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March 28, 2011

International Valuation Professional Board
41 Moorgate
London EC2R 6PP
United Kingdom

Re: Technical Information Paper 1
The Discounted Cash Flow (DCF) Method – Real Property and Business Valuations

Dear Sirs:

Attached for your consideration in Attachment 1 are our responses to the Questions for Respondents, as well as specific comments on the language in the TIP Exposure Draft in Attachment 2.

As stated on page 2 of the TIP Exposure Draft, the International Valuation Professional Board is preparing a series of these TIP's to assist valuation professionals in identifying best practices and to promote consistency of practice. As a firm of valuation professionals, American Appraisal supports these efforts thoroughly.

We are concerned, however, about the depth of the guidance in this, the first, TIP.

The DCF Method of valuation has been used in practice for at least 30 years. It has been discussed in any number of publications addressing valuation and corporate finance issues. These books will typically devote chapters to such fundamental elements of the DCF Method as calculating the WACC, adjusting the WACC to produce an appropriate discount rate, developing projected financial information, calculating the terminal value, adjusting the result for non-operating assets, etc. Similarly, entire courses in finance are focused on creating and populating DCF models. The TIP, meanwhile, covers these issues in the broadest terms, and adds little to the body of literature on the topic.

Alternatively, the TIP could have distilled the body of knowledge, and recommended certain approaches which the IVSC would endorse. But this course of action was not chosen either. In fact, the TIP specifically states that the approaches discussed are not mandatory.



In summary, we see a dichotomy between the stated intent of the TIP's, and the guidance in TIP 1. If they are truly meant to provide the guidance that professional valuers will use in their practices, we suggest that the issues be discussed in at least the level of detail seen in many valuation publications, and settle on those practices which the IVSC will endorse as Best Practices.

Sincerely,

American Appraisal

American Appraisal Associates



ATTACHMENT 1

Questions for Respondents

1. Do you agree that the DCF method, if properly applied, can be used as a method to arrive at market value?

Yes. The DCF method of the Income Approach is widely used by investors to arrive at market value.

The income approach explicitly recognizes that the current market value of an asset, investment, or business is premised on the expected receipt of future economic benefits, such as cost savings, periodic income, dividends, and/or sale proceeds. In the DCF method of the income approach, annual future cash flows are estimated, then individually discounted back to present value. If the cash flow stream will continue beyond the discrete projection period, a normalized future cash flow attributable to the asset or investment is estimated, then capitalized and discounted back to present value. The summation of the discounted cash flows provides an indication of the market value of the subject asset or investment. If a discrete cash flow stream can be ascribed to the asset or investment, the DCF method can be used to arrive at market value for any asset or investment, regardless of the nature of the asset.

2. Do you agree that the underlying DCF method described in this paper applies equally to the valuation of real property and businesses? If not, please explain the differences that you believe exist.

Yes. The DCF method can be used in the valuation of income-producing real property and businesses. Furthermore, if a discrete cash flow stream can be ascribed to a personal property asset or to an intangible asset, the DCF method is equally applicable.

3. This Exposure Draft states that the discount rate should be determined based on the risk associated with the cash flows (para 10), whether the DCF model is being used to determine a market value or investment value.

Do you agree, or do you consider that other matters should be taken into account in determining the appropriate discount rate?

Selection of an appropriate discount rate is a very important element of any DCF analysis. And while there are numerous considerations to be made in selecting an appropriate discount rate, it can be summarized as having two principal components: The first is a benchmark rate of return expected by investors in assets similar to the



subject property. For businesses, this is typically referred to as the Weighted Average Cost of Capital (WACC). For real property, investors commonly employ a Capitalization Rate. When determining market value, market participant assumptions must be used to determine the benchmark rate. When determining investment value, entity-specific assumptions are used.

Once the benchmark rate is determined, it may need to be adjusted for the risk in achieving the specific cash flows in the model. If the cash flows are estimated on a very conservative basis (low or no growth, steady or declining margins, high reinvestment in CAPEX), the appropriate discount rate may be below the WACC or cap. rate. On the other hand, if the cash flows are projected on a very aggressive or optimistic basis, the appropriate discount rate would be above the WACC or cap. rate.

4. Do you agree that the most commonly adopted terminal value calculation at the end of the explicit forecast period is the “constant growth” model, cross-checked for sensibility to an implied capitalization rate or exit multiple? If not please identify what other method you most commonly use.

Yes. It is our opinion that, in valuing going concern businesses, the most commonly used terminal value calculation employs the “constant growth” or “Gordon growth” model. This is typically cross-checked with an exit multiple. But it is important to note that the projection period for certain early-stage companies may not be long enough for the company to reach constant growth. In this case, we may use two multi stage growth models if the business that is being valued has higher growth rate for prolonged periods after the discrete projection period.

When valuing real property, the terminal value is typically determined with a capitalization rate, which is substantially the same as the rate used in a constant growth model (discount rate less the growth rate). But it is also important to consider the use of the asset at the end of the projection period. If real property improvements will be used for only a limited period of time (the projection period), the “terminal value” may be the value of the land less demolition and remediation costs.

5. Do you agree that providing a discount rate is used that is consistent with the financial assumptions made in calculating the cash flows that the choice of using explicit or implicit financial assumptions in the cash flows should not affect the valuation result?

Yes. It is vitally important that the discount rate used in the DCF method be consistent with the financial assumptions used in projecting the cash flows. If real growth (no inflation) assumptions are used to develop the projections, the discount rate must reflect no inflation. If nominal growth assumptions (includes inflation) are used to develop the projections, the discount rate must reflect projected inflation

Valuations of businesses are generally made using after tax cash flows whereas real



property is generally valued prior to consideration of taxes. Both are generally valued with nominal (inclusive of inflation) projections. This is because that is the way in which investors generally view such assets for purchase or sale. While it is mathematically possible to adjust discount rates to account for pre-tax, after-tax, nominal or real, best practice should be to use the cash flow streams and discount rate derivations normally attributable to real property and business valuation.

6. Do you agree that more detailed discussion and examples of the valuation inputs into a discounted cash flow model are inappropriate? If not how much additional information do you think should be included in best practice guidance?

The appropriateness of a more detailed discussion and examples of the valuation inputs into a DCF model is a function of the intent of the IVSC. As you point out, there are many industry specific sources of training in the DCF method, from college finance courses to accreditation classes held by professional valuation societies. And in many jurisdictions detailed guidance exists and the IVSC standards may just be interpreted as being compliant with local valuation standards (e.g. German IDW S1 and others). This could lead to a very inconsistent application of the standard. If the intended purpose of TIPs is to identify best practice and to promote consistency of practice, then more detailed discussion is necessary. The problem mentioned for not having detailed discussion or examples can be circumvented by proper disclosures and caveats.

If, on the other hand, the intent of the IVSC is to provide a basic level of understanding to users of valuation reports, the level of discussion in the Exposure Draft may be adequate.



ATTACHMENT 2

The Discounted Cash Flow (DCF) Method – Real Property and Business Valuations

Paragraph 5: In the definition of “Weighted Average Cost of Capital”, the WACC seems to be equated to the discount rate. While this may be true in some cases, we typically see an adjustment to the WACC to account for the risk of achieving the particular projected cash flow. That is, the WACC may be adjusted upwards if the projections are considered aggressive or optimistic, and may be adjusted downward if the projections are considered conservative or pessimistic. Paragraph 7 also makes reference to “an appropriate discount rate.” The TIP should be expanded to include a discussion of “an appropriate discount rate” or advise the reader that this very important topic will be addressed in a separate TIP.

Paragraph 8: “Cash flows for future periods are constructed using projected income and projected expenditures.” They are not constructed with actual income and expenditures.

Paragraph 11: Our comment is similar to that in Paragraph 5. Either expand the discussion of discount rates, or leave to a future TIP.

Paragraph 16 b): Cash flow is not income less expenses. Non-cash expenses (depreciation and amortization) are typically added back, and cash outflows for capital expenditures and changes in working capital are taken out.

Paragraph 16 e): The statement that “Expenses may be placed at the accounting point in time rather than the point in time at which they are incurred” is incorrect. A DCF model should reflect the point in time at which income is received and expenditures made, and not at the time when recognized for accounting purposes.

Paragraph 16 k): Again, a fuller discussion of the discount rate and the WACC for an industry is needed.

Paragraph 19: The statement “The cash flows may be market derived or be specific to the asset or business being valued” does not properly describe the difference between fair value and investment value. When market-derived inputs are used in a DCF, the result is fair value. When entity-specific inputs are used in a DCF, the result is investment value. In both cases, however, the inputs must be specific to the asset or business being valued.

Paragraphs 21 and 22: The use of the terms “growth explicit” and “growth implicit” are confusing. Simply stated, if the projections assume inflationary growth as well as real growth, the discount rate



should also include a factor for inflation. If the projections reflect only real growth, the discount rate should not include a factor for inflation.

Paragraph 24: The disclosures should be limited to the following:

- The commencement date of the cash flow and the number, frequency and term of the periods employed.
- The derivation of, or rationale for, the discount rate.
- The basis for adopting the terminal value calculation.
- The rates of taxation used and the quantification of net operating losses where applicable.
- A sensitivity analysis for discount rates and long-term growth rates only.