Jim Hitchner's
Valuation Products and Services

DO YOU KNOW?

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A free periodical to promote education and alert you to important areas of interest in the financial valuation, fraud, and litigation services profession.

Do You Know...

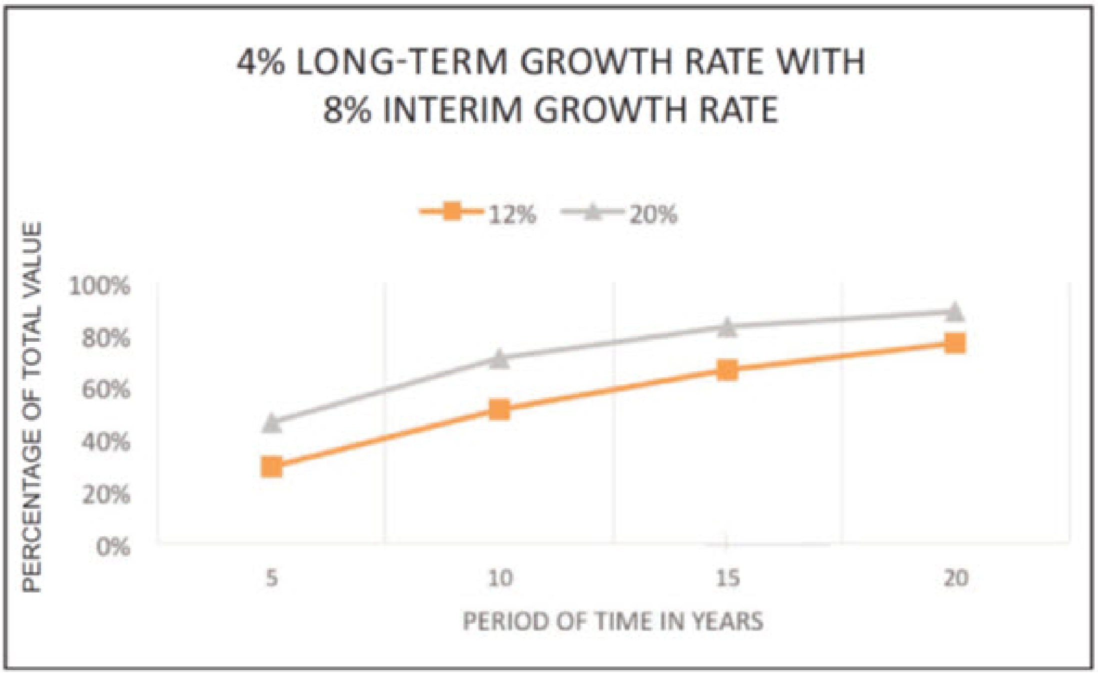
...if the terminal year of a DCF is based on a perpetuity model?

The quick and easy answer is "yes." However, the long and complex answer is "not really." In the income approach, the business valuation profession usually values the going concern of a business into perpetuity, which an attorney once said is a "very long time." However, given the power of discounting and compounding, it really is not a "very long time." It's a rather short time.

Present-value factors mitigate the length of time where perpetuity values actually matter. In corporate finance, larger discount rates compound at different levels than smaller discount rates. The decline in present-value factors is not linear but asymptotic. Therefore, the calculation of present-value factors using higher discount rates rapidly results in a point in the cash flow analysis where the present-value factor is very small. As a result, the present value of the cash flows is pretty much front-loaded based on the early years of the projections in a discounted cash flow (DCF) method.

We illustrate this concept by looking at discount rates of 12 percent and 20 percent. Let's assume a five-year interim growth of 8 percent per year, followed by a long-term constant growth rate (into perpetuity) of 4 percent. For simplicity, we will use end-of-year cash flows, with the first year at $100. The charts' data present the percentage of the total value attributable to the four time periods of 5, 10, 15, and 20 years at each discount rate.

	Years			
	5	**10**	**15**	**20**
Discount Rate				
12%	**29%**	**51%**	**66%**	**77%**
20%	**46%**	**71%**	**83%**	**89%**



What is also interesting is that we ran the models with very high interim growth rates and negative interim growth rates, and the results were similar. The bottom line here is that a large part of the value in a DCF model is captured in about 15 to 20 years. At both lower and higher discount rates, the majority of the value is captured in 10 years.

This concept and many important "best practices" will be covered in detail in our upcoming 6/28/17 webinar, with Jim Hitchner as presenter:

Best Practices: The Discounted Cash Flow Method