Jim Hitchner's Valuation Products and Services

DO YOU KNOW?

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Do you know...

... analyst considerations in selecting an expected long-term growth rate? What about in uncertain times?

Special Thanks to Robert Reilly of Willamette Management Associates

In a business valuation, selection of the expected long-term growth (LTG) rate is an important procedure in the application of any income approach valuation method. This is particularly important in the direct capitalization method because the LTG rate is one of only three explicit variables in the direct capitalization method, expressed as follows:

Value = <u>Normalized expected income metric</u> Discount rate – LTG rate

Selection of the LTG rate is also very important in the yield capitalization (aka the discounted cash flow method). In the discount cash flow (DCF) method, the LTG rate explicitly impacts the business valuation in the terminal value calculation.

In *all* business valuation analyses, the LTG rate selection should be well supported. The selected LTG rate should be internally consistent with selection of all of the other valuation variables that impact the income approach analysis. And, the selected LTG rate should be appropriate to the metric (or measure) of income capitalized in the income approach analysis.

We have summarized 10 considerations that analysts should take into account in selecting the LTG rate. These considerations are appropriate to the valuation of a business or business ownership interest. Different LTG rate considerations may be appropriate in the valuation of either tangible property or intangible property.

1. The analyst's selected LTG rate may be different in the direct capitalization analysis than in the yield capitalization analysis. In the direct capitalization analysis, the LTG rate should be appropriate to the time period starting in Year 1. In the yield capitalization analysis, the LTG rate should be appropriate to the time period starting at the end of the discrete projection period. That is, in the yield capitalization analysis, the terminal value is typically calculated at the end of a 5-year or 10-year discrete projection period. The subject company will be different (and its ability to achieve growth will be different) in Year 1 compared to in Year 10. Also, the expected industry growth rate, competitors' growth rates, guideline company growth rates, and overall economy growth rates will all be different in Year 1 compared to in Year 10 (or whenever the terminal period begins).

2. The selected LTG rate is a perpetuity growth rate. That is, the analysis assumes that the subject company income metric will change (increase or decrease) at that rate forever. The LTG rate may be considered an average expected growth rate. That is, the subject company is not expected to grow at exactly the expected LTG rate each and every year. However, the LTG rate selection implies that the subject company income metric will grow (on average) forever.

3. The selected LTG rate should be consistent with the income metric to which it is to be applied. That is, the LTG rate is typically applied to the subject entity's net income or net cash flow (NCF). So, the LTG rate should be appropriate to net income, NCF, or whatever income measure is subject to the capitalization procedure. However, analysts sometimes support their selected LTG rate by reference to data that forecast subject company revenue growth, guideline company revenue growth, industry revenue growth, general economic production or consumption growth, etc. Analysts also sometimes support their selected LTG rate by reference to security analysts' predictions of guideline publicly traded company (GPTC) stock price growth. These data points may not be informative to the analyst's projection of the subject entity's net income or NCF (and net revenue) LTG rate. In other words, the dataset that the analyst relies on to support the LTG rate should be applicable to the income level that is capitalized in the valuation.

4. Most of the data sources that analysts rely on to support the LTG rate forecast, in fact, provide short-term growth rate forecasts. Analysts often rely on various industry data sources to estimate the subject industry LTG rate. Most of these industry sources estimate a 5-year growth rate (say in industry revenue). Analysts often rely on economists' consensus surveys (e.g., *Livingston Survey*) to estimate a general inflation rate and a GNP growth rate. Most of those economists' consensus sources provide forecasts of economic data for 5 to 10 years in the future. And, analysts often rely on security analysts' projections of guideline companies' dividend and capital gain growth rate. Most security analyst company income projections only include a period of 3 to 5 years in the future. Particularly with regard to an LTG rate applicable to a terminal value analysis (starting, say, 5 years in the future), analysts should be aware that they may be supporting their perpetuity period growth rate forecast based on data that reflect relatively short-term projections.

5. Analysts should consider the consistency of all income approach valuation variables to the selected LTG rate. Depending on the income approach method applied and the income metric analyzed, some of these valuation variables include: depreciation expense, capital expenditures, research and development expense, selling and promotion expense, working capital investments, and others. In other words, a relatively upward-biased LTG rate estimate should be supported by equally upward-biased projections of growth-sustaining expenses and investments. Alternatively, a relatively modest LTG rate estimate would be inconsistent with more growth-oriented expense and investment projections.

The analyst's selected LTG rate should be supportable and internally consistent with the other valuation variables incorporated in the analysis.

6. Analysts should carefully consider the implications of applying a "default" or simplifying assumption LTG rate. As a simplifying assumption, some analysts apply a long-term inflation rate as the LTG rate for the valuation analysis. And, some analysts select the product of the long-term inflation rate estimate and the long-term GNP growth rate estimate as the LTG rate for the valuation analysis. These analysts sometimes claim that such a simplifying assumption represents a cap on the growth rate applicable to the valuation. Some analysts justify this opinion by claiming that a higher LTG rate will cause the subject entity to grow to a level that exceeds the national economy. This statement is simplistic. Even for a very large private company, it would take a long time for a more aggressive growth rate to cause the subject company to influence the size of an entire industry—no less the entire economy. And, since the entire economy includes the total of all individual, business, and government expenditures, no company could actually grow to a level that exceeds the national economy. Analysts often apply simplifying assumptions for many valuation variables. However, analysts should also support their selection of any simplifying assumption—including an LTG rate assumption.

7. Particularly with regard to entities expected to grow faster than the combined rate of inflation plus the rate of GNP growth, analysts often consider a two-stage growth model. This two-stage model allows the analyst to incorporate into the valuation (1) differing annual growth rates during the discrete projection period, (2) a higher than normal growth rate in the first stage of the model, and (3) a normal or (stabilized) LTG rate in the second stage of the model. That is, the two-stage model disaggregates the terminal period analysis into (1) an initial 5- or 10-year period of supernormal growth and (2) a reversionary period of stabilized, normal growth. The application of the two-stage model allows the supernormal growth rate entity to reach the condition of stabilized growth more gradually than does the one-stage terminal value model.

8. The analyst should consider both the market approach and the income approach when selecting the LTG rate. The analyst's market approach pricing multiples (particularly GPTC pricing multiples) incorporate implicit growth rates. The implicit LTG rates in the selected pricing multiples should be consistent with the explicit LTG rate in the income approach direct capitalization rate. In other words, the analyst should select (or adjust) GPTC-derived pricing multiples to be consistent with the selected income approach LTG rate.

9. In selecting the LTG rate, analysts should consider the growth rate history of the subject company, of the subject industry, and of the selected GPTCs. The expected future LTG rate does not have to be the same as these historical growth rates of any of these benchmarks. However, the analyst should be able to support the selection of an LTG rate that is materially above or materially below these benchmarks. In other words, the analyst should consider why the subject company's expected LTG rate would be much greater than—or much less than—the benchmark historical growth rates.

10. The analyst should consider the components (or the causes) of the expected future LTG rate. That is, the analyst should consider if the entity's expected future growth will be generated by (1) the entity's current goods and services and current assets in place, (2) new goods and services and new assets developed by the entity, or (3) acquired goods and services and acquired future assets. If the expected LTG rate will come from developed or acquired products, services, and assets, then the valuation should incorporate both the expenses and the investments required to achieve that LTG.

The selected LTG rate is an important variable in any direct capitalization valuation analysis or yield capitalization valuation analysis. The selected LTG rate should be appropriate to the income metric (such as net income or NCF) included in the valuation analysis. - Robert F. Reilly, CPA/ABV, ASA, CFA, CVA, Managing Director, Willamette Management Associates, Chicago

How does the process of selecting expected long-term growth rates change in times of economic uncertainty -- as we are experiencing today during the coronavirus crisis? On April 16, 2020, Robert Reilly and Kyle Wishing are the speakers for a VPS StraightTalk webinar that will do a deep dive into all the implications of selecting a long-term growth rate.

Visit the VPS website at <u>www.valuationproducts.com</u> to purchase access to the live webinar "Estimating Long-Term Growth Rates in Times of Economic Uncertainty" or to the recording following the program.

A more detailed description of the analyst procedures related to supporting and documenting the expected LTG rate selection is presented in the new book *Best Practices—Thought Leadership in Valuation, Damages, and Transfer Price Analysis* by Robert Reilly and Robert Schweihs. Click here for more information.

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