

## 'It's Like Déjà Vu All Over Again' Valuing a Business in a Post-Pandemic World: Part 2

COVID-19 has had a significant impact on current economic and industry conditions, as well as governmental regulations. As a result, depending on the effective valuation date, COVID-19 may have significant implications for business valuation analysis and required disclosures in a valuation report.

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How do we value a business post-COVID-19? How is it possible to develop credible financial forecasts given the uncertainties relating to the impact of the pandemic on the economy and selected industries, as well as the potential depth and duration of the resulting economic recession? These concerns are particularly vexing to many young valuation professionals who have seen a 10-year bull market and have never experienced an economic recession. However, those of you with gray hair realize that we've been through periods of uncertainty before, including the 2008–2009 financial crisis, the 2000 dotcom crash, as well as other similar events.

The malapropism attributed to Yogi Berra, the former manager of the New York Yankees and Baseball Hall of Famer, expresses my take on this: "It's like déjà vu all over again." While certain forces that resulted in the current economic environment are different from those of 2008-2009, there are many similar issues that we *have* seen before. Somehow, despite the uncertainty, we were able to develop reasonable and credible estimates of value then and we can do so now. **Part I of this article** discussed key factors a valuation analyst should consider when valuing a closely held business in the post-COVID-19 environment. In Part 2, I will present guidance in selecting and applying the appropriate valuation approaches and methodologies.

## **Valuation Approaches and Methodologies**

For purposes of a post-COVID-19 valuation, as with any valuation, a valuation analyst should consider the three valuation approaches (income, market and asset), as well as the related methodologies. The selection of a particular approach and methodology will be dependent upon the scope of work, as well as the analyst's professional judgment.<sup>1</sup>

After having performed a preliminary analysis of the business' historical financial performance and assessing its financial condition, the analyst should first determine whether the business is a viable going concern. If the analyst determines the business is a holding company or is not a viable going concern, then the appropriate valuation approach would be an asset approach. If the business is an operating business and is determined to be a going concern, then the analyst should consider the income, market and asset approaches and select those considered to be most appropriate.

### **Asset Approach**

In applying an asset approach, the analyst restates the value of the assets and liabilities (which are recorded at historic costs) to current market values and deducts the resulting value of total liabilities from total assets to derive the net asset value. Consideration must also be given to whether unrecorded assets and liabilities exist. Some appraisers do not consider this approach to be appropriate for valuing service-oriented companies, particularly when valuing a minority interest that does not have the ability to liquidate the assets to realize their value. However, in those instances where the value derived using an income or market approach is less than the value realized using an asset approach, the value of the net tangible assets is considered to represent a "floor" value. Any functional and economic obsolescence should also be considered.

### **Income Approach**

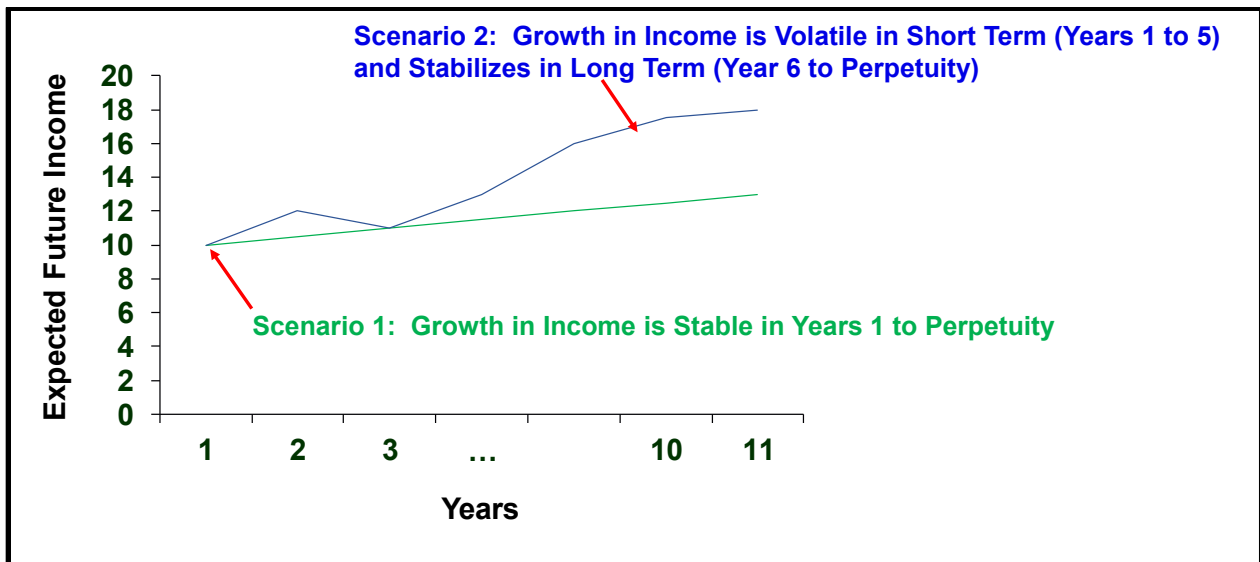
In applying the income approach, there are two common methodologies used in practice. The capitalized cash flow method is used when net cash flow and growth are assumed to have stabilized. A value is calculated by dividing the expected future net cash flow for a single period by a capitalization rate. The discounted cash flow method is used when net cash flow and growth have not yet stabilized. A value is calculated by projecting net cash flow for each year in

a discrete projection period to a point where growth assumed to stabilize, and then a terminal value for net cash flow for the remaining years into perpetuity is calculated. The present values of each of the projected future net cash flows and the terminal value are then discounted to a present value as of the valuation date using a discount rate.

There are those, including certain courts, that argue it is speculative to project future cash flows and a valuation method relying on such projections is not credible. Those adhering to this school of thought argue that it is therefore more credible to estimate value using historical cash flows and a capitalized cash flow method. However, this logic is fundamentally flawed as both the capitalized cash flow and discounted cash flow methods are based on estimates of expected future results — the key difference between the two methods is simply the future point in time at which projected net cash flow and the rate of growth are assumed to stabilize.<sup>2</sup>

**Exhibit 1** presents two alternative scenarios reflecting differing assumptions about projected net cash flow and the point in time at which growth stabilizes.

**Exhibit 1.  
Income Approach: Alternative Assumptions Regarding Growth Rates**



In Scenario 1, projected net cash flow and growth are assumed to have stabilized in year one. In this instance, a capitalized cash flow method would be appropriate. In Scenario 2, projected growth and net cash flow are projected to be volatile in years one to five, and then stabilize in year six to perpetuity. For purposes of estimating value in this instance, it would be appropriate

to develop a financial forecast of net cash flows for the discrete period (represented by years one to five) and the terminal period and use a discounted cash flow method.

Given the expected impact of COVID-19 on future financial results for most businesses, it is highly improbable that net cash flow and growth will have stabilized in the first year.

Consequently, in applying an income approach, it will be necessary to use a discounted cash flow method. Use of this method will require that financial forecasts be developed. The school that would argue it is speculative to project future cash flows in any instance would also argue that even if a discounted cash flow were the theoretically appropriate method to use, there is too much uncertainty to permit the development of financial forecasts. However, it is worth noting again the guidance provided in IRS Rev. Rul. 59-60:

*Valuation of securities is, in essence, a prophesy as to the future . . .*<sup>3</sup>

In “Valuing a Business — The Analysis and Appraisal of Closely Held Companies,” by Shannon Pratt, widely recognized as one of the foremost valuation practitioners, discusses that the development of an estimate of a business’ value is fundamentally dependent on estimates of expected future financial results:

*In the simplest sense, the theory surrounding the value of an interest in a business depends on the future benefits that will accrue to its owner. The value of the business interest, then, depends upon an estimate of the future benefits and the required rate of return at which those future benefits are discounted back to present value as of the valuation date.*<sup>4</sup>

Unfortunately, we do not have a crystal ball and cannot predict the future with absolute certainty. The only way in which to determine the “true” value of a business is for an actual transaction to occur and, even then, the transacted value may not be indicative of the value for a specific purpose (e.g., the fair market value of a minority interest for estate tax purposes). Consequently, the analyst *must* rely upon estimates.

For purposes of obtaining financial forecasts, the analyst should consult with management regarding their expectations as they are most oftentimes in the best position to know the company and the industry. However, the analyst should not simply accept the forecasts, but instead should critique the projections and underlying assumptions for reasonableness.

Oftentimes, if a financial forecast exists, management will have only prepared one scenario which is typically the “most likely” case. Such a forecast *may* be reasonable to rely upon depending on the facts and circumstances. However, in the post-COVID-19 times we are experiencing now where there is significant uncertainty regarding potential outcomes, it may be appropriate to consider requesting that management develop alternative scenarios reflecting differing expectations regarding future results. **Exhibit 2** is an example of a scenario matrix presenting three scenarios (a best case, middle or most likely case and worst case) and reflecting alternative assumptions regarding the duration of a recessionary period and the impact on financial performance.

**Exhibit 2.**  
**Income Approach: Scenario Matrix**

Scenario	Duration	Adverse Financial Impact
1 - Best Case	Short (6 Months)	Slight
2 - Middle Case (Most Likely)	Medium (1 Year)	Modest
3 - Worst Case	Long (2 Years)	Severe

Once the scenarios have been identified and alternative forecasts of projected net cash flow developed for each, management should be consulted regarding their assessment of the probability for each scenario and, again, the analyst should critique these for reasonableness.

In theory, the financial forecasts should include estimates of the probability-weighted net cash flows for each year in the forecast. The reason for this is that the distribution of net cash flows may not be symmetrical, but instead skewed. If the distribution of projected net cash flows and probabilities are symmetrical above and below the most likely estimated net cash flow, then the most likely cash flow will be equal to the expected (probability-weighted) value (**Exhibit 3**).<sup>5</sup>

**Exhibit 3.**  
**Income Approach: Expected Cash Flows — Symmetrical Distribution**

	Projected Net Cash Flow		Probability	=	Probability Weighted Value
Scenario 1 Best Case	\$150	X	25%	=	\$37.50
Scenario 2 Middle Case (Most Likely)	\$100	X	50%	=	\$50.00
Scenario 3 Worst Case	\$50	X	25%	=	\$12.50
	Std. Dev.: 40.82		100%		\$100.00

If the distribution of projected net cash flows and probabilities are symmetrical above and below the most likely net cash flow, then the most likely cash flow equals the expected (probability weighted) value.

However, if the estimated distribution of projected net cash flows and probabilities are skewed, then the most likely cash flow and expected (probability-weighted) value will differ (**Exhibit 4**).<sup>6</sup> In this instance, development of alternative scenarios may be useful. It should be noted that the magnitude of the difference between the most likely value and the probability-weighted value is dependent on how much the distribution is skewed. Further, the magnitude will also be significantly affected by the assumptions regarding the projected net cash flows for the terminal period as the present value of the terminal period accounts for the majority of the value in a discounted cash flow model.

**Exhibit 4.**  
**Income Approach: Expected Cash Flows — Skewed Distribution**

	Projected Net Cash Flow		Probability	=	Probability Weighted Value
Scenario 1 Best Case	\$150	X	15%	=	\$22.50
Scenario 2 Middle Case (Most Likely)	\$100	X	50%	=	\$50.00
Scenario 3 Worst Case	\$25	X	35%	=	\$8.75
	Std. Dev.: 51.37		100%		\$81.25

If the distribution of projected net cash flow and probabilities are skewed, the most likely cash flow and the expected (probability weighted) value will differ.

In practice, most forecasts do not include the probability-weighted expected net cash flows for each year. However, the probability-weighted approach is still a useful concept to use for developing alternative forecast scenarios and is often used in practice. There are also those that advocate the use of Monte Carlo statistical simulation techniques for estimating probability-weighted scenarios. However, as noted by Shannon Pratt and Roger Grabowski in *Cost of Capital*: “Such techniques are simply a tool. You can assemble more limited scenarios and use such scenarios as tools to transmit information to both operating and executive management, as well as serve as a basis for a better valuation. ... Simple preparation of alternative revenue, expense, and resulting cash flow scenarios can assist the analyst in understanding the expected net cash flows that should be used in any cash-flow-based valuation.”<sup>7</sup>

Once the financial forecasts have been developed, the analyst must next determine whether to use a direct-to-equity or invested capital model. An invested capital model is more often preferable as it allows for increased flexibility in modeling alternative assumptions regarding the proportions of debt and equity in the capital structure.

However, in the event a business is able to obtain funds through one of the CARES Act programs, it may be simpler to use a direct to equity model. Another alternative for handling this source of funds is to determine the operating value of the business’ based on net cash flow excluding the impact of the CARES ACT and then separately value the latter and add it to the operating value as a “bolt on.”

The analyst must next estimate the applicable discount rate for purposes of discounting the projected future values to a present value. The discount rate reflects the risk of achieving the expected future cash flows. Whether the discount rate should be increased to reflect additional risk resulting from COVID-19 is a topic of much debate. There is one school that argues that the company specific risk premium should be increased to reflect increased risk. There is another school that argues for normalizing the risk-free rate to adjust for federal intervention in the markets which are artificially depressing interest rates, and also using a conditional/recommended equity risk premium to reflect current market conditions. Whatever alternative is selected, the result should be a discount rate that reflects the risk of achieving the expected future cash flows.

A question often asked when using probability-weighted net cash flows in conjunction with a discount rate is whether one is double counting the estimate of perceived risk. However, as noted by Jeff Balcombe of the BVA Group, LLC, adjustment to the cash flow accounts for the fact that a company may be expected to have a different distribution of cash flow. The adjustment to the discount rate accounts for fact that the standard deviation (measure of dispersion) of the expected future cash flows may differ, i.e., the discount rate is increased to reflect the higher risk of achieving those cash flows.<sup>8</sup> In practice, a single discount rate for all scenarios is often used.

### Market Approach

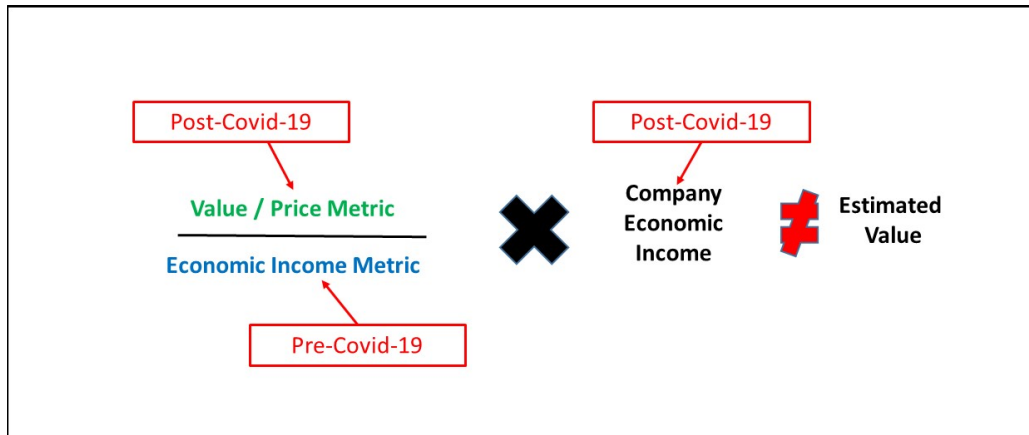
There are also two common methodologies used in applying the market approach. The first method is the guideline public company method in which the prices at which the stocks of comparable public companies are traded are used as proxies to value the subject company. In determining whether or not to use this method, consideration must be given as to whether the selected public companies are truly comparable to the subject business in terms of line of business, size, growth, profitability, etc. The second method is the guideline company transactions method in which actual market transactions are used to determine pricing multiples. This method is subject to the same issue of comparability.

In both market-based methods, multiples are developed using a measure of value or price in the numerator and an economic income metric in the denominator. Common examples of multiples include Price / Earnings, Market Value of Invested Capital (“MVIC”) / Earnings Before Interest, Taxes, Depreciation, and Amortization (“EBITDA”), MVIC / EBIT, etc.

However, in the post-COVID-19 market, use of a market-based multiple is problematic as the values in the numerator and/or denominator may not reflect the impact of COVID-19. For example, if the guideline public company method is used and the current public company stock price is used as the price metric in the numerator, then this metric may reflect the impact of COVID-19. However, if the denominator reflects historical earnings of the public company, then there is a mismatch between the numerator and denominator which will result in a flawed result (unless adjusted for) when applied against the subject company earnings (which must also be consistent with the selected multiple) (**Exhibit 5**).



## Exhibit 5. Market Approach Multiple



There are similar issues in applying the market approach and guideline company transactions method. For example, if the price for a guideline transaction was negotiated prior to COVID-19, then the multiple may not reflect the adverse impact of the pandemic. Consequently, application of this multiple against subject company earnings (with COVID impact) would result in a flawed estimate of value.

Some appraisers have developed various techniques for adjusting the guideline public company multiples and guideline company transaction multiples to address the aforementioned issues. For example, Jim Hitchner presents alternative approaches in “COVID-19 and the Effects on Business Valuation — Frequently Asked Questions,” published in *Financial Valuation and Litigation Expert*.<sup>9</sup> In addition, Joseph W. Thompson, Daniel R. Van Vleet, William P. McInerney and David J. Neuzil also present techniques in “Alternate Valuation Methods in the era of COVID-19,” published in *Business Valuation Update*.<sup>10</sup>

### Discounts for Lack of Control and Lack of Marketability

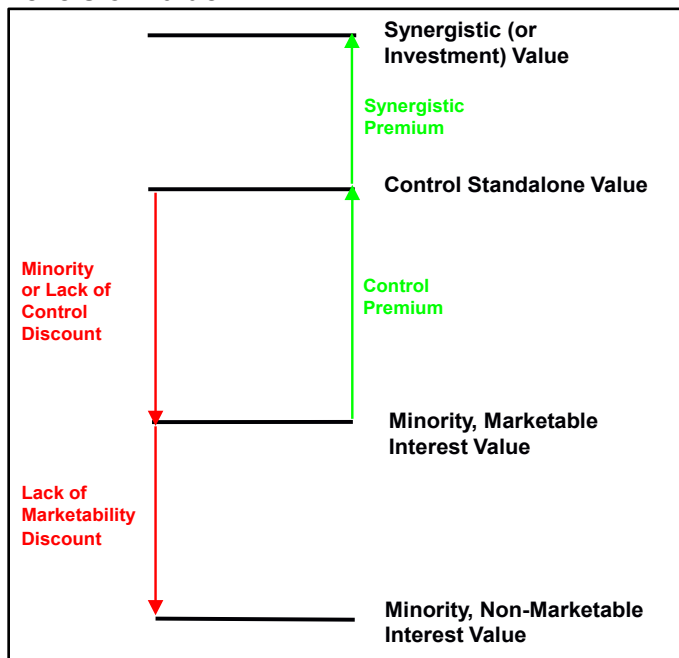
Ownership interests include the following characteristics:

1. **Minority:** An ownership interest less than 50 percent of the voting interest in a business
2. **Control:** The power to direct the management and policies of a business.
3. **Marketability:** The ability to quickly convert property to cash at minimal cost.<sup>11</sup>

**Exhibit 6** presents the alternative “Levels of Value” that represent these different

characteristics.

**Exhibit 6.**  
**Levels of Value**<sup>12</sup>



The valuation approaches and methods used to value the business, as well as the types of normalization adjustments made to the financial statements, determine the resulting level of value. Depending on the level of value derived, premiums or discounts may be required to derive the applicable level of value for the ownership interest being valued. For example, if the valuation approach and normalization adjustments made by the analyst result in a control level of value and the ownership interest being valued is a minority, non-marketable interest, then discounts for lack of control (e.g., minority interest) and lack of marketability would normally be deducted.

Typically, control or lack of control is dealt with in the normalization adjustments made to cash flow. COVID-19 has not changed this.

In assessing whether COVID-19 has affected any applicable discount for lack of marketability, Travis Harms recently presented a summary of factors for consideration, as shown in **Exhibit 7**.

**Exhibit 7.**  
**Factors to Consider in Estimating the DLOM Post-COVID-19**<sup>13</sup>

- **Expected holding period.** *From the perspective of a hypothetical willing buyer, has the onset of the pandemic changed the expected holding period for the subject interest? If the pandemic has made a near-term sale of the business more likely, the appropriate marketability discount may be smaller. If, instead, the pandemic has extended the period during which the interest is expected to remain illiquid, a larger marketability discount may be indicated.*
- **Expected growth in value.** *How has the pandemic affected the expected capital appreciation over the anticipated holding period? If the discount rate used in the valuation of the business has increased, the resulting estimate of growth in value is likely higher as well, which may reduce the marketability discount. On the other hand, the crisis situation may increase the agency costs borne by minority investors, which could reduce the expected capital appreciation and increase the marketability discount.*
- **Expected interim cash flows.** *How will the pandemic influence the subject company's ability or willingness to pay dividends to minority shareholders? If dividends are expected to be cut or suspended, the appropriate marketability discount may increase.*
- **Required holding period return.** *How has the pandemic affected the return premium investors require for enduring illiquidity? Relative to returns on publicly-traded shares, an increasing premium for illiquidity would contribute to a higher marketability discount, while a lower illiquidity return premium would suggest a lower marketability discount.*

## Summary

The post-COVID-19 environment is constantly evolving and professional business appraisers will have to stay abreast of the many current developments in order to ensure they are considering all of the information necessary to develop reasonable and credible estimates of value for closely held businesses.

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<sup>1</sup> SSVS provides for two alternative scopes of work: a “Calculation Engagement” (i.e., a limited scope analysis) and a “Valuation Engagement” (i.e., a full-scope analysis). In performing a Calculation Engagement, the analyst and client agree on the most appropriate valuation approaches and methodologies to be used and the extent of procedures to be performed. For a Valuation Engagement, the analyst is required to consider all applicable approaches and methodologies and then exercise professional judgment in applying those the analyst considers appropriate. AICPA SSVS, VS Sec. 100, ¶ 21.

<sup>2</sup> In venues where the Courts do not accept a discounted cash flow method, an alternative is to first develop an estimate of value using the discounted cash flow method and then, using a capitalized cash flow method, back into the rate of growth that results in a similar value.

<sup>3</sup> Rev. Rul. 59-60, 1959-1 CB 237, Sec. 3.03.

<sup>4</sup> Shannon P. Pratt and Alina V. Niculita, *Valuing a Business - The Analysis and Appraisal of Closely Held Companies*, 5th Edition (New York: McGraw-Hill, 2008), p. 56.

<sup>5</sup> Shannon P. Pratt and Roger J. Grabowski, *Cost of Capital – Applications and Models*, 5<sup>th</sup> ed., (Hoboken: Wiley & Sons, Inc. 2014), p. 25-26.

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*, pp. 856-857.

<sup>8</sup> James R. Hitchner and Harold G. Martin, Jr., “COVID-19 and Business Valuation - What to do NOW! Valuing Small, Medium, and Large-Size Businesses,” Financial Consulting Group, May 14, 2020.

<sup>9</sup> James R. Hitchner, “COVID-19 and the Effects on Business Valuation - *Frequently Asked Questions*,” *Financial Valuation and Litigation Expert*, June/July 2020.

<sup>10</sup> Joseph W. Thompson, et al., “Alternate Valuation Methods in the era of COVID-19,” *Business Valuation Update*, Vol. 26, No. 6, June 2020, <https://www.bvresources.com/articles/business-valuation-update/alternate-valuation-methods-in-the-era-of-covid-19> (accessed May 22, 2020).

<sup>11</sup> *International Glossary of Business Valuation Terms*, (The C.L.A.R.E.N.C.E. Glossary Project comprised of the following professional organizations: American Institute of Certified Public Accountants, American Society of Appraisers, Canadian Institute of Chartered Business Valuators, National Association of Certified Valuation Analysts, and The Institute of Business Appraisers, 2001).

<sup>12</sup> James R. Hitchner, ed., *Financial Valuation: Applications and Models*, 4<sup>th</sup> ed. (Hoboken: John Wiley & Sons, Inc., 2017), 393.