FACTORS AFFECTING THE VALUE OF CONSTRUCTION COMPANIES

In its simplest form, the value of a business can be estimated by multiplying a profitability metric by a valuation multiple.

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Consider the value of the following two hypothetical construction companies. Jack owns Nailed It (NI), a residential construction company. NI has 100 full-time employees. Sally owns a very similar company, Built for You (BFY), which also happens to employ 100 people. These companies are almost identical — similar markets, similar employee pools, and similar customers. Last year, they generated the same amount of revenue and income. The management style of the owners is the key difference. Jack is extremely disorganized; he struggles to locate information, keep schedules, and track and analyze data. He is relatively inexperienced as a manager. Sally, meanwhile, is very punctual and organized and has 15 years of management experience. Her strengths are monitoring projects, optimizing resources, managing employee utilization, and tracking client satisfaction. Which company is more valuable?

Despite being identical in terms of services and size, most people would identify BFY as being more valuable. Alarm bells start to ring in a valuation analyst's head when learning about the sloppy management style, lack of experience, and poor use of data at NI. Despite generating the same amount of profit last year, Jack's management style may jeopardize future profits, reducing business value, and this reduction in value could be substantial.

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EXHIBIT 1
Fundamental Valuation Equation

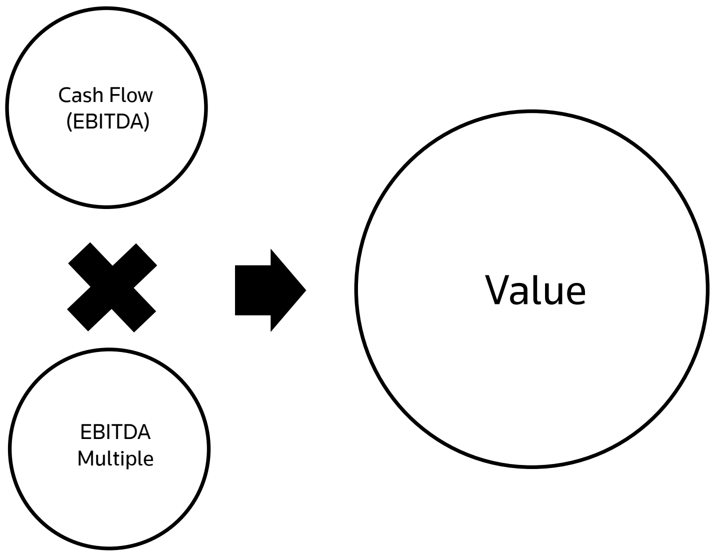
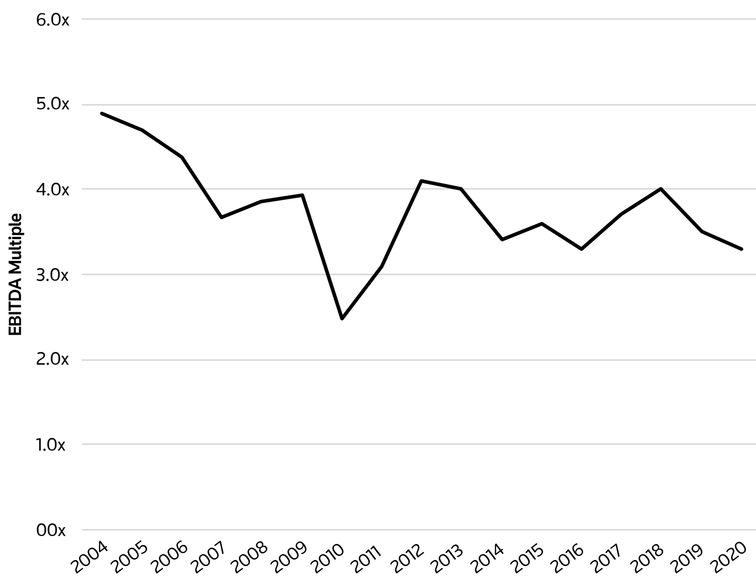


EXHIBIT 2
Trend in EBITDA Multiples in the Construction Industry



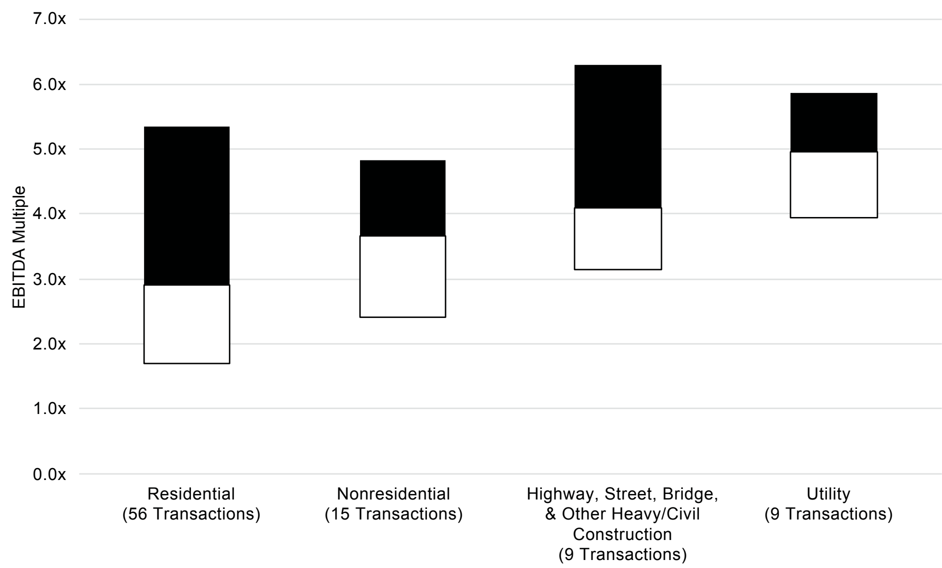
In addition to the risk factors from this example, there are many other drivers of business value.

Valuation formula

In its simplest form, the value of a business can be estimated by multiplying a profitability metric by a valuation multiple. One commonly used metric is EBITDA — earnings before interest, taxes, depreciation, and amortization, as seen in Exhibit 1. EBITDA is used as a proxy for the cash flow generated by the operations of a business. People will pay more for less risky companies, which translates to a higher multiple. Much of a valuation analyst's time is spent analyzing the risk profile of a company such as NI.

EXHIBIT 3

Interquartile Range for Construction Industry EBITDA Multiples



Estimating an EBITDA multiple

Valuation multiples reflect risk factors from the economy as a whole. The recession in 2008 and 2009 was a stark reminder of how the economy can affect the value of construction companies. The father of one author owned a residential framing business during this time. Work dried up during the recession, causing many businesses to shut down. As the risk associated with this sector increased, valuation multiples decreased and investors noted the volatility and risk associated with construction. Even after the economy picked back up, investors were initially nervous about paying high multiples for construction companies. Although business is now booming for the residential framing business and across the construction industry, the recession serves as a reminder of how the economy can affect valuation multiples.

Exhibit 2 presents the trend in EBITDA multiples for privately owned construction companies from 2004 to the present, including the effects of the recession.[1] Over the last decade, EBITDA multiples in the construction industry have trended between three and four times EBITDA for privately owned companies. This range is a reasonable place to start when assessing the value of a construction company.

An EBITDA multiple can be further refined based on the segment occupied by a company within the construction industry. In Exhibit 3, we present the interquartile range — from the 25th percentile to the median and from the median to the 75th percentile — for four segments of the construction industry. The data set consists of asset transactions from the DealStats database from 2011 to the present.[2]

In Exhibit 3, the median EBITDA multiple increases from just under 3 times for residential construction companies on the left to approximately 5 times for utility construction companies on the right. This trend may be influenced by the barriers to entry for these four industry segments.

Residential construction has low barriers to entry. Rather than buying a residential construction company, a person can start their own without too much difficulty. The lower barriers to entry put downward pressure on valuation multiples. For industries such as utility construction, with its moderate to high barriers to entry, a higher multiple is considered. Because new entrants require a significant investment to compete, a higher multiple assignment is considered. Residential construction is also tightly tied to the overall economy. Infrastructure construction, including highway and utility work, can be countercyclical

EXHIBIT 4
Factors Affecting the EBITDA Multiple

Factor	Low Multiple	Average Multiple	High Multiple
Management Bench Strength	Little to no resources to invest in employee development, high turnover	Limited resources to continuously train the next level of management	Contains the resources and staff to continuously train next level of management, low turnover
Employee Stability	Employees are underpaid and dissatisfied, with high turnover	Employees are fairly paid, and turnover is in line with industry	Employees are paid well and highly motivated, and there is low turnover
Customer Concentration	Rely too heavily on a single customer	Less reliant on one customer	Rely on various customers with a diversified offering
Profitability	Volatile and/or low profitability, lack of growth opportunities	Some volatility, may lack history of strong profitability	Track record of growing profits with minimal volatility
Competitive Landscape	Operates in narrow geographic area, high competition	Operates in wider geographic area with less competition	Operates in a wide geographic area, low competition
Barriers to Entry	Easy for new competitors to emerge and copy business model	New entrants require significant investment to compete	Significant capabilities difficult to recreate

and tends to have less dramatic swings than single-home construction starts. Investors seem willing to pay more for those sectors that have more stable demand.

Even within a specific industry segment, multiples can vary widely. For example, for the residential construction company EBITDA multiples in Exhibit 3, the third quartile multiple was over 5 times, while the first quartile multiple was under 2 times. The range in valuation multiples reflected differences in risk profiles from company to company. High-risk companies command lower multiples than safe investments.

Exhibit 4 illustrates how certain operational risk factors may affect the valuation multiple.

Other factors that can affect valuation multiples include:

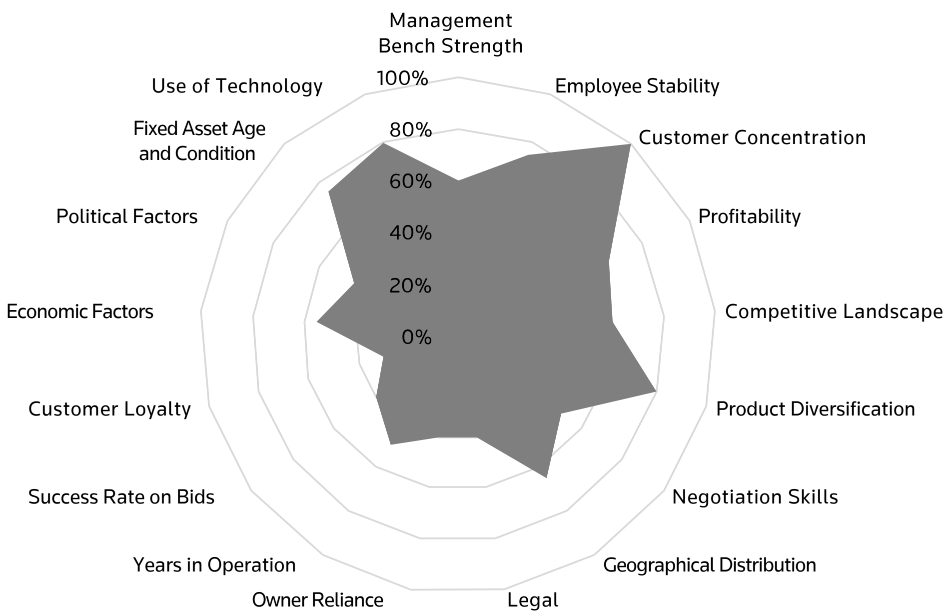
- success rate on bids;
- symbiotic relationships;
- project backlog;
- product or service diversification;
- geographical distribution;
- reliance on business owner;
- legal risk;
- years in operation;
- negotiation skills;
- access to high-quality materials;
- risk management;
- regulation compliance;
- access to highly skilled workforce;
- ability to curtail operations in response to market demand;
- customer loyalty;
- economic factors;
- political factors;
- age and condition of machinery and equipment;
- use of technology; and
- reputation.

Wherever possible, we like to present data visually. Company risk factors can be modeled using a polygon, with risk factors positioned around the outside. If a company performs well regarding a particular factor, a point is plotted toward the outside of the polygon. If the company performs poorly, a point is plotted toward the center. The points are then connected to visualize a company's risk profile.

The model shown in Exhibit 5 is a helpful communication tool that provides a visual representation of a company's risk profile and highlights areas in which a company can improve.

The larger the colored shape is in the polygon, the higher the valuation multiple should be. However, these factors do not all affect the multiple equally; the valuation multiple may be highly responsive to some factors and less responsive to others. Addi-

EXHIBIT 5
Factors Affecting Value



tionally, each factor may not have a linear effect on the valuation multiple. For these reasons, formula-based estimates of valuation multiples are often inaccurate, although they are a great place to start for a ballpark indication of value.

Conclusion

The value of a business can be affected dramatically by its risk profile. The valuation multiple is affected by:

- economic factors, as demonstrated by the impact of the latest economic recession on valuation multiples;
- the industry and sector in which the subject company operates; and
- numerous company-specific factors that influence the risk profile.

Valuation analysts take all of these factors into consideration when estimating the value of a company. ■

NOTES

[1] Data from "2nd Quarter, 2021," DealStats Value Index (2021) and "Private Deal Update 4Q 2012," Pratt's Stats (2012), published by Business Valuation Resources, LLC (www.bvresources.com). Note that DealStats was previously known as Pratt's Stats.

[2] "DealStats," Business Valuation Resources, LLC (2021) (database). Available at: https://www.bvresources.com/products/dealstats.