

Size Matters

Valuation of Small and Micro Businesses

This column focuses on valuation issues unique to very small or “micro” businesses. These businesses often have less financial and management information available, much of which may be deficient by GAAP or other standards. Therefore, valuers must do more qualitative review and apply greater professional judgment.

From Forecast to Value—Business Valuation During COVID-19

By Gregory R. Caruso, JD, CPA, CVA

As the proverb says, we live in interesting times. The last nine months have brought many changes to our personal and business lives. COVID-19 and the resulting economic effects have increased demands on business valuers to review provided data for credibility when predicting future cash flows.¹ This review is necessary to estimate cash flow as well as to select the risk adjustment, whether it be a multiplier, capitalization rate, or discount rate.

This article demonstrates the risk adjustment, beginning with an actual projection (see Table 1). It works through the major steps of a market method valuation,² emphasizing additional steps and adjustments due to COVID-19 and its effects on the overall economy, the industry, and the company itself.

¹ See Gregory R. Caruso, *The Art of Business Valuation: Accurately Valuing a Small Business* (Hoboken, NJ: John Wiley & Sons, 2020), 29, www.theartofbusinessvaluation.com.

² In the actual valuation, both the income method and market method were used. Because most factors and logic are the same, only the market method is reviewed here.

Factors Considered

Table 1 is a summary of the projection provided by a construction company’s management.³ A quick review reveals two factors raising the level of risk associated with this company:

1. Of \$20,650,000 of projected work, only \$1,550,000 is continuing from the prior year. Often, existing jobs take longer than planned, but new starts will be required for continuation as a going concern.
2. Two new jobs make up \$16 million of the projected \$20 million-plus. These new jobs present a significant concentration risk.

Reducing risk was the fact that a significant amount of jobs are apartment projects.

³ The actual projection provided was for 2.5 years with significant detail provided in the current year and then less detail in future years. The summary in Table 1 is for the year 2021. Monthly data was provided that has been summarized for purposes of this article.

Table 1: General Contractor Projection

Projection for 2021 as of 6/30/2020

Job	Status	Revenues	Type	Notes
A	New	\$500,000	Residence	
B	New	\$1,300,000	Nonprofit	
C	Started	\$450,000	Apartments	
D	New	\$8,900,000	Apartments	
E	New	\$7,100,000	Apartments	
F	Started	\$700,000	Church	
G	Dead	\$700,000	Retail Fitness	Not going forward
H	New	\$100,000	Church	
I	New	\$500,000	Apartments	
J	Started	\$400,000	Church	
Total Revenue		<u>\$20,650,000</u>		Historic Rev. +/- \$8 M
COGS		<u>\$18,550,000</u>		90% Based on flat %
Gross Profit		\$2,100,000		10% Based on flat %
Expenses		<u>\$1,700,000</u>		Based on a flat %
Income / Operations		<u>\$400,000</u>		2% Hist. Inc. +/- \$250,000

Note:

The bulk of new projects, including the two largest, start in the first half of the year

Concentration risks are very typical for construction contractors. Therefore, an analyst would need to develop an understanding of the overall situation to determine likely cash flow and an appropriate risk adjustment.

By using typical forecast⁴ review questions,⁵ the following additional items were noted:

- The projections were routinely prepared by the company’s president to manage the backlog.
- The company’s president stated that historically, 50 percent of the jobs started

within a reasonable time of the projected start date; therefore, the pipeline was sufficient. The president also felt this backlog had a higher likelihood of starts than many prior projections.

- The president used percentages for the cost of goods sold (COGS), expenses, and profitability, and did not budget beyond that.
- Those percentages probably understated profitability, assuming the forecast was met. The president did not see the need to predict specific profitability other than to anticipate that there would be some cushion in this unlikely forecast.
- The company had never been close to meeting its forecast numbers. Again, in practice, forecasts were more of a pipeline management tool than a financial forecast.
- On the other hand, past forecasts could not be compared because the president updated them monthly to estimate the year-to-date results, without keeping a copy.

Other pertinent company facts that became apparent through conversation and document review⁶ included:

- In recent years, annual revenues had averaged approximately \$8 million. Revenues had been trending upwards, with projected revenues of \$12 million in 2020 from jobs already in process.
- Profitability averaged around \$180,000 before add-backs and adjustments. These were thin margins, but they were relatively consistent with an upward trend.

⁴ Technically, management provided a projection, which it never fine-tuned to reach the level of a forecast. But it was tendered as a forecast, and for that reason, the two terms are used somewhat interchangeably in this article.

⁵ Caruso, *The Art of Business Valuation*, 182. I believe the questions are self-evident from the answers and have eliminated the questions for brevity. A few of the questions provided for reviewing projections: What is the support for the changes? Who prepared the forecast? Why was the forecast created? What date was it created? Where did the key facts and assumptions come from? If based on contracts or other existing backup, can you review the back-up? Is there a history of forecasts? If so, compare forecasts versus results. Are they reasonably consistent or is the variance consistent?

⁶ Clearly, many review steps and facts have been left out. I have tried to share the essence of the data so professional judgment matters can be understood.

- Company management was extremely competent.
- Accounting was very conservative. Profits from reduced costs and change orders were posted at job completion, so gross margins and profitability were up-and-down.
- The balance sheet was weak. The owner consistently over-distributed, leaving the company undercapitalized.
- Bonding generally was not required for the types of projects this company performed. In practical terms, that reduced financial information quality, as there were no reviewed financial statements. Bonding companies generally require more substantial balance sheets to protect their bonds. But that can reduce value because stronger balance sheets reduce the potential return on invested equity.

Questioning of company management also revealed the following COVID-19 factors:⁷

- The company had been subject to a shutdown order covering most projects in Pennsylvania, its largest market, causing losses relative to its forecast in the second quarter of the year. The company appeared to be recovering some of the lost revenues since the shutdown and would still have a solid year compared to much of its reviewed history.
- The State of Pennsylvania imposed strict shutdown orders, and it is not clear whether future orders will be issued.
- The company had received a Paycheck Protection Program (PPP) loan. The loan was highly likely to be 100-percent forgiven, as the company had a higher payroll within the required period than in previous years. The loan significantly improved the balance sheet, along with a one-time cash receipt from a joint venture.
- The company had a thin balance sheet—\$500,000 in net current assets compared to a \$1 million industry benchmark.⁸
- The best estimate of apartment construction (the leading revenue contributor to the company), prepared by a subsidiary of the National Association of Homebuilders dated June 6, 2020, showed a small dip in apartment construction in 2020 but a quick recovery in 2021. Industry articles indicated there could be financing issues ahead,

which could impact starts.

- Company management knew the prospective clients in its pipeline. Still, it could point to no specific likely financing or other information that would help determine the likelihood of project starts in a downturn.
- Construction companies tend to be highly cyclical and fare poorly in economic downturns.

Valuation Approach

How does a business valuator synthesize this information into a future cash flow used in a valuation methodology? While additional considerations are detailed in the full report, the primary reasoning is as follows:

- In reviewing the forecasts, it appears that the company's revenues are very concentrated around a few, more extensive jobs, which is typical for contractors. These jobs are multifamily, which has been more stable than other construction over the recent past. Projected total revenues are higher than historical revenues, but the start dates of jobs are always unpredictable. This unpredictability has become more pronounced in the current environment as both sources of financing and market conditions have become more uncertain. Note: I increased my risk assessment (capitalization rate or multiplier) to reflect the difficulty of determining the timing of specific jobs and continuing cash flow through the forecast period. I also used historical cash flows, which are significantly lower than projected cash flows.
- Projected cash flows were \$20 million, while historical cash flows were in the range of \$8–\$9 million. Absent COVID-19, the backlogs would likely have supported \$10 million-plus in 2021 and \$15 million-plus in 2022.
- The company has a weak balance sheet relative to comparable general contractors. This increases the risk of default (a risk that is magnified during downturns) and lowers value based on earnings. Again, these risks are reflected in an increased assessment for risk under a going concern assumption.
- In an appendix to the report, I used the discounted cash flow (DCF) method, incorporating extremely low after-tax cash flows that I developed as a sanity check on the value found. I did not use this as a valuation method, given the uncertainty of my projection. The value is below my found value, but because of the shallow projected cash flows, in my judgment, it supports the value found. Note: This estimate would not have been made in a pre-COVID-19

⁷ See <https://www.theartofbusinessvaluation.com>. Buyers of the book, *The Art of Business Valuation: Accurately Valuing a Small Business*, have access to a secure area on the website that contains COVID-19-related materials, including (1) a worksheet for developing a marketability discount due to COVID-19, (2) COVID-19 questions, and (3) sample report language.

⁸ RMA, Industry Code 236220, Commercial and Institutional Building Construction, National, Sales \$5–10 million.

environment. I mention it here to demonstrate an additional check performed to support my valuation and a technique you might want to add to appropriate valuations. My purpose was to demonstrate to myself and report users that the company had reasonable underlying value even if a difficult period ensued for the next year or two.

Market Method

This particular valuation was performed using both an after-tax cash flow with the capitalization of earnings method (in my judgment, the supplied projection did not provide usable data for the DCF method) and a market method. I had limited comparables, but the use of the two methods, which produced close indications of value, offset this limitation. In the interest of brevity, this article only discusses the market method, but the logic underlying the two methods is the same.

Selecting the Multiplier

The search parameters used to determine whether a particular transaction in the DealStats database was comparable to the subject company were businesses in the same industry—NAICS Code 236220, Commercial and Institutional Building Construction—that had more than \$4 million and less than \$25 million in revenues, with earnings before interest, taxes, depreciation, and amortization (EBITDA) greater than \$100,000.

The price-to-EBITDA data was based on eight transactions, with a median multiplier of 4.3, a mean multiplier of 6.7, and a 25th percentile of 2.1. Compared to the peer set, the company had between a 25th percentile and median EBITDA throughout all years. Because less profitable companies often have higher cash-flow multipliers,⁹ I also graphed the results based on sales price versus profitability, as shown by EBITDA. This graph indicated a multiplier of up to approximately 7.0 for a company with 5 percent profitability. I selected a price-to-cash-flow ratio of 3.50, based on (a) historical performance and the overall backlog trend, (b) increased market uncertainty and overall risk, and (c) the company's weak balance sheet.

Figure 1 shows the graph plotting the cash flow multiplier versus profitability.¹⁰ I do not usually include this graph in my report, because it may be misinterpreted, but I am showing it here to demonstrate my thought process and professional judgment. I believe that the higher multiples of less profitable companies are due in large part to the likely conveyed balance sheets (typically, these companies carry 45 to 60 days' receivables and end up including some of that working capital, but

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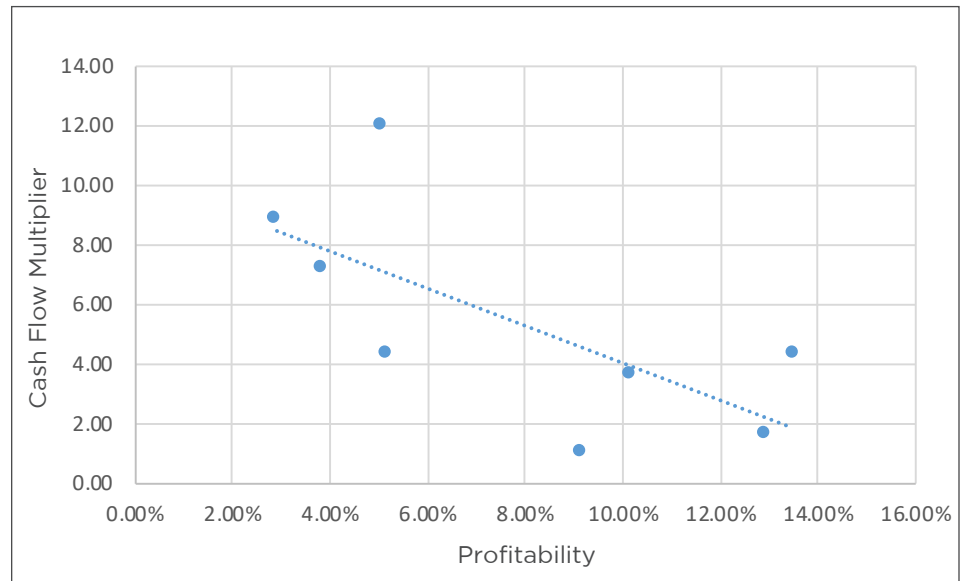
⁹ This may seem counterintuitive, but I have now done this analysis at least 100 times, and with one or two exceptions, cash flow multipliers increase as profitability decreases.

¹⁰ I often use regression analysis to calculate R-squared but it is an indication of correlation not correctness. With limited comparables—and since the balance sheets may not be accurately reflected—regression analysis likely would not verify anything. In the actual valuation I relied on the fact that the income method produced almost the same indication of value as the value found. The market method was not strong enough on its own to form an opinion.

The weak balance sheet created some level of going concern issues that did not signal likely liquidation but would increase the perceived risk to a rational investor.

the DealStats data was inconclusive).¹¹ Here, I have a weaker-than-typical balance sheet and suspect I would have selected a multiplier of 4.25 had there been no COVID-19 considerations. But the weak balance sheet created some level of going concern issues that did not signal likely liquidation but would increase the perceived risk to a rational investor.

Figure 1: Plotting Multiplier vs. Profitability



My post-COVID-19 multiplier was 3.5—a 17.6 percent increase in the risk assessment (under the assumption that my non-COVID-19 multiplier would have been 4.25).

Weighting the Cash Flows

The weighting of the cash flows is shown in Table 2.¹² The pre-COVID-19 EBITDA cash flow weighting was supported by the pre-COVID-19 cash flow projection for future work. For the past 15-plus years, apartments have been the most recession-resistant sector of new construction. However, the likelihood of reduced cash flow due to the recessionary effects of COVID-19, particularly once various federal economic stimulus programs are curtailed, warranted selecting a lower cash flow.

¹¹ This data issue is very common with these types of companies. It is a legitimate issue with market data for small companies with complex balance sheets and limited comparables. (I doubt even 50 percent of the brokers understand the matter sufficiently to report it correctly.)

¹² This valuation actually was an update of one performed as of December 31, 2019. The company had strengthened its balance sheet significantly since the original valuation, which was the main weakness (going from a net current asset value of -\$100,000 to \$500,000). Nevertheless, the value found was lower due to COVID-19 issues.

It is important to note that if another shutdown order or second wave affects productivity or demand, the cash flow would likely be reduced further.

Table 2: Cash Flow Weighting

	2020	2019	2018	2017	Selected Weighting
EBITDA Cash Flow	\$645,300	\$625,100	\$433,400	\$231,000	
Pre-COVID-19 Weighting	1	1	1		\$567,933
COVID-19 Weighting		1	1	1	\$429,833

Cash flow was reduced by 24.32%

The COVID-19 weighting reflects the fact that this company was in a highly cyclical industry, and that uncertain economic forecasts¹³ likely would result in canceled jobs or at least delays in project starts. This is highly likely to reduce cash flows in the foreseeable future; therefore, I did not use 2020 as part of the weighting for the COVID-19 adjusted cash flow. It is important to note that if another shutdown order or second wave affects productivity or demand, the cash flow would likely be reduced further.

¹³ Carmen Reinicke, "JP Morgan CEO Jamie Dimon says 'normal effects of recession' will be delayed until late this year or early next," *Markets Insider*, August 11, 2020, <https://markets.businessinsider.com/news/stocks/economic-outlook-recession-jpmorgan-jamie-dimon-normal-effects-delayed-coronavirus-2020-8-1029493456>.

By walking through the process of gathering qualitative data and applying it to the quantitative data necessary to perform a compliant business valuation for a micro or small business, I have attempted to illuminate the effects of the pandemic on the U.S. economy.

Indication of Value

Table 3 shows a summary of the pre-COVID-19 and post-COVID-19 values.¹⁴

Table 3: Pre-COVID-19 Value vs. Post-COVID-19 Value

Market Method Value Found	Multiplier	Cash Flow	Value
Pre-COVID-19 Indication of Value	4.25	\$567,933	\$2,413,717
COVID-19 Indication of Value	3.5	\$429,833	\$1,504,417
Value was reduced by	37.67%		

Conclusion

There is no doubt that COVID-19 has altered the way we do business and business valuations. At this point, it appears that those changes will inform how we do business in the foreseeable future. By walking through the process of gathering qualitative data and applying it to the quantitative data necessary to perform a compliant business valuation for a micro or small business, I have attempted to illuminate the effects of the pandemic on the U.S. economy. It is, of course, a forward-looking judgment call. But the new paradigms bring new risks, and these risks require us to consider how they will change value. **VE**



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¹⁴ There is always a risk of double-counting and undercounting, but that is part of professional judgment and the art of business valuation. For me, small business valuation begins and ends with my father’s quote, “I would rather be approximately right than perfectly wrong.” I am adjusting both cash flow and the multiplier, even though some commentators believe all risk can be reflected in one or the other. In some valuations, that is the case, but not here. My cash flow does not anticipate a second shutdown or second wave of the virus. If there are additional shutdown orders or a second wave that reduce demand or productivity, my cash flows will be high and that very real risk at this juncture requires adjustment beyond the cash flow. Some may have a different opinion, and that is why the best we can do is issue “opinions” of value.