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The Top 10 Errors Made in Using the Merged and Acquired Companies Valuation Method

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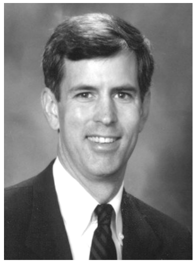
Introduction. There are a variety of pitfalls to avoid in analyzing and applying transaction data used in the merged and acquired companies method of business valuation. Many business appraisers fail to truly understand the intricacies of using the method properly and, as a result, make serious errors in its application, resulting in flawed valuation findings. In our experience of reviewing the valuation reports of others, we routinely see the same kinds of basic mistakes made which often invalidate the findings or render the valuation report of questionable quality. Attorneys who deal with valuation matters need an appreciation of these issues to avoid problems for their clients, and in litigation cases, to make sure their expert's report is prepared correctly, and to identify and expose flaws that might be present in the opposing expert's report. Another article in this issue of *Fair Value* ("In Defense of the Merged and Acquired Companies Valuation Method") provides a general description of the merged and acquired companies method and how business appraisers search out data on acquisitions and then attempt to use that information in a valuation.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Examples of Problems In Using the Method. There are a potentially large number of issues and problems that might arise in using the merged and acquired companies method. Some of the more common problems to avoid are as follows:

1. Contingent Earnout Payments- One problem is that the total purchase price as stated and used in the calculation of multiples may include amounts for contingent "earn out" payments to the seller that may never in fact be paid. In the world of mergers and acquisitions, sellers will often put the best spin on the future prospects of the company, "hyping" what it can do in revenues or earnings after being bought by the buyer. This "hype," however, may be at odds with the actual historical performance of the company. The skeptical buyer will sometimes be willing to offer a contingent future payment (an earnout) to the seller based on actually later achieving this "fluff" in some stated time period (e.g., two or three years after the purchase). In reality, earnouts are often never paid because the fluff never becomes reality. More often than not, earnouts are a way to make the seller happy, giving them the hope of an additional kicker to the purchase price, while not committing the buyer to pay for something they believe has a limited chance of realization. Therefore, when the total price includes contingency amounts, the appraiser should normally restate the purchase price to exclude the earnout, then recalculate and use the adjusted multiples.

2. Same Transactions Reported in Multiple Databases- Appraisers using multiple sources of data (e.g., transaction databases such as *Pratt's Stats, Done Deals*, etc.) must be alert to the possibility that a transaction may occur in multiple databases and should therefore be eliminated when this is present so that it is only counted once.

3. Until the Fat Lady Sings- An announced deal is not the same thing as a closed deal, yet many appraisers fail to see if a deal has actually closed. All too often, the appraiser will find a news release or public company filing stating that a company is going to be acquired for a given price and use this as market data in

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valuing the private company. However, that does not in fact mean that the company was ultimately actually acquired or that the final price and terms remained the same when the deal actually closed. Many announcements of pending deals never result in closed transactions. Alternatively, a buyer may force a renegotiation of the pricing and terms once details on the target are discovered during due diligence. Therefore, the appraiser must go the extra step beyond the initial news release to find out what in fact happened.

4. Mixing Stock and Asset Deals- In deriving multiples from transactions, the appraiser must remember that the same multiple for an asset versus a stock transaction can mean very different things. When compiling the multiples, computing averages, medians and other statistics for the range of multiples, the appraiser should try to avoid throwing asset deals and stock deals into the same hopper to avoid an apples to oranges comparison. This does not mean that it is incorrect to use valuation multiples from both types of transactions. Rather, because what is included in the transaction obviously may vary, this may affect how the multiple and additional adjustments are applied in using the data to value the closely held company.

For example, Company A is acquired in a stock deal where the buyer, by virtue of acquiring the stock, bought all of Company A's assets and assumed all of its liabilities for a valuation multiple that was 7 times earnings before interest, taxes, depreciation and amortization expense ("EBITDA"). Company B, in the same industry, and selling for a 5 times multiple of EBITDA, was an asset deal, where the buyer bought all of Company's B assets, except accounts receivable. Unfortunately, many business appraisers will fail to carefully examine the transaction and what was included or not included. The appraiser might then erroneously conclude that because Company A sold for 7 times EBITDA and Company B sold for 5 times EBITDA that the average industry multiple is 6 times. Suppose the private company being valued has $1,000,000 in EBITDA and $2,500,000 in interest-bearing debt. Therefore, the appraiser might then apply the apples to oranges average multiple of 6 to arrive at a total value of invested capital of $6,000,000. Since the private company has $2,500,000 in interest-bearing debt, this is subtracted to give a value for the private company's common stock of $3,500,000, the final value.

By erroneously mixing an apple (a multiple based on a stock deal where all assets and liabilities were included) with an orange (a multiple based on an asset deal where not all assets and liabilities were included) the business appraiser has: (1) reached false conclusions about the average multiple paid, and (2) arrived at an incorrect value for the subject private company.

What the appraiser should have done in this instance was to separately apply the multiples from each of the transactions and then make adjustments for what was included or not included. Company B involved a price paid where receivables were not purchased by the buyer. By contrast, in valuing the subject company, the appraiser's mission is to determine the value of its shares, including all assets and liabilities. Therefore, if we use Company B's multiple, we must also properly add to any resulting value the fair market value of the receivables of the company being valued to arrive at the value of its shares.

Table A shows that while the multiples from the two transactions are very different, separately applying the stock versus the asset deal and then making appropriate adjustments for the receivables results in exactly the same valuation finding for the private company ($4,500,000) by the two transactions. By contrast, the appraiser who erroneously averaged the multiples and used a 6 times EBITDA multiple, undervalued the private company by $1,000,000 (an incorrect value of $3,500,000 versus a correct value of $4,500,000).

Table A
Different Multiples- But Giving the Same Answer

	Value of Private Company Based on: Co. A	Co. B
EBITDA of Company Being Valued	$1,000,000	$1,000,000
Times: Multiple Paid	7	5
Equals: Total Value of Invested Capital	$7,000,000	$5,000,000
Less: Interest-Bearing Debt of Company	($2,500,000)	($2,500,000)
Equals: Preliminary Value of Shares	$4,500,000	$2,500,000
Plus: Accounts Receivable of Private Company	$0	$2,000,000
Equals: Implied Value of Private Company	**$4,500,000**	**$4,500,000**

Obviously, the foregoing example is very simplistic, and there may be other factors in considering stock versus asset multiples. Nonetheless, it illustrates the simple mistakes that can be made when the appraiser blindly uses data without carefully considering its implications.

5. Blindly Applying Multiples without Reviewing the Details- Many appraisers fail to scrutinize the data and details of a transaction from a database before applying it. For example, just because a company transaction is listed in *Pratt's Stats* in the same SIC code does not mean it is a valid transaction to apply to the company being valued. In the details reported, it might be noted, for example, that a company is in an entirely different business than the industry segment in which it appears. Alternatively, the transaction might involve a company operating under Chapter 11 bankruptcy protection, raising questions about whether or not it was a distress sale. Furthermore, the company might have only one employee, making it hard to say it is truly similar to a company being valued that has 100 employees. Also, revenue size, profit margins, etc., need to be similar, if possible.

6. Stopping the Transaction Search after Reviewing Databases Alone- It is tempting and easy to stop the transaction search after finding a number of transactions in databases. However, there is a wealth of potential acquisition data available on the Internet, particularly buried in the filings of public companies, waiting to be mined and used. While drilling for more data will sometimes result in a "dry hole," the opposite can occur, with far more detailed transaction data unearthed than is available in a database. If nothing else, the additional information can add to the sample size of transactions available to the appraiser to consider and possibly use, and also may allow for a large enough sample to make greater use of statistical analysis tools to see if any factors can be identified that appear to drive the price paid.

7. Dated Transaction Data- If transaction data is very old, a logical question is whether or not it is valid and reliable for use in valuing a company. Some appraisers simplistically assume that because a transaction occurred some time ago that it is not valid and dismiss it. However, if other more recent data is available from other sources that tends to confirm the validity of the range of multiples found in the older data, it may in fact be the case that the older data is still entirely valid and can be used and relied upon. On the other hand, if the conditions in the industry are very different at the present valuation date than when the earlier transactions occurred, it may well be that the prior transactions have limited usefulness.

8. Understanding the Nature and Limitations of Some Sources of Transaction Data- One useful source of data available to business appraisers on merged and acquired company transactions is *Done Deals*, an online database searchable by industry grouping. The biggest shortcoming of the data, though, is that it is generally less detailed that what is found in *Pratt's Stats*, even on the same transactions. Also, users should be aware that valuation multiples are often calculated using the annualized interim results of the acquired company. For example, if the acquired company was purchased for $5,000,000 and it had revenues of $5,000,000 for the latest six month period prior to the acquisition, the revenues would be assumed to be annualized to $10,000,000 for a full year, giving a price to revenue multiple of 0.5 ($5,000,000 / $10,000,000). While that might be reasonable in many cases, in highly seasonal businesses this can result in an erroneous multiple.

9. Incorrect Calculation of Valuation Multiples- A frequent error by business appraisers in using *Pratt's Stats* data relates to the use of the computation of EBITDA multiple. If the database has an N/A in a company's income statement for non-cash charges (depreciation and amortization) and/or interest expense, an EBITDA multiple, which is based on earnings before interest expense, taxes, and depreciation and amortization expense, cannot be calculated and is not reported as a multiple. However, some business appraisers calculate the EBITDA multiple anyway, erroneously assuming that N/A means $0 for those items. The result is a totally invalid and incorrect multiple.

10. Time Travel- A buyer only knows what is known at the valuation date in deciding what to pay for a company, not what happens in the future. Yet this does not stop some business appraisers in searching out and using data on merged and acquired companies where the transactions occurred well after the valuation date, perhaps even years later. Sometimes, this use of after the fact data is intentional to try to lead to a desired end result that would not have been achieved by using data from the acquisition climate existent at the valuation date. Other times, the use of post-valuation date data is simply the result of sloppiness on the part of the appraiser in failing to see when the reported transaction occurred. Regardless of the reason, the result is an erroneous valuation. By using subsequent transactions, these appraisers have time traveled, taking into account

future circumstances that in the real world would not have been known to a buyer and seller at the valuation date. The major error in using post-valuation date data is discussed in detail in two comprehensive articles in the Summer 2002 issue of *Fair Value*, "Back to the Future!" (by Michael Paschall) and "Why Time Travel in Business Valuation is Wrong," by George Hawkins. Subsequent versions of these articles that were later published in *Business Valuation Review*, the official publication of the Business Valuation Committee of the American Society of Appraisers, can be found at Banister Financial's web site at: www.businessvalue.com

Conclusion. Proper use of the merged and acquired companies valuation method requires skill and careful thought on the part of the business appraiser. Users of valuation services should be alert to the potential mistakes that are commonly made by business appraisers in using the method, particularly inexperienced individuals. As demonstrated earlier, failing to properly understand and use data can result in a highly inaccurate value. To the estate planning attorney whose client is an estate or the family law attorney who is arguing about the value of a company in a divorce, the financial ramifications of failing to correctly employ the merged and acquired method can be significant. Therefore, vigilance and a careful reading of the valuation to see how and if the appraiser correctly used the method is always a good practice. ♦

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