placement discount"[12] [*emphasis added*].

In the same BVR issue, the authors of a different and unrelated article wrote, "As discussed herein, the Rule 144 change appears to have had *minimal* impact on private placement discounts"[13] [*emphasis added*]. The conflicting results highlight the difficulty in performing and analyzing regression-based DLOM studies.

Given the apparent weaknesses in regression based models to estimate the DLOM, valuation analysts may want to consider alternative ways to use DLOM studies that derive regression models.

One way that valuation analysts can use these types of studies is to review the factors that were determined to have the greatest effect on the DLOM, analyze those factors for the subject company relative to the companies in the DLOM study, and then subjectively select a DLOM that is greater, similar to, or lower than the average or median discount indicated in the study.

Valuation analysts should take caution if they follow the same procedures that the Tax Court relied on when it estimated the DLOM for non-controlling ownership interests in their gift and estate tax valuations. This is because the method to estimate the DLOM that was accepted by the Tax Court and relied on by the IRS expert mismatched the subject interest to the method to estimate the DLOM. More specifically, the IRS expert relied on DLOM data derived from non-controlling ownership interests even though the IRS expert believed that the subject ownership interest was a controlling ownership interest.

One generally accepted consensus among valuation analysts is that it is not appropriate to rely on data from transactions in non-controlling ownership interests to estimate the DLOM for a controlling ownership interest.[14]

That said, a 7.5 percent DLOM is within a reasonable range of DLOMs for controlling ownership interests in cash-rich companies (these types of DLOMs generally range from around 5

9 Dr. Stanley Jay Feldman, "A Note on Using Regression Models to Predict the Marketability Discount," *Business Valuation Review* (September 2002).

10 William L. Silber, "Discounts on Restricted Stock: The Impact of Illiquidity on Stock Prices," *Financial Analysts Journal* (July-August 1991): 60–64

11 Michael Hertzel and Richard L. Smith, "Marketability Discounts and Shareholder Gains for Placing Equity Privately," *Journal of Finance* (June 1993).

12 Ezra Angrist, Harry Curtis III, and Daniel Kerrigan, "Regression Analysis and Discounts for Lack of Marketability," *Business Valuation Review* 30, no. 1 (Spring 2011): 46.

13 Aaron M. Stumpf, Robert L. Martinez, and Christopher T. Stallman, "The Stout Risius Ross Restricted Stock Study: A Recent Examination of Private Placement Transactions from September 2005 through May 2010," *Business Valuation Review* 30, no. 1 (Spring 2011): 14.

14 This is largely based on anecdotal evidence. See, for example: (a) George B. Hawkins and Michael A. Paschall, *CCH Business Valuation Guide* (Chicago: CCH, 2010), pages 20–21; (b) Shannon P. Pratt, *Valuing a Business–The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw-Hill, 2008), 399; and (c) Aaron M. Rotkowski, "How to (And How Not To) Estimate the DLOM for Controlling Ownership Interests," *Business Appraisal Practice* (Fourth Quarter 2011).

to 20 percent). In this case, it is possible that the IRS expert and the Tax Court had a concluded DLOM in mind, and both parties fit the data around that answer.

SUMMARY AND CONCLUSION

While there are lessons to be learned from the *Koons* decision, this decision does not provide a roadmap for valuation analysts to follow in order to estimate the DLOM. This is because when estimating the DLOM for the subject interest in CI LLC, both valuation experts in this case inappropriately compared apples (i.e., the subject interest—a controlling ownership interest) to oranges (i.e., DLOM studies based on non-controlling ownership interests). As previously stated, the Tax Court determined that the subject interest was effectively a controlling ownership interest. The subject interest could enjoy most, but not all, of the prerogatives of unilateral control.

Based on this mismatching of DLOM studies and the characteristics of the subject interest, the Tax Court did not have the appropriate tools at its disposal to reach a meaningful conclusion regarding the DLOM. The Tax Court selected a DLOM based on the evidence that was put before it, and not based on appropriate methodologies to estimate the DLOM for controlling ownership interests.[15]

In spite of this Tax Court decision, one should be cautious if adopting the guidance outlined in the *Koons* case to estimate the DLOM for a controlling ownership interest. The decision suggests that the analysts should spend the time to fully understand how the subject interest can get to the subject company assets, whether through distributions, sale of assets, or a company liquidation.

Depending on the nature of the shareholder agreements and the experience and background of the valuation analyst, the analyst may need to discuss this issue with legal counsel. VE

15 For a discussion of the DLOM for controlling ownership interests, see: Aaron M. Rotkowski, "How to (and How Not to) Estimate the DLOM for Controlling Ownership Interests." *Business Appraisal Practice* (Fourth Quarter 2011).

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