

Commonly Used M&A Metrics Contribute to Overpaying

By Jack Alexander

Executive Summary:

A variety of valuation methods and metrics are utilized in setting and evaluating acquisition prices. All of the methods have strengths and limitations. Each can play a role in developing a comprehensive view of a potential deal. However, two of the most commonly used methods to evaluate acquisition pricing, EPS accretion test and comparable transaction pricing, have significant flaws. While both of these measures are important, it is imperative that managers and boards understand the limitations and biases in these metrics. Numerous studies report that most acquisitions fail to create value for the shareholders of the acquiring company. One of the contributing factors to this record is the tendency for acquirers to overpay. In many cases, this is a result of misapplication of two common valuation techniques.

Earnings per Share (“EPS”) Accretive/Dilutive Test

Since many investors value companies based on multiples of earnings, it is very important to understand the impact of an acquisition on EPS. The basic test is to determine if the acquirers EPS will increase (accrete) or decrease (dilute) as a result of proceeding with a specific acquisition. A “rule of thumb” used by many managers, bankers and investors is that a deal should be accretive within 12 months. EPS is a critical measure of performance for a company, especially those trading in public capital markets. The method involves identifying all of the various ways an acquisition will affect EPS. Examples include:

Favorable to EPS

Profits contributed by the acquired firm
Profits from sales synergies
Reduced costs

Unfavorable to EPS

Expenses related to the acquisition, including implementing synergies
Amortization of Goodwill (prior to 2001)
Amortization of other intangibles
Cost of capital to finance the acquisition

- additional shares issued to acquire company
- interest expense on debt issued to finance deal
- foregone interest on cash utilized

Prior to 2001, acquisitions accounted for under the purchase method required that goodwill resulting from the transaction be amortized over some future period. Under rules effective in 2001, goodwill is no longer amortized in the Income Statement. Now goodwill arising from an acquisition is carried on the balance sheet and evaluated for recoverability on an annual basis. Since goodwill amortization expense is excluded from the Income Statement, the “bar” in the accretive-dilutive test was lowered substantially. *Since this test does not fully reflect the true cost of capital for the acquisition, it will result in a positive impact on earnings long before earning an economic return.* Figure 1 illustrates the economic return and implied hurdle rate in a sample transaction.

This deal as presented would be accretive to earnings since the earnings contributed by the target and expected synergies exceed the financing costs. EPS will increase from \$1.00 prior to the acquisition to \$1.07 reflecting the acquisition. If the investors are focusing on EPS and using a PE multiple to value the Company (and if the PE multiple remains constant) the price of the acquiring Company’s stock will rise from \$20.00 to \$21.40 per share.

What about the economics of the transaction? What is the hurdle rate implied in this EPS analysis (i.e. what is the required rate of return on the capital used to purchase this company to break even on EPS)?

Figure 1		EPS Accretive Dilutive Illustration					
<u>Assumptions</u>							
<u>Acquirer:</u>		<u>Target</u>					
PE Ratio	20	Purchase price					100
Shares Outstanding(m)	60	Interest rate					6%
Tax rate	40%	Revenue					100
Acquisition Financing	Debt	Profitability					10%
		Amortization					0
Steady State- first fiscal year		Debt					
		Acquirer	Acquisition				Combined
		Target	Synergies	Financing	Amortization	Total	
Sales		1000	100	20		120	1120
PBT		100	7	6	-6	7	107
TAX		-40	-2.8	-2.4	2.4	0	-42.8
PAT		60	4.2	3.6	-3.6	0	64.2
Shares		60	60	60	60	60	60
EPS		1.00	0.07	0.06	-0.06	0.00	1.07
Implied Stock Price		\$ 20.00					\$ 21.40

The hurdle rate implied in this EPS accretion test is 3.6%. If PAT exceeds the after tax financing costs of \$3.6m, the deal will be accretive to (i.e. add to) earnings. Since the purchase price of the acquisition is \$100m, the hurdle rate is 3.6%, as follows:

$$\frac{\text{After tax financing expense}}{\text{Purchase price}} = \frac{\$3.6\text{m}}{\$100\text{m}} = 3.6\%$$

Is 3.6% an appropriate return for shareholders? Hardly! Investors could typically earn a higher rate by investing in essentially risk free treasury notes. In all investment decisions, the hurdle rate should be based on the specific risk associated with the investment. In acquisitions, the hurdle rate should be based on the target's risk profile adjusted for any perceived addition/reduction in risk due to the acquisition.

In spite of the reduced usefulness of the accretive-dilutive metric, bankers, managers and analysts continue to use it as a primary measure of the financial performance of an acquisition. If you listen to any conference call announcing an acquisition, EPS accretion dilution will likely be prominently featured. It is certainly important to understand and communicate the EPS effect of a deal. However, it is **not** a comprehensive economic test.

Comparable or relative pricing Methods: Multiples of revenues, earnings and cash flow

Nearly all acquisition decisions will include an analysis of the pricing of similar companies in recent acquisitions. It is an important tool to determine whether pricing of a proposed transaction is in the pack of other recent deals. Nearly all transactions will be reviewed in the context of what other parties have paid for similar businesses. This process is no different than evaluating the pricing of residential real estate. Prior to negotiating on the purchase price of a home, real estate brokers typically provide a "Comp Listing", which summarizes transaction prices on recent home sales in the area. In a similar way, investment bankers and Corporate development managers will identify recent transactions in the industry and compute key valuation metrics such as Enterprise Value/EBITDA, EV/Revenue, etc. These valuation metrics are then used to set or evaluate the pricing of the deal under review. Generally, companies must pay a "full" or "strong" value in order to convince the target's management and board that they should sell. Sometimes acquirers offer preemptive bids to prevent the target from considering other potential parties. Further, many companies are sold through "auctions", where they are essentially marketed to a large number of potential buyers. The winners of this process are typically the highest bidder. All of these factors put upward pressure on the transaction prices. Therefore, managers who wish to build economic value through an acquisition program must recognize that the comparable transaction valuation methodology has a strong upward bias on transaction pricing.

Additional Methods Should be utilized

Despite their shortcomings, both the accretive-dilutive test and Comparable methods are useful tools in the decision process. The danger in placing too much reliance on these methods results from two factors. First, neither method reflects the full economics of the deal, since they do not utilize an appropriate measure of return on the capital invested. Secondly, the measures do not require explicit assumptions about the total performance of the combined businesses. It is difficult to understand the performance expectations that are built into a comparables pricing analysis. How can operating managers understand what performance they are signing up for?

The use of EPS Accretive Dilutive test and multiples pricing methods should be complemented by a comprehensive Discounted Cash Flow analysis. The analysis should include a "base case" valuation and sensitivity analysis to understand the impact of critical assumptions on valuation. Similarly, acquirers should estimate the expected economic return using Return on Invested Capital ("ROIC"). In the example in figure 1:

$$\text{ROIC} = \frac{\text{Operating profit after tax(target + synergies)}}{\text{Acquisition price}} = \frac{\$4.2\text{m} + \$3.6\text{m}}{\$100\text{m}} = 7.8\%$$

A return of 7.8% is unlikely to exceed a realistic estimate of the cost of capital for this investment. If the Acquirer proceeds with this acquisition, it will be accretive to earnings but will not earn an acceptable return for the shareholders of the acquiring Company.

Summary

Determining an appropriate transaction price for an acquisition target is a critical element of a successful acquisition. Acquirers must set prices that enable them to earn an economic return on the investment. Care must be exercised in the use of common methods, which should be complemented by DCF and other economic based methods.

References: Performance Dashboards and Analysis for Value Creation, Alexander, Wiley 2006

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