

The business valuation community has grappled with unprecedented challenges and opportunities in the past few years. We have seen a whirlwind of macroeconomic factors, from lingering uncertainty in U.S.-China relations and Russia's relentless war in Ukraine to frenetic post-COVID-19 M&A activity. Amidst these global events, domestic concerns—including supply chain disruptions, labor shortages, soaring inflation, and tightened underwriting criteria at financial institutions—have further complicated the valuation landscape. As we delve into the intricate world of business valuations, we will explore how these factors have created a unique environment for valuation professionals, who must now navigate uncharted territory while seeking solutions to novel challenges.

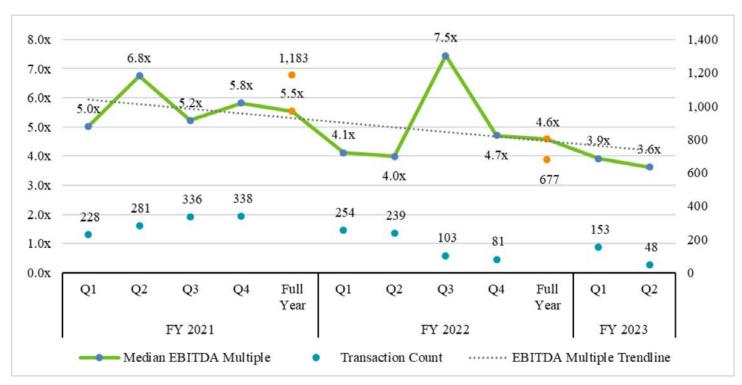
## Market Multiples

When valuing a business, it is crucial to analyze the multiples at which companies have transacted in recent periods. It is also important to examine the enterprise value -to-EBITDA multiples at which companies are currently trading in the public markets to validate the reasonableness of a company's enterprise value as derived using an income approach. Given the turbulent economic environment in recent years, as well as uncertainty about future growth slowdowns or downturns,

an analysis of these multiples over a multiyear period can be a good indicator of market and industry trends.

Figure 16 demonstrates that private transaction multiples generally declined from 2021 through the second quarter of 2023. In addition, transaction volume decreased significantly during the same period, potentially brought on by rising interest rates<sup>7</sup> as well as tightened lending standards.<sup>8</sup>





<sup>1</sup> As used in the mergers and transactions method within the market approach to business valuation.

<sup>2</sup> The operating value of a company before considering capital structure, which is equal to its equity value, plus net debt, plus minority interest(s).

<sup>3</sup> Earnings before interest, taxes, depreciation, and amortization.

<sup>4</sup> As used in the guideline public company method within the market approach to business valuation.

<sup>5</sup> The income approach generally values a company based on an analysis of the risk-adjusted income earning capacity of a company, typically by relying on either the discounted cash flow method (future cash flows) or the capitalized cash flow method (representative cash flows, typically based on historical data).

<sup>6</sup> The data in this chart relates to market multiples based on the purchase price of privately held companies in relation to a representative level of EBITDA. Data per DealStats (extracted on August 21, 2023); transactions of companies with less than \$1 million in revenue in the latest full year prior to transaction were excluded from the dataset.

<sup>7</sup> J.P. Morgan Chase & Co., Historical Prime Rate, https://www.jpmorganchase.com/about/our-business/historical-prime-rate.

<sup>8</sup> Rich Miller, "US Banks Are Tightening Lending Standards, Raising the Risk of a Recession," *Bloomberg*, November 21, 2022, https://www.bloomberg.com/news/articles/2022-11-21/us-banks-tighten-lending-standards-raising-risk-of-recession.

To make the analysis more relevant for a subject company, valuation professionals should further filter transactions in order to identify relevant industry-specific multiple trends. Figures 2 and 39 demonstrate the difficulty in extrapolating trends across key industries from public company trading multiples.

Figure 2: 2021 to Q2 2023 Industry Trading Multiples

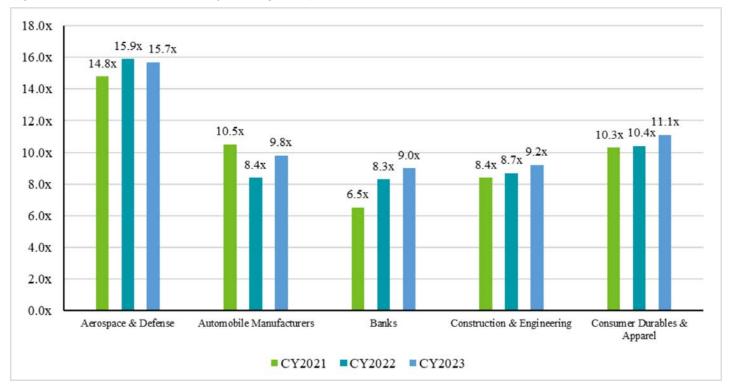
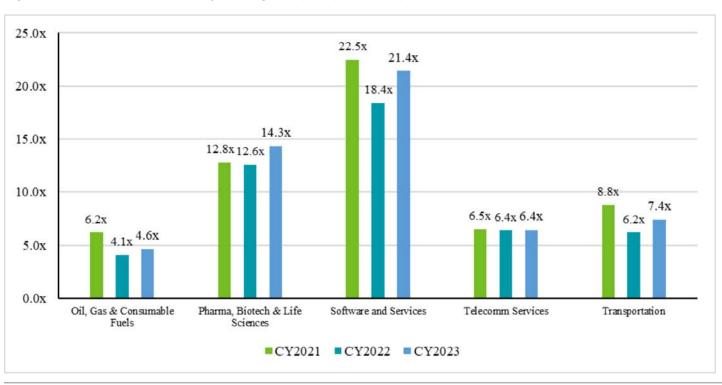


Figure 3: 2021 to Q2 2023 Industry Trading Multiples (Continued)



<sup>9</sup> The data relates to market multiples based on the trading price of publicly held companies in relation to a representative level of EBITDA. Data per Capital IQ (extracted on August 21, 2023), Industry Key Stats & Ratios.

During this period, some industries were still dealing with ripple effects (whether positive or negative) from the COVID-19 pandemic, while others found that operations had returned to pre-pandemic conditions. To make the analysis more relevant for a subject company, valuation professionals should filter searches down to publicly traded companies that are closely comparable to a subject company to identify relevant multiple trends.

Valuation professionals should continue monitoring market multiples during 2023 and beyond to understand any trends in subject companies' specific industries.

#### Inflation and Rising Interest Rates

A major market factor continues to be the rise of inflation brought on by aftershocks of the COVID-19 pandemic. The U.S. economy is plagued by too much demand and too little supply across many industries. Fiscal stimulus (government spending) and monetary stimulus (low interest rates) caused the money supply to grow by 37.8 percent

from January 2020 to December 2021. The growth in money and pent up demand from the COVID-19 pandemic drove an extraordinary appetite for goods and services. In addition, pre-COVID-19 lean inventory practices<sup>10</sup> were ill-equipped for the effects of pandemic-related shutdowns, fiscal stimulus, geopolitical events, and constrained labor output/productivity, resulting in supply chain disruptions, which were further exacerbated by supply hoarding in some sectors.

With the Federal Reserve (the "Fed") raising interest rates significantly over the past year and a half to curb inflation, the cost of equity has also increased substantially due to bloated risk-free rates. Figure 4 shows the negative effects rising rates tend to have on company values in the public markets. Valuation experts must also consider changes to a subject company's cost of debt financing, as debt currently on the balance sheet may be at much lower rates than the company could obtain in the marketplace today. These factors and forecast risk need to be weighed to determine an appropriate cost of capital for a subject company.

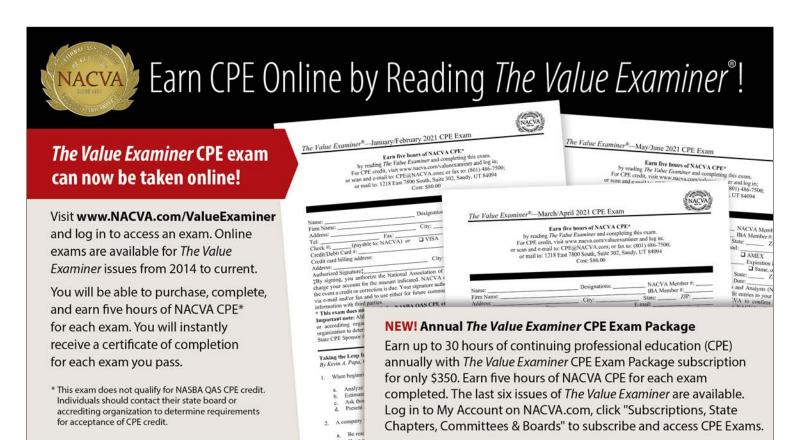




<sup>10</sup> Based on a just-in-time inventory planning approach that focuses on only replenishing inventory as needed.

<sup>11</sup> Per the U.S. Department of Treasury, the 20-year daily treasury par yield curve rates were 1.94 percent and 4.14 percent on December 31, 2021, and December 31, 2022, respectively.

<sup>12</sup> MacroMicro, Federal Funds Rate vs. S&P 500, https://en.macromicro.me/collections/9/us-market-relative/91/interest-rate-sp500.



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These market factors indicate several questions that a valuation professional should contemplate for valuation engagements in 2023 and beyond:

- 1. Is it possible to bifurcate revenue changes due to production versus price increases?
- 2. How are inflationary impacts reflected in the company's forecast?
- 3. How has inflation impacted customer contracts?
- 4. Are there new items or protective language in contracts or proposals that can help reduce the risk?
- 5. Are increasing interest rates preventing the company from making investments?
- 6. Was the subject company able to pass on inflated costs to its customers?

#### Forecast Risk and the Cost of Capital

As recently observed by Ginger Chambless, head of research for J.P. Morgan's Commercial Banking division,

"Given stronger than expected economic momentum so far in 2023, a recession appears off the table this year." Chambless goes on to list several factors impacting the U.S. economic outlook, including a slowing of the Fed's rate increases, gradually improving inflation, and alleviation of supply chain bottlenecks in many industries. Over the past several months, whether for administrative or transaction purposes, we have seen many forecasts predicting a decline in revenue from 2022 to 2023. As a general rule, management forecasts rarely predict a decline in year one of a forecast. Still, due to the somewhat turbulent post-COVID-19 economy, that is precisely what many economists are predicting and many companies are planning for this possibility.

As valuation experts, we must thoroughly vet the forecast, comparing it not only to different internal metrics of a company (such as historical results, prior forecasts, and the narrative provided in the management meeting) but also to macroeconomic and industry factors. If the forecast provided

<sup>13</sup> Ginger Chambless, "Midyear 2023 Outlook: 10 Considerations for the U.S. Economy," J.P. Morgan, August 10, 2023, https://www.jpmorgan.com/commercial-banking/insights/economic-trends.

by the company appears to be optimistic, you need to ask "why?" Industries were affected in different ways going into 2023, and there may be reasons a company can outperform the overall economy. Still, as valuation professionals, it is our task to understand the "why" behind the forecasts we have been provided. Vetting a forecast has always been a challenge, as management does not have a crystal ball; however, in the turbulent post-COVID-19 economy, it has become even more imperative for business valuation professionals to ask the right questions and thoroughly understand management's explanations.

Suppose you are valuing a company in an industry that has stabilized. There may be differences between the forecast and the company's historical results, whether revenue, margins, operating expenses, or overall profitability. These levels may be higher or lower than a subject company has seen historically, but they may be the new norm for the company or its industry. If forecasted levels are significantly different than historical levels, the risk of the forecast will need to be addressed in the cost of equity financing.

#### Supply Chain

The past two-plus years have been a logistical nightmare for most industries. Delays and increased freight costs have made it difficult for companies to obtain product and predict delivery dates. As valuation specialists, we need to understand what management has done and what they plan to do to overcome these obstacles, should they still be lingering.

Have inflationary pressures increased the cost of supplies? See if your subject company has contingencies built into their contracts to pass on or share some of the cost burden with their clients. Be sure to understand the company's supplier base. Does it have multiple suppliers or is it predominately sole-sourced? If the company imports most of its products from overseas, can domestic alternatives help alleviate the demand burden? Are there opportunities to purchase large quantities of a particular item the company relies on? Ask management how solid their inventory levels are and if there is a risk of obsolescence. Depending on management's responses, adjustments to the historical financial statements could be warranted. Whether it be expenses above and beyond to bring a product in or inventory that needs to be written down, we need to understand any supply chain issues

the company faced or faces and how management navigated or plans to navigate those scenarios.

#### Labor

Many companies face challenges in both retaining existing employees and attracting new ones. Companies in many industries are implementing pay increases, different compensation incentives, and increases in overall benefits packages to keep pace with the market and their competitors. Because of the stiff competition in the hiring environment, recruiting efforts and costs have increased. Many companies turn to outside recruiters and implement referral bonuses for existing employees to help attract talent. Valuation professionals must assess a subject company's current employee base and evaluate its headcount needs going forward to achieve forecasted revenue and profit targets. These factors can lead to margin compression<sup>14</sup> for many companies, an unfortunate reality that should be discussed during the due diligence meeting and factored into the valuation analysis.

# **Working Capital**

An important component to consider as companies move towards a post-COVID-19 environment is how working capital needs and trends have evolved. With no further rounds of PPP<sup>15</sup> and ERC<sup>16</sup> resources being provided to boost cash reserves, valuation analyses must factor in enough working capital to fund future growth.

Companies in various industries were forced to adapt their operations during the COVID-19 pandemic, including renegotiating terms for receivables and payables, purchasing inventory in bulk due to supply chain constraints, accommodating remote employees, and making significant draws on lines of credit. Because of such changes, it is essential to understand how a subject company's working capital needs have shifted since 2020. It is not as simple as analyzing working capital through the same lens as before, or even during, the pandemic; it requires an assessment of recent historical working capital trends as a baseline from which to project further changes to working capital needs. Another important consideration is the impact a potential economic slowdown or downturn might have on a subject company's working capital needs.

<sup>14</sup> Defined as input costs rising faster than the sale price of a product or service, resulting in margin declines over time.

<sup>15</sup> The Paycheck Protection Program (PPP) provided Small Business Association-backed loans to help businesses keep their workforces employed during the COVID-19 pandemic. Two rounds of PPP funds were offered, with loan forgiveness available to businesses that met eligibility requirements.

<sup>16</sup> The Employee Retention Credit (ERC) was a refundable tax credit for businesses that continued to pay employees while shut down due to the COVID-19 pandemic, or while experiencing significant declines in gross receipts, from March 13, 2020, to September 30, 2021. Eligible employers could claim the ERC on an original or adjusted employment tax return for a period within those dates.

With many different macro factors affecting business valuations in 2023 and beyond, business valuation experts must thoroughly consider whether and to what extent these factors impact a company and its industry.

In addition to analyzing trends in common working capital metrics, valuators should also analyze working capital as a percentage of revenues to develop a baseline for projecting future working capital needs. Further, valuators should analyze working capital data from the subject company's industry to compare to the subject company and also understand industry trends.

All these factors potentially affect the working capital percentage used in the valuation analysis and the subject company's working capital surplus or deficit position as of the valuation date.

## Summary

With many different macro factors affecting business valuations in 2023 and beyond, business valuation experts must thoroughly consider whether and to what extent these factors impact a company and its industry. Although experts should consider a subject company's facts and circumstances during and emerging from the COVID-19 pandemic, it is important to remember that valuations are a "forward-looking" exercise. Thus, it is imperative to analyze and understand how a subject company is navigating through the many challenges faced by all industries. VE



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