

## **Financial Statement Analysis in Mergers and Acquisitions**

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### **Overview**

Financial statement analysis is fundamental to a corporate acquirer's assessment of an acquisition or merger candidate. As part of its due diligence investigation, a corporate acquirer typically analyzes the current and prospective financial statements of a target company. This analysis is used in estimating the 'value' of the shares or net assets of the target company, and in determining the price and terms of a transaction the acquirer is prepared to offer and accept.

This paper will address the practical applications of financial statement analysis typically performed by corporate acquirers in open market valuation and pricing exercises. This paper is not intended to be an all-inclusive discussion, and some of the items discussed may not be applicable in a given situation. Every open market transaction is unique, and judgment is required to determine the appropriate nature and level of financial statement analysis that should be undertaken in each case.

### **Determining value and price**

The principal determinants of the value of the shares (or underlying net assets) of a target company in an open market transaction are:

- the quantum and timing of prospective (after-tax) discretionary cash flows that will be generated. This typically includes discretionary cash flows to be generated by the target company from its operations on a ‘stand-alone’ basis as well as discretionary cash flows that a buyer anticipates will arise in the form of post-acquisition synergies;
- the acquirer’s required rate of return given its perceived level of risk of achieving said discretionary cash flows and its perception of the target company’s ‘strategic importance’;
- redundant (or non-operating) assets that are acquired as part of the transaction; and
- the amount of interest-bearing debt that is assumed by the acquirer.

As a simple example, assume that the acquisition of Company X is expected to generate \$10 million of prospective discretionary cash flow per annum (including anticipated post-acquisition synergies), and that the prospective acquirer considers a 12% capitalization rate to be appropriate based on its cost of capital, and its assessment of Company X’s operations, the industry in which it operates, and the risk of generating said discretionary cash flows. Further assume that Company X will sell redundant assets with a net realizable value of \$2 million and that the acquirer will assume \$25 million of Company X’s interest bearing debt obligations. It follows that the value (normally defined as fair market value) of the shares of Company X generally would be estimated as:

Prospective annual discretionary cash flow	\$10 million
Divided by: capitalization rate	12%
Equals: capitalized cash flow	\$83 million
Add: redundant assets	<u>\$2 million</u>
Equals: enterprise value	\$85 million
Deduct: interest bearing debt	<u>(\$25 million)</u>
Equals: fair market value of the shares of Company X	<u>\$60 million</u>

The actual price (and related transaction terms) that a corporate acquirer might be prepared to pay for the shares (or underlying net assets) of Company X may be higher or lower than its estimate of fair market value. This is due to such things as the negotiating positions of the parties involved, the number of acquirers interested in Company X at a point in time, and numerous other factors that may only come to light during the course of negotiations.

An analysis of the historical and forecast financial statements (where available) of a target company is used when assessing each of the determinants of its equity value. In addition, the terms of an open market transaction normally stipulate that adjustments to the agreed price may be required pending the results of the buyer's final due diligence investigation.

### **Prospective Discretionary Cash Flow**

Businesses typically are valued based on their ability to prospectively generate discretionary cash flow. Discretionary cash flow is defined as cash flow from operations (often termed earnings before interest, taxes, depreciation, and amortization, or 'EBITDA'), less income taxes, capital expenditure requirements (net of the related income tax shield), and incremental working capital requirements. Discretionary cash flow represents the amount of money available to the providers of capital of a business (debt holders and shareholders) that can be withdrawn without impairing the existing operations of the business, or its ability to generate its forecast operating results. An estimate of prospective discretionary cash flow to be generated by a business normally involves an assessment of the historical operating results of the target company and any financial projections that have been prepared. In addition, an assessment of the prospective discretionary cash flows to be generated normally includes those of the target company itself, and those that the acquirer anticipates will be realized in the form of post-acquisition synergies.

#### *Historical operating results*

In most cases, recent historical operating results (normally the past five years, with greater emphasis on the most recent years) are considered when estimating prospective operating results. The amount of weight afforded to historical operating results depends on whether and to what extent they are believed to represent what the target company prospectively is capable of generating on a stand-alone basis. For example, where the

target company has undergone significant changes in recent years (e.g. in terms of its product lines, capacity, management philosophy, the dynamics of the industry in which it operates, and so on), historical operating results may not be indicative of future expectations, and any analysis thereof should be discounted accordingly.

In addition to providing an indication of the level and variability of historical profitability and cash flow, an analysis of the historical financial statements of an acquisition target normally involves the calculation of various financial ratios that can generally be categorized as:

- profitability ratios (e.g. gross margin and operating profit margin) that indicate the proportion of revenues retained by the company at different levels, and the company's sensitivity to fluctuations in revenues;
- efficiency ratios (e.g. days in receivables and inventory turnover) which assist a buyer in assessing incremental working capital requirements that will be needed to support prospective revenues, and in evaluating management efficiency;
- liquidity ratios (e.g. the current ratio and quick ratio), which measure the short term financial strength of the business, and whether the buyer will be required to make a capital injection to support the operations of the target company;
- financial leverage ratios (e.g. long term debt to equity and times interest earned) which measure target company's ability to accommodate interest bearing debt. This may in turn affect the acquirer's cost of capital, and its required rate of return; and

- operating ratios (e.g. sales per employee and average selling price per unit sold), which help a buyer in assessing the resource and capacity requirements of a target company.

Ratios and trends therein can provide a buyer with insight into the reasons for a target company's historical performance. However, ratio analysis must be tempered by consideration of changes in accounting policies, management practices, and so on, which might distort such analysis. In addition, when analyzing the historical financial statements of the target company, it is important to consider the state of the economy and the industry at the time those results were achieved.

When reviewing historical operating results, buyers should closely scrutinize a target company's recent historical financial statements for 'window dressing'. Prior to selling a business, many owners and managers will take steps to reflect the best possible financial results, knowing that those results often are a key element in negotiations with prospective acquirers. Therefore, owners and managers sometimes reduce spending in discretionary accounts such as advertising, research and development, and so on, to increase short-term profitability. However, these actions may have serious long term consequences to the vendor's business.

The analysis of historical financial statements also involves the identification of unusual or non-recurring items. This is because, by definition, historical unusual and non-

recurring items are not indicative of prospective operating results. Vendors normally are quick to point out unusual and non-recurring items that negatively impacted historical operating results. However, a buyer should consider whether these things truly are non-recurring. For example, while a costly strike may be unusual, it may recur in the future, and therefore should be considered either through a reduction of prospective discretionary cash flows, or in the level of risk of achieving those cash flows. Simply because an item is classified as 'unusual' or 'extraordinary' in the financial statements does not necessarily mean that it will not recur. Conversely, non-recurring and unusual items that favourably affected historical operating results often are buried as part of revenues or expenses from ongoing operations. Examples include non-recurring property tax refunds, a significant one-time sale, and the recovery of assets that had previously been written down. The detection of these things requires careful analysis of the historical financial statements, including ratios, trends, and so on.

The analysis of historical financial statements should not be limited to annual results. Quarterly and monthly results also should be considered as these can provide insight as to seasonality and interim performance. Where practical, the analysis of historical financial statements should be accompanied by an analysis of supporting schedules, such as the trial balance and other working papers that may be available. Many items are classified for accounting purposes in such a way as to distort the analysis of these results. In addition, the classification of revenues and expenses for financial statement presentation purposes may change over time, again distorting ratios and apparent trends.

While much of the analysis of historical operating results will focus on the income statement and the balance sheet, the statement of cash flows and notes to the financial statements also are important. Historical cash flow statements provide an indication as to the capital investment necessary to sustain and grow the operations of the business. The notes accompanying the financial statements reveal such things as significant commitments that the target company has made that will impact prospective discretionary cash flows.

#### *Forecast operating results*

When preparing a business for sale, the owners, managers or advisors to a prospective seller may prepare forecast operating results. Where forecasts are prepared, they normally are for a period of 3 to 7 years. Where meaningful forecasts are available, a buyer typically will estimate the value of the target company's equity using a 'discounted cash flow' methodology. As a practical matter, the discounted cash flow methodology typically is the preferred methodology of corporate acquirers. While an explanation of the mechanics of the discounted cash flow methodology are beyond the scope of this paper, it is an extension of the 'capitalization of discretionary cash flow' valuation methodology presented earlier.

Often in their valuation and pricing analysis, buyers will rely on the seller's financial statements without conducting sufficient analysis to determine whether or not those projections are reasonable. Common areas of forecast deficiencies include:

- internal inconsistencies. Sellers often will forecast revenues to grow at a much higher rate than expenses, arguing that many expenses are fixed in nature. While this may be true to some extent, many fixed costs are 'step costs', and are only fixed over a certain range of operating activity;
- excessive optimism compared to historic operating results. Forecasts often explicitly or implicitly assume certain levels of efficiency will be achieved in the future that had not been achieved in the past. Comparing prospective financial ratios with historical ratios can provide an indication of where optimism in the forecast may exist;
- inadequate forecast period. Where a business is cyclical, the forecast should be of sufficient length to demonstrate performance over an entire business cycle;
- insufficient capital expenditure requirements. In order to achieve an increase in revenues, most businesses need to increase their capital expenditures. Prospective capital expenditures should be analyzed to determine the extent that they represent 'maintenance capital' as opposed to 'growth capital'; and
- failure to adequately consider incremental working capital requirements. Buyers and sellers sometimes neglect to consider that to achieve revenue growth, a company usually needs to increase its accounts receivable, inventories, and other current assets. While a portion of the increase may be financed through higher accounts payable and other 'trade' liabilities, most businesses require a net increase in working capital to

grow. To the extent that cash is invested in working capital, it cannot be withdrawn or invested elsewhere in the business. Therefore incremental working capital requirements should be deducted in determining prospective discretionary cash flows.

It is not sufficient just to examine the forecasts themselves, but to understand the underlying assumptions and supporting calculations thereto. In addition, forecasts should be considered in the context of expectations for the industry and the economy in general. Where possible, it is helpful to compare year-to-date actual results with budgets and forecasts that were previously prepared to assess the ability of those preparing the forecast to make reasonable predictions.

In addition, when assessing forecast operating results that were prepared by the staff or advisors of a vendor, the buyer should be aware of assumed synergies that have been incorporated therein. Often when preparing forecasts in contemplation of a sale, a vendor will liberally anticipate synergies that it believes a 'typical buyer' will be able to achieve by combining the vendors' operations with its own. Synergies may include headcount reductions, savings in operating costs, and in some cases, increases in revenues. As discussed in the following section, while synergies are an important component of open market transactions, they are unique to every prospective purchaser. Where a prospective buyer fails to identify and segregate synergies that have been incorporated into a vendor's forecasted operating results, it risks overstating or double counting those anticipated benefits.

*Post-acquisition synergies*

In most open market transactions involving corporate acquirers, the acquirer anticipates that it will realize some synergies or strategic advantages by combining the acquired company with its existing operations. In open market transactions, anticipated synergies generally should be assessed separately from the estimated discretionary cash flows that a target company is expected to generate on a stand-alone basis. In most cases, anticipated synergies that can readily be quantified (such as headcount reductions) are assigned a probability factor based on the likelihood that they will be realized. The probabilized synergies are then added to the anticipated discretionary cash flows of the company on a stand-alone basis to derive the buyer's expectation of discretionary cash flows to be generated following the transaction.

Synergies are unique to each acquirer. In most cases, an acquirer has a reasonably good idea about the synergies that are expected to arise following a transaction based on its knowledge of its own operations and those of the target company. Financial statement analysis can assist corporate acquirers in assessing the plausibility of its synergy assumptions, and in identifying synergies that may not be readily evident.

Assessing the reasonableness of anticipated synergies generally is done through an evaluation of forecast data. Where the operations of the target company and the acquirer are similar, their respective financial ratios sometimes can be compared to determine

whether the target company's operations can be rationalized to the extent anticipated. In some cases, it may be possible to find meaningful industry data to assist in the analysis.

The identification of 'hidden' synergies generally involves an analysis of the target company's historical financial statements, and a comparison of relevant operating ratios to those of the acquirer (where the two are comparable). For example, where the acquirer has lower working capital requirements than the target, it may indicate that savings are possible through more stringent accounts receivable collection policies or more efficient inventory management. However, buyers must be cautioned against assuming that just because their own operations appear to be more efficient than those of the target company does not necessarily mean that synergies are available. Alternatively, if such synergies are possible, they may be difficult to realize, and hence should be discounted accordingly.

### **Risk Assessment**

The second major component in business valuation and pricing is the determination of an appropriate rate of return (expressed either as a discount rate or a capitalization rate) to apply against the prospective discretionary cash flows anticipated from an acquisition.

The determination of an appropriate rate of return is a complex and subjective task that should take into account the acquirer's cost of capital, the nature of the target company's operations, the industry in which it competes, and prevailing economic conditions. Most corporate acquirers have target 'hurdle' rates of return that are used when assessing the value and price of acquisition candidates. These hurdle rates sometimes are adjusted

(decreased or increased) to reflect such things as the buyer's perceived risk and its perceived 'strategic importance' of the acquisition. In the end, the rate of return chosen by a corporate acquirer should reflect the risk that prospective discretionary cash flows will fall short of forecast. Accordingly, all things equal, the more optimistic the prospective financial results, the greater the level of risk in achieving those results, and the higher the required rate of return.

#### *Historical operating results*

Where a target company's historical financial statements are believed to provide some indication as to future expectations, an analysis of those financial statements is an important part of risk assessment and rate of return determination. This normally involves an analysis of:

- historic profit and cash flow levels and volatility therein. Where historical operating results have been erratic, this normally suggests lower predictability, and hence higher risk. It also is helpful to assess whether historical operating results demonstrate an upward or downward trend, and whether a profit and cash flow cycle exists;
- the target company's performance under different economic and industry conditions. Relative performance provides an indication as to a company's susceptibility to changing economic and industry conditions, and management's historical ability to react to such changes;

- the cost structure of the target company, specifically the degree to which its operating costs are fixed as opposed to variable. Companies with high levels of fixed costs have a higher degree of operating leverage. As a result, their profitability typically is more sensitive to changes in revenues. Higher variability normally implies greater risk; and
- historical returns, such as return on net assets employed and return on invested equity. These ratios provide an indication as to resources required to generate economic returns to providers of capital.

The notes to recent historical financial statements also are important to consider in assessing risk. The notes disclose such things commitments, contingencies, and so on, that may increase or decrease risk. For example, a company that hedges its foreign exchange exposure with forward contracts may be less risky than one that does not. Alternatively, a company facing a legal claim against it that cannot be readily quantified would disclose such a contingency in the notes to its financial statements.

#### *Balance sheet analysis*

A useful analysis to conduct in evaluating an acquisition target is to segregate its most recent balance sheet between net operating assets, redundant assets, and financing. This allows the acquirer to compare its estimate of enterprise value (before redundant assets) against the net operating assets of the business, and to specifically recognize the interest bearing obligations that it is assuming, and any redundant assets that may be available. Where practical, it also is useful to restate assets and liabilities at their value in use (or

market value) as opposed to their book values. This gives the buyer some indication as to replacement cost of the underlying assets. A discussion of how market values and values in use are determined is beyond the scope of this paper. While replacement cost typically is not a principal economic driver in mergers and acquisitions, higher replacement costs often result in a lower level of risk, and lower required rate of return. This may be supported on several premises, including:

- higher tangible asset values often allow a company to obtain greater debt financing. Since the cost of debt is less than the cost of equity, this reduces the discount and capitalization rate, which normally is expressed as a blend of debt and equity;
- higher capital asset requirements may prove to be a barrier to entry, thereby reducing prospective competition; and
- in the event that the acquired business fails, higher proceeds of liquidation may be achieved, thereby reducing the level of downside risk.

The difference between the 'enterprise value' of the target company (i.e. the total value of the business, without regard to how it is financed) and net tangible assets represents the amount of value attributable to intangible assets, including goodwill. As a general rule, a lower rate of return is required on the underlying net tangible assets of a business as contrasted with intangible assets such as goodwill. Therefore, where the amount attributable to goodwill appears to be excessive or insufficient, this may suggest that the buyer should increase or decrease (as appropriate) its rate of return requirements accordingly.

Following the example presented earlier in this paper, assume that prospective discretionary cash flows from an acquisition are expected to be \$10 million per annum, and that a 12% capitalization rate is considered appropriate. This derives capitalized cash flows (or 'enterprise value' before consideration of redundant assets) of \$83 million.

Further assume that the target company has a recent balance sheet as presented in Exhibit 1. A restatement of the balance sheet to market values, and a segregation of those values into the categories of operating, redundant, and financing, may reveal that the buyer would be paying approximately \$33 million in tangible net assets and therefore, approximately \$50 million of goodwill.

If we assume that the buyer requires a return of 9% on tangible net assets acquired, then the implicit rate of return on the goodwill component would be 14%, determined as:

Annual discretionary cash flow	\$10 million
Less: return on net tangible assets (\$33 MM @ 9%)	<u>\$3 million</u>
Discretionary cash flow attributable to goodwill	<u>\$7 million</u>
Implied return on goodwill (\$7 MM / \$50MM)	<u>14%</u>

If the buyer believes that the implied rate of return on the goodwill component is insufficient, given the nature of the target company, the industry in which it competes, the 'strategic importance' of the acquisition, and so on, it should adjust its overall capitalization rate of 12% upward as appropriate.

Exhibit 1

Target Company Balance Sheet (\$ 000)

	Book Value	Value in Use	Segregated as		
			Operating	Financing	Redundant
Current assets					
Cash	800	800		800	
Accounts receivable	6,765	6,765	6,765		
Due from affiliate	2,000	2,000			2,000
Inventories	11,311	11,311	11,311		
Prepaid expenses	<u>380</u>	<u>380</u>	380		
	21,256	21,256			
Fixed assets (net)					
Land and building	14,775	16,000	16,000		
Machinery & eqpt.	9,069	12,000	12,000		
Furniture & fixtures	<u>2,211</u>	<u>2,211</u>	2,211		
	26,055	30,211			
Deferred costs	<u>1,407</u>	<u>0</u>			
Total Assets	<u>48,718</u>	<u>51,467</u>	<u>48,667</u>	<u>800</u>	<u>2,000</u>
Current liabilities					
Accounts payable	9,404	9,404	9,404		
Accrued liabilities	3,736	3,736	3,736		
Current portion of LTD	<u>5,000</u>	<u>5,000</u>		5,000	
	18,140	18,140			
Long term debt	20,000	20,800		20,800	
Deferred income taxes	<u>4,577</u>	<u>2,800</u>	2,800		
Total liabilities	42,717	41,740	15,940	25,800	0
Shareholder equity					
Capital stock	1,477				
Retained earnings	<u>4,524</u>				
Total equity	<u>6,001</u>	<u>9,727</u>	<u>32,727</u>	<u>(25,000)</u>	<u>2,000</u>
Total liabilities & equity	<u>48,718</u>	<u>51,467</u>			

*Forecast operating results*

When assessing the level of risk in forecast discretionary cash flows (where they have been prepared), a buyer generally should consider:

- how those results compare against historical performance. Normally where forecast operating results are significantly better than historical performance, it implies a higher level of risk;
- the basis of the revenue projections, including supporting schedules detailing revenues by product, by customer, by territory, etc. For example, where a large portion of revenues is anticipated through new products or new customers, this may indicate a higher level of risk. Similarly, where a handful of customers account for a large portion of the company's revenues, this may also indicate a higher level of risk;
- the resources (i.e. operating expenses, capital expenditures, and incremental working capital requirements) that are assumed to be required to meet the revenue projections. As previously discussed, forecasts prepared by a vendor in anticipation of a sale often include optimistic assumptions regarding the target company's prospective ability to leverage its cost base;
- the amounts afforded to anticipated synergies (where these have been included in the forecast discretionary cash flows), and the likelihood that those synergies will be attained; and
- expected industry and economic conditions, and the expected rate of growth in the market. For example, where revenues are forecast to grow at a faster rate than the

industry as a whole, this necessitates taking market share from competitors.

Increasing market share normally is more difficult (i.e. more risky and/or more costly) compared to growing at the rate of the industry as a whole.

It often is helpful to perform sensitivity analysis on forecast operating results. This involves identifying a few (normally two or three) key economic drivers of the target company's prospective financial results (e.g.; industry growth rates, capacity utilization, and so on) and assessing the target company's exposure to changes in those economic drivers. Greater variability to changes in key economic drivers typically indicates a higher level of risk.

### **Redundant Assets**

Redundant (or 'non-operating') assets are defined as those that are not required in the ongoing operations of a business, and which can be extracted from the business without impairing its ability to generate prospective discretionary cash flows as forecast.

Examples of redundant assets may include marketable securities, loans to affiliated companies, and vacant land. As a practical matter, redundant assets usually are removed by a vendor prior to a sale of the business. However, where they are not withdrawn, redundant assets represent a source of incremental value that buyers normally will pay for.

While in many cases redundant assets are evident from an examination of the target company's balance sheet near the transaction date, this may not always be the case. A careful analysis of recent historical financial statements and supporting documentation can help in the identification of redundant assets that may not readily be apparent. For example:

- accounts receivable may include amounts that are due from other parties aside from trade receivables, such as amounts due from employees or affiliated companies. This could be discovered through an analysis of the trial balance supporting the financial statements; and
- reductions in fixed asset turnover may indicate the existence of idle equipment that can be sold as scrap, thereby generating additional cash.

Buyers must be cautioned, however, that what appears to be a hidden redundant asset may simply be the result of the nature of the target company's operations or inefficiencies in its management practices. Therefore, it may be difficult or costly to realize additional value from those 'hidden' redundancies. In such cases, the contribution of those redundant assets to the enterprise value of the target business should be discounted accordingly.

In order to qualify as redundant, the asset in question must be permanently redundant. For example, a company may have marketable securities on hand at a given date, but given the seasonal nature of its business, it may require those assets to finance an increase

in receivables or inventories in the near future. Where assets are temporarily idle, they do not constitute redundant assets, and they are not a source of additional value. An analysis of the target company's quarterly or monthly operating results may help in identifying apparent redundant assets that are not truly so. In addition, an examination of the target company's forecast operating results may reveal that some assets appearing to be redundant at a given date are expected to be deployed in the business in the future (e.g. vacant land), and therefore are not redundant.

A final topic in redundant asset determination is the treatment of a target company's cash on hand at the transaction date. As indicated in the example under 'balance sheet review', a target company's cash on hand normally is applied against its existing interest bearing debt obligations, which serves to allocate a greater portion of the target company's enterprise value to its equity value. This suggests that cash on hand at the transaction date is redundant, which may not always be the case. A buyer should examine the target company's components of 'net trade working capital' (generally represented by accounts receivable plus inventories, less accounts payable and accrued liabilities), as well as its overall working capital requirements (total current assets less total current liabilities), and net operating assets acquired. Where some or all of the target company's cash on hand is required to support its operations, that cash is not 'redundant', and therefore should not serve to reduce the target company's interest bearing debt, nor should it be added to the enterprise value of the target company as a redundant asset.

### **Interest Bearing Debt Obligations**

The amount of a vendor's interest bearing debt that is assumed by an acquirer pursuant to a transaction reduces what the buyer will pay for the equity (shares or net assets) of the target company. (Recall that enterprise value less interest bearing debt equals equity value). This normally includes both long term and short term interest bearing debt obligations, including loans, mortgages, lines of credit, capital lease obligations, and so on. While the amount of interest bearing debt outstanding at a given date often can be discerned from the balance sheet, this is not always the case. In particular, where a buyer acquires the shares (as opposed to the net assets) of the target company, the buyer assumes responsibility for any hidden obligations. Accordingly, the notes to the financial statements should be closely scrutinized for such things as:

- off balance sheet financing. Accounting standards sometimes allow companies to record obligations in the notes to their financial statements as opposed to the liability side of the balance sheet. For example, assets that have been securitized sometimes are removed from the balance sheet along with the related debt obligation. In its analysis, a buyer should adjust both the assets and liabilities of the target company to understand both what it is acquiring, and the obligations that it is assuming; and
- guarantees of indebtedness of other companies (or its employees, directors, shareholders or other parties). As a practical matter, given the uncertainty of whether or not guarantees will be called, they typically are withdrawn prior to the sale of a business.

In addition, some debt obligations, while not interest bearing themselves, are equivalent to interest bearing debt, and should be treated accordingly. This is more common in privately-held companies where shareholders and related parties lend money to the company interest free, but which amounts are repayable on demand. While such debts normally are evident from a review of the balance sheet, this is not always the case. Amounts owing to related parties sometimes are combined with other liabilities for financial statement presentation purposes. Therefore, a close scrutiny of the notes and supporting schedules or trial balance of the financial statements is required.

Finally, a target company's cash on hand normally serves to reduce the amount of interest bearing debt assumed. As previously discussed, this assumes that cash on hand at the transaction date effectively is a redundant asset. Buyers should assess the plausibility of such an assumption prior to mechanically applying cash on hand against interest bearing debt. Similarly, it may not be appropriate to reduce enterprise value by the entire outstanding balance of a bank line of credit in circumstances where the line of credit is at a temporary (seasonal) high to support inflated inventories or receivables that will be liquidated in the near term.

### **Other Liabilities and Adjustments**

While non-interest bearing liabilities (such as accounts payable, accrued liabilities, and so on, sometimes referred to as 'trade liabilities') are not deducted from enterprise value in

arriving at equity value, they do affect equity value indirectly. This is because trade liabilities reduce the net tangible assets of the target company. As previously explained, all things equal, lower net tangible assets normally translate into greater risk. Further, trade liabilities must be satisfied through future cash flows, thereby reducing prospective discretionary cash flows.

While trade liabilities normally are reflected on the balance sheet, this may not always be the case. Particular emphasis on identifying 'hidden' trade liabilities should be made when the financial statements of the target company are not audited. Even where a clean audit opinion is rendered, it means that the financial statements are not materially misstated according the Generally Accepted Accounting Principles. There remains the possibility that liabilities have not been reported, or that they have been disclosed in the notes to the financial statements as opposed to being presented with liabilities on the balance sheet. Accordingly, the notes to the target company's financial statements should be closely scrutinized for hidden trade liabilities. In addition, a thorough assessment of the operations of the target company is fundamental to understanding where hidden trade liabilities may exist. Where a buyer discovers material understated liabilities (or overstated assets) during its final due diligence investigation following the execution of a letter of intent, it may result in an adjustment to the final price. Alternatively, it may indicate areas where a buyer should obtain specific vendor representations and warranties as part of the terms of the transaction.

Common areas of hidden trade liabilities include:

- under-funded pension obligations. In particular, the recent downturn in the financial markets may have exasperated this situation for many companies;
- post-retirement benefits. Many companies offer their retirees continued benefits such as medical and dental care and certain insurance coverage. Often these liabilities are not fully accrued for;
- warranty obligations. While warranties generally are accrued, the basis for determining the warranty allowance should be closely scrutinized, particularly in cases where the target company has recently introduced new products for which there is little history for determining warranty obligations;
- costs associated with discontinued operations. Accounting standards require that discontinued operations be separately disclosed, and that estimated costs be fully accrued for at the time the decision is made to discontinue the operations in question. However, accruals for discontinued operations sometimes fail to consider all of the associated costs of severance, legal claims, and so on, that frequently arise;
- environmental liabilities, which have become of increasing concern in light of more stringent environmental standards in recent years, and a more litigious environment with respect to these liabilities;
- take or pay contracts, where the target company must accept delivery of certain goods, regardless of whether they are needed. This may only be a temporary issue where the inventory that must be accepted can subsequently be sold. However, it

does tie up cash during the interim period, and in some cases, the products taken may have to be written down in order to be liquidated; and

- losses on forward currency contracts and futures contracts. Some companies will use forward and futures contracts to reduce operating risks. However, risk reduction in this respect also means that a company will not enjoy the upside potential where it occurs. For example, a cash flow forecast may have favourable assumptions regarding foreign exchange rates. However, where the target company is locked in at a less favourable rate, either the forecast should be adjusted, or the pending loss on the forward exchange contract should be recognized.

In addition to trade liabilities, buyers should beware of overstated assets. For example, in the months prior to a sale, a seller sometimes will engage in consignment sales in order to increase its revenues and accounts receivable. Alternatively, some companies will have an inventory count that includes obsolete items that previously had been written off.

Inflated trade assets have the same impact as hidden trade liabilities. Therefore, close scrutiny of trends, ratios, and changes in recent financial results is needed to detect such overstatements to the extent possible.

## **Conclusions**

A thorough and objective review of the financial statements of an acquisition or merger candidate is an essential component of open market transactions. This includes both historical financial statements, forecast operating results (where they exist), and the

supporting notes and schedules thereto. The focus of the analysis should be on the determinants of equity value, including the amount and timing of prospective discretionary cash flows, the level of risk involved, the existence of redundant assets, and the amount of interest bearing debt (and equivalents) outstanding. In addition, it is important to determine whether any hidden trade liabilities exist that serve to reduce the underlying net operating assets of the target company, and accordingly reduces the value and price that would be paid for its shares.

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Howard Johnson is a Partner with Campbell Valuation Partners Limited in Toronto ([www.campbellvaluation.com](http://www.campbellvaluation.com)), Canada's longest-established independent firm specializing in business valuations, acquisitions & divestitures, financial litigation and related matters. Mr. Johnson is co-author of *The Valuation of Business Interests* (Canadian Institute of Chartered Accountants, 2001), and co-editor of *Canada Valuation Service* (Carswell, periodical). He can be reached at 416-597-4500 or [hjohnson@cvpl.com](mailto:hjohnson@cvpl.com).