HOW SHOULD FUNDS APPROACH VALUATION IN A DOWNTURN ENVIRONMENT?
Presenters for today

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Financial Services partner and senior analyst with client responsibilities including private equity funds, hedge funds, fund-of-funds, real estate investment companies and asset lending businesses.

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Great Lakes valuation leader with significant experience valuing business enterprises and securities, such as equities, debt, preferred stock and options and derivatives.

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Valuation industry leader for financial services focusing on portfolio valuation for private equity, VCs, credit funds and BDCs.
ASSESSING THE CURRENT MARKET
Setting the stage…

- Many funds are preparing their 1st quarter valuations
- The economic upheaval makes this a difficult exercise
- There has never been a more sudden and material market shakeup like that which we’re experiencing
- At what price would a willing buyer or sell transact?
Common approaches taken by funds

• Income model
  - Enables firms to project business income based on revised forecasts
  - Benefit is that the discount rate captures the risk of getting this income on time and in full measure

• Market model
  - Firms may perform additional calibration where observed transaction prices are backed into identified but unobservable input assumptions
  - Assumptions are updated and rolled-forward for subsequent measurement dates
  - Directional consistencies expected between comparable market multiples and implied multiple
Best practices

• Follow policies and procedures that are already in place
• Be clear about the rationale taken and support it with documentation
• Evaluate your impact cycle and carefully consider qualitative attributes of the industries you invest in
• Consult with your advisors and peers
CURRENT MARKET AFFECTS ON CALIBRATION AND RECONCILIATION
COVID19 impact by industry/sector

- Airlines
- Automotive
- Entertainment (events)
- Gaming
- Elective healthcare
- Leisure facilities
- Retail
- Restaurants
- Oil and gas drilling

- Commercial real estate
- Construction
- Logistics/Transportation
- Manufacturing
- Agriculture

- Defense
- Life sciences
- Packaging
- Pharmaceuticals
- P&C insurance
- Telecom
- Waste management (Residential)

- Internet service companies
- Media (Streaming)
- Online consumer non-discretionary
- Computer hardware/repair

Source: Moody's, S&P, other research.
Not a one size fits all model

**Liquidity**
- Current liquidity and other liquidity resources
- Qualification of loans
- Degree of cooperation with other co-investors
- Current cash burn and runway

**Leverage**
- Current leverage and expected leverage for 2020
- Has the capital been recently refinanced? Has there been a recent capital raise?
- EBITDA add-backs
- What is the debt tolerance for the business/industry?

**Cost structure**
- The variability of the company’s cost structure vs. fixed cost

**Capex needs**
- Is the business capex intensive?
- What are the immediate capex needs?
- Condition of the PP&E
- Capacity of PP&E and ability to delay immediate capex spend

**Management/ Sponsor**
- Track record and experience in navigating in challenging environments
- Resiliency and adoptability
- Sponsor desirability and ability to support the business
Credit Valuations

- Seniority / subordination in the capital structure
- Structural subordination (HoldCo vs. OpCo)
- Liquidity
- Capital expenditures
- Cash flow strength / operations
- Loss given default / recoveries
- Leverage threshold varies by company / industry / size
- Other key qualitative factors
U.S. economic dashboard: Recession and recovery

**U.S. economy has suffered a series of shocks**
- Supply, demand and financial shocks
- Near 7-standard deviation shock
- Depression like shocks, but no depression
- Recession will likely last 2-3 quarters

**Policy response**
- Robust fiscal and monetary policy response
- Main Street Lending Facility

**Shape of recovery**
- Unlikely to be a V-shaped recovery
- Elongated and frustrating in some industries
U.S. newly-reported Coronavirus cases

New York and All Other States Daily Covid-19 cases
(7-day moving average of daily cases)

All States excluding New York daily Covid-19 cases
and 7-day moving average of daily cases

Source: Johns Hopkins; Bloomberg News; RSM US
Half of U.S. states have started the reopening process, and early signs of economic activity rebounding is visible in restaurant data in states like Texas.

Population under stay-home orders

- Number of people (millions)
- Planned re-openings
- Under stay-home orders
- Total population

NYC subway ridership

- Year-on-year change
- 0%
- -20%
- -40%
- -60%
- -80%
- -100%

Public transit ridership

- Year-on-year change
- 0%
- -20%
- -40%
- -60%
- -80%
- -100%

Restaurant dine-in activity

- Year-on-year change
- 0%
- -20%
- -40%
- -60%
- -80%
- -100%

Source: BloombergNEF, New York Times, ABC News, U.S. Census; Note: Data as of May 6, 2020, state “opening” from stay-home orders covers any form of restriction easing, including elective surgery only to limited re-openings of salons, restaurants, movie theaters, schools, etc.

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Middle market loan market

Source: S&P Global Market Intelligence, LCD
Middle market loan market

Average Bid of Leveraged Loans

Source: S&P Global Market Intelligence, LCD
Middle market loan market

Quarterly Returns of the S&P/LSTA Leveraged Loan Index

Source: S&P Global Market Intelligence, LCD
AN EXAMPLE OF USING CALIBRATION TO SUPPORT DCF-BASED VALUATIONS
Upfront commentary on calibration
References in existing guidance

AICPA PE-VC Guide: Backtesting
- Chapter 11, Paragraph 11.07

ASC 820-10-35-24C

AICPA PE-VC Guide: Income Approach
- Chapter 5, Paragraph 5.63

AICPA PE-VC Guide: Calibration
- Chapter 10, Paragraph 10.25
Many funds rely primarily on a market approach for valuation.

A number of funds develop cash flow or forecasted income statement models to evaluate the investee’s management team.

- May or may not be relied upon for valuation purposes.

One of the primary critiques of an income approach-based model is the reliance on a number of unobservable inputs.
Valuation methodology

• The intersection of unobservable inputs and fair value measurements is best explained in the AICPA’s Accounting and Valuation Guide, Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies (the “PE-VC Guide”) in the Calibration chapter (Chapter 10).

• Most commonly, calibration is often thought of for the application of a market approach over a period of valuation dates, such as the bifurcation of the impact of the market’s performance and the company’s financial/operational performance on the selected (or implied) multiple and corresponding fair value.

• But calibration is not limited to just the market approach, which we will illustrate on the following slides.
Illustrative example – Background info

**Purchase price**
- $60 million
- LTM revenue of $50 million
- “Adjusted EBITDA” of $10 million
- Implied multiples of 6x EBITDA and 1.2x revenue

**Market data**
- Median GPC multiple of 8.5x
- Implied multiple approximately 30% discount from median

**Management’s data**
- Detailed 2018 budget
- 2019-2021 high-level plan
- 3-4 year holding period
- Future exit multiple expected to approximate the entry multiple

Implied IRR of 24% based on the budgeted cash flows, holding period, terminal value and initial purchase price.
During 2018 and 2019, the portfolio investment had challenges and accomplishments. However, costs outpaced revenue growth and margin slipped. Fund management considered the holding period might take longer than originally planned in order to “fix” the margin pressure. However, the relevant GPC valuations were on a steady increase and keeping pace with the broader markets.

### 2018 Valuation
- Revenue of $54 million and EBITDA of $10.5 million
- Median GPC multiple of 9.0x
- **Concluded fair value of $63 million**
- EBITDA multiple of 6.0x was 33% discount from median
- Implied revenue multiple slightly lower at 1.17x

### 2019 Valuation
- Revenue of $59 million and EBITDA of $11.0 million
- Median GPC multiple of 9.5x
- **Concluded fair value of $60 million**
- EBITDA multiple of ~5.75x was 40% discount from median
- Implied revenue multiple dips to 1.07x
Illustrative example – Current quarter LTM data

• Now in the first quarter of 2020, the company has been hit with challenges that are consistent with the larger market/economy. The supply chain has been disrupted and demand for the company’s products has softened. The median multiple of the GPCs has dropped to 5.5x.

• Although the downturn was sharp, only the last few weeks of the quarter were impacted. Although LTM revenue is $60 million and LTM EBITDA is $10.8 million, those metrics are not representative of future expectations.

• Management does not believe a calibrated LTM EBITDA multiple of 3.25x to 3.5x appropriately captures the value of the investment ($35 to $38 million).
Illustrative example – Current quarter NFY data

- Applying NFY multiples is also problematic, as the NFY metrics will be depressed but may not be any more meaningful as management expects the supply chain will correct, even if there is uncertainty about how long the recovery may take.

- Based on cancelled orders and the best-available information as of the measurement date, management anticipates a decline in revenue over the next few months until the supply chain is restored and projects NFY revenue of $35 million and NFY EBITDA of $1.5 million.

- However, by end of the fiscal year, management expects the run-rate to have returned to levels slightly below the time of acquisition ($4 million revenue and $750K EBITDA per month).

- By end of 2021, management expects to have caught back up to the forecast that was in place at the end of 2019.

- Management does not believe a calibrated NFY EBITDA multiple of 2.75x to 3.25x appropriately captures the value of the investment ($4.0 to $4.9 million).
Illustrative example – “Backtesting”/Calibration

- The fund's management continued the discipline of a detailed annual budget and a high-level long-term outlook for the business.
  - But management never calculated fair value of the investment using a DCF model.

- Management could perform a variant of backtesting, using the forecasts prepared, and compute the implied cost of capital from the 2018 and 2019 valuations, and compare those to the IRR at initial investment, which was 24%.

- Management can also benchmark discount rates against broader private market studies/published data such as Cambridge Associates, Pepperdine, or if an early stage VC investment, the rates of return by stage of development as noted in paragraph B.04.02 of the PE-VC Guide.

- The above steps should be documented consistent with the guidance in Chapter 10 (Calibration) of the PE-VC Guide.
Illustrative example – Applying the DCF

• Because the DCF allows for the flexibility to account for the sudden decline, and expected recovery, in forecast cash flows, it is more likely to develop a credible valuation.

• However, the accounting guidance for unobservable inputs and audit procedures around testing prospective financial information prevent certain obstacles. Calibration is essential.

• In our example, the adjustments to cash flows for the remainder of fiscal years 2020 and 2021 were incorporated. Management calibrated current market data to the initial transaction IRR as well as the implied discount rates in subsequent transactions (which were approximately 25% each year), and determined a discount rate of 30% captured the current risk characteristics.

• Using that 30% discount rate and the resulting cash flows described on the previous slide, management calculated a value of approximately $53 million for the investment.
### Illustrative example – DCF models

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<tr>
<th>Initial Acquisition IRR</th>
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Illustrative example – Alternative scenarios

Alternative Scenario #1
- Cash infusion from the fund of $8 million is required to help bridge the short-term challenges.
- Operating metrics remain the same.
- Fair Value of $45 million.

Alternative Scenario #2
- Investment horizon shortened, exit now planned for mid-2022 at 5x LTM EBITDA
- Fair Value of $42 million.

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Jay Loudermilk
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QUESTIONS AND ANSWERS