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

Response on behalf of Property Institute of New Zealand

A. Answers to Questions for Respondents

Question 1

This Exposure Draft states that the DCF method should not be judged on the basis of whether or not the explicit cash flow assumptions are ultimately realized but rather on the degree of market support for the assumptions at the time they were made.

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

Answer

We agree that the DCF method is an acceptable method for estimation of market value but only if there is no relevant market data from which to make a direct estimate of value. That is, it is an acceptable method of estimation in category three of the FASB/IASB guidance on Fair Value.

Question 2

The IVPB has concluded that although there may be distinct terms and types of analyses that apply respectively to real property valuations and business valuation the underlying DCF method is identical in each case.

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?

Answer

We agree that the underlying DCF method is applicable to the two specified applications.

Question 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?

Answer

We agree that the discount rate should reflect the risk associated with the cash flows. However, that risk should be undiversifiable risk. We consider that the Draft should have provided additional guidance on estimation of the cost of equity. Given tthe context for use of the DCF method, it is likely that this cost will have to be estimated from a model. The most commonly used

model for this purpose is the Capital Asset Pricing Model (CAPM). However, the resulting estimate is likely to require adjustment for (i) uncertainty in estimation of the parameters of the model (parameter error) and (ii) inadequacies of the model in allowing for market imperfections (model error).

Question 4

A number of different methods are identified which can be applied to the calculation of the terminal value at the end of the cash flow period (growth, fading growth, net asset value, salvage value, etc). For long-life real property assets or going concern businesses the Board believes a constant growth model is the most commonly used method, coupled with a cross check for the reasonableness of the figure, eg by reference to the implied exit multiple.

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 capitalisation rate or exit multiple? If not please identify what other method you most commonly use?

Answer

We agree that the terminal value is most commonly estimated on the basis of constant growth from the terminal date. However, we consider that the Draft should have included guidance on the choice of discount rate to be applied from the terminal date. For example, if analysis of the cash flows to the terminal date is carried out in nominal terms (nominal cash flows and nominal discount rate) but the cash flows from the terminal date are assumed to grow at a rate g% real then the discount rate applied from the terminal date should be the real discount rate.

Question 5

The Exposure Draft explains that cash flows can be developed on the basis of alternative financial assumptions, eg inclusive or exclusive of anticipated inflation, inclusive or exclusive of tax etc. Providing the discount rate used is consistent with the financial assumptions in the cash flows the valuation result should not be affected by the alternative used.

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?

Answer

We agree that if there is consistency between the definition of the cash flows and the discount rate the result will be the same irrespective of whether the analysis is carried out in nominal terms (nominal cash flows and nominal discount rate) or in real terms (real cash flows and real discount rate). However, if (for example) the cash flows are subject to tax it is simpler to conduct the analysis in nominal terms as the tax shield from depreciation is not subject to inflation.

Question 6

This Exposure Draft is intended to identify best practice in the creation and application of discounted cash flow models. The Board has made the decision not to explain in detail the types of inputs that may be used in different situations or the investigations that may be appropriate. Neither are illustrative examples provided. The preliminary view of the Board is that detailed discussion of inputs or a limited range of examples is inappropriate because it could be misleading if it led readers to believe that these models were endorsed by IVSC or conversely, variations of these models in different situations were not appropriate. There are many industry specific sources for those who require training in the development and use of relevant DCF models.

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?

Answer

We agree with the Board's decision to avoid the use of numerical examples as, in our view, there is a significant danger that the examples would end up being regarded as the definitive guidance rather than merely being illustrative of definitive guidance. However, we consider that there would be a significant increase in the usefulness of the TIP if there was more general guidance on important technical issues such as those referred to in our answers to Questions 3, 4 and 5.

B. Other Comments

1. Given that the information for estimation of NPV by discounting cash flows often comes from the accrual based accounting system, we consider that guidance should be provided on use of the Residual Income approach to the estimation as it makes direct use of accounting numbers.

2. We suggest that the second to last sentence of paragraph 13 should perhaps read as follows: "If a criterion specified by a particular owner or prospective owner is to be used …." ; and we note that in the second line of paragraph 22 there is a stray "I".