

# UBS Fundamental Analytics

## *Recession Watch*

## *How did Sector financial resilience evolve?*

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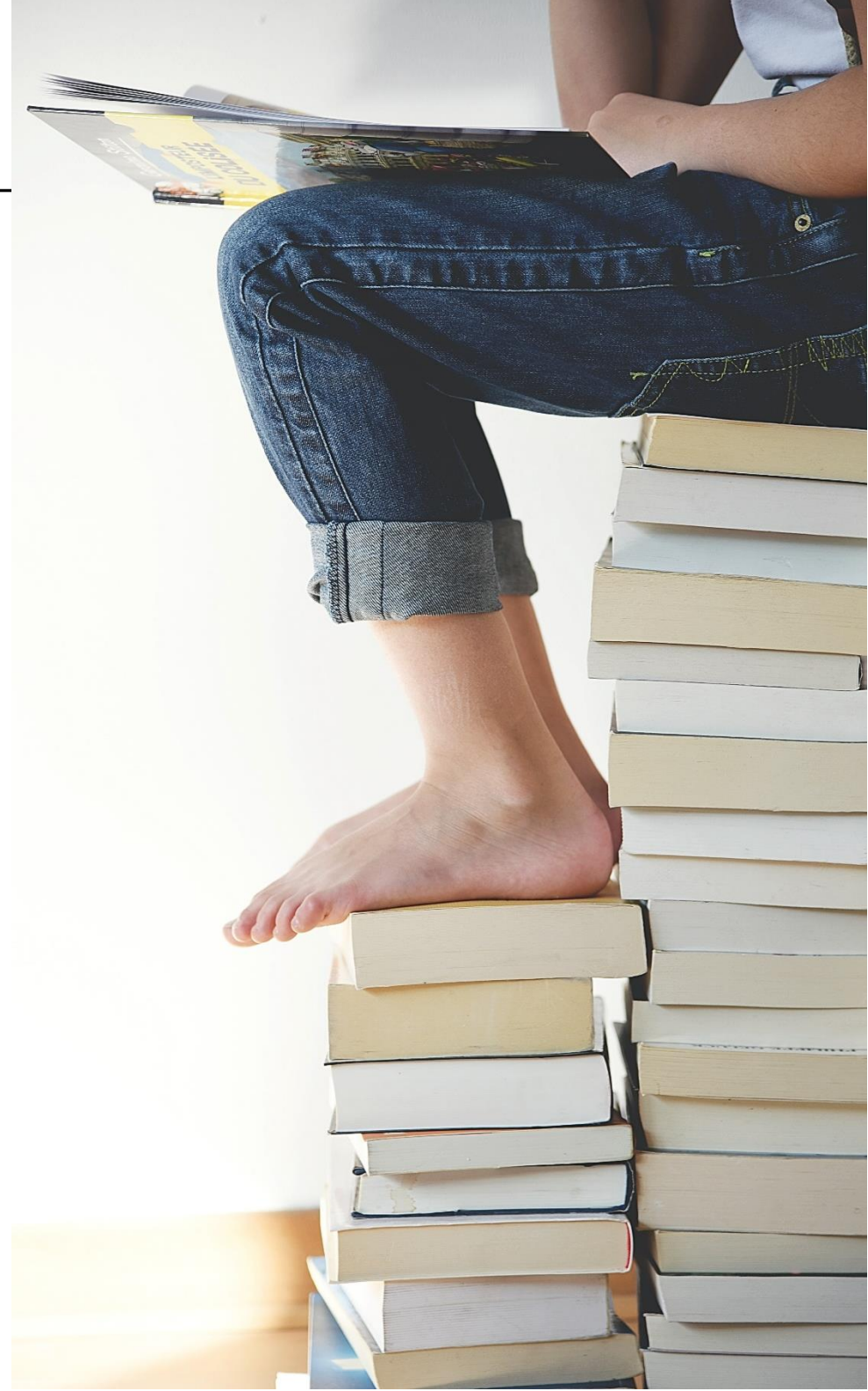
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# Recent work you may have missed

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- Outlier identification using machine learning
- How to value disruptive companies
- PVGO analysis
- Country risk premium
- Peer group benchmarking using clustering
- Enhanced iROIC
- Pricing power betas / Inflation
- Behind the numbers
- Amber flags



# 1-2-1 quarterly calls with clients


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- Discuss our recent works
- Flexible agenda
- Clients can set their own agenda
- 30 minutes every 3 months
- More than 40 clients have signed up
- [yiding.lu@ubs.com](mailto:yiding.lu@ubs.com)



# Recession – the key question on investors' minds

- Who could be more exposed to a downturn?
- Which sectors could be more exposed?
- What metrics should we be focusing on?
- How can we analyse at scale?



Global Research and Evidence Lab  
7 July 2022

## Fundamental Analytics

### Recession in 2022? Who could be fundamentally more impacted by a recessionary downturn?

Equities

Global

Fundamental Analytics


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**Key questions from investors and how we can answer them**

The key questions we are hearing from investors is, who could be more exposed to a downturn? Are these exposures focused in particular sectors? Which companies have balance sheet and cash flow exposures and weaknesses that could be amplified by a recessionary downturn? How can we derive deeper insights? What should we be focusing on? Is it possible to do this type of analysis at scale? This note outlines the structure of our methodology and framework to answer these questions.

Could your companies be fundamentally more susceptible to a recessionary downturn?



**We provide a quantitative screen for financial resilience**

We looked at nine different financial resilience metrics based on latest reported data for more than 2,300 companies under UBS coverage. These metrics look at the cash flow generation, operating leverage and balance sheet strength of the companies. We compare the companies within the same GICS sector and look at the top 10 and bottom 10 companies based on the financial resilience score. We also provide an interactive model ([download](#)) for users to set their own weights to the different metrics and calculate overall scores.

**A Quant screen cannot replace unpacking deep-dive fundamental analysis**

Our quantitative screen identifies a list of companies that might require additional analysis. We also provide a fundamental framework to analyse financial resilience, and it is not just looking at the cash and debt figures on the balance sheet. For cash flows, we have to consider not only the accessibility of cash but also its flexibility. For obligations, it is not just the net debt figure on balance sheet but all other forms of obligations and commitments.

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# Financial resilience metrics for analysis

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- 5 years historical data and 3 years of forecasts from UBS Estimate & Visible Alpha consensus
- Three different lenses of measuring financial resilience
  - Cash flow generation
  - Operating leverage
  - Financial leverage
- GICS Sector median value for each metric

# Analysing cash flow generation

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- **Cash conversion cycle:** How quickly can you convert cash?
  - Days sales outstanding:  $DSO = \frac{\text{Average receivables}}{\text{Revenue}} \times 365$
  - Days inventory outstanding:  $DIO = \frac{\text{Average inventory}}{\text{COGS}} \times 365$
  - Days payables outstanding:  $DPO = \frac{\text{Average payables}}{\text{COGSS}} \times 365$
  - Cash conversion cycle =  $DSO + DIO - DPO$
- **Free cash flow conversion rate:** How well can you convert profit into cash?
  - $FCF \text{ Conversion Rate} = \frac{EBITDA - FCF}{\text{Average Total Assets}}$
  - $FCF = EBITDA - D\&A - Taxes - \Delta NWC$
- **10-year operating cash flow volatility:** Can you keep a stable level of cash flow through a business cycle?

# Analysing operating leverage

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- **Degree of operating leverage:** What is fixed cost vs variable cost relationship?
  - $DOL = \frac{\% \text{ change in EBIT}}{\% \text{ change in revenue}}$
- **Cash runway rate:** How long can the business pay off fixed cost based on available cash & cash equivalent
  - $\text{Cash runway rate} = \frac{\text{Cash \& cash equivalent}}{\text{Fixed cost}}$
  - Proxy fixed cost using gross profit - EBITDA
- **10-year EBIT margin volatility:** Can you keep a stable level of cash flow through a business cycle?

# Analysing financial leverage

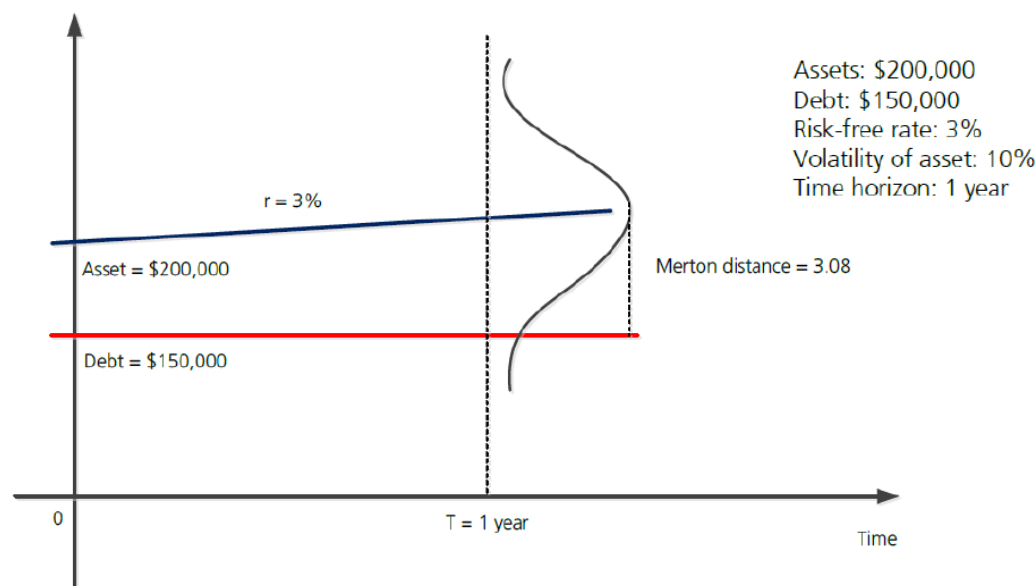
- **Interest coverage ratio:** How well can the company's earnings cover its interest?

–  $\text{Interest coverage ratio} = \frac{EBIT}{\text{Interest expense}}$

- **Gross debt/EBITDA ratio:** How well can the company's earnings cover its debt?

–  $\text{Gross debt/EBITDA} = \frac{\text{Total debt}}{EBITDA}$

- **Merton distance:** How likely will assets be below liabilities when they become due?



$$\text{Merton distance} = \frac{\ln\left(\frac{200,000}{150,000}\right) + (3\% - 0.5 * 0.1^2) * 1}{0.1\sqrt{1}} = 3.08$$

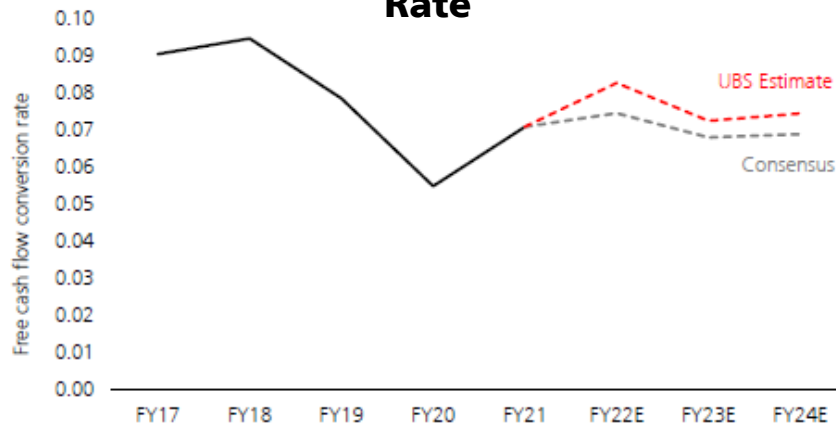
Source: UBS



# Cash flow generation

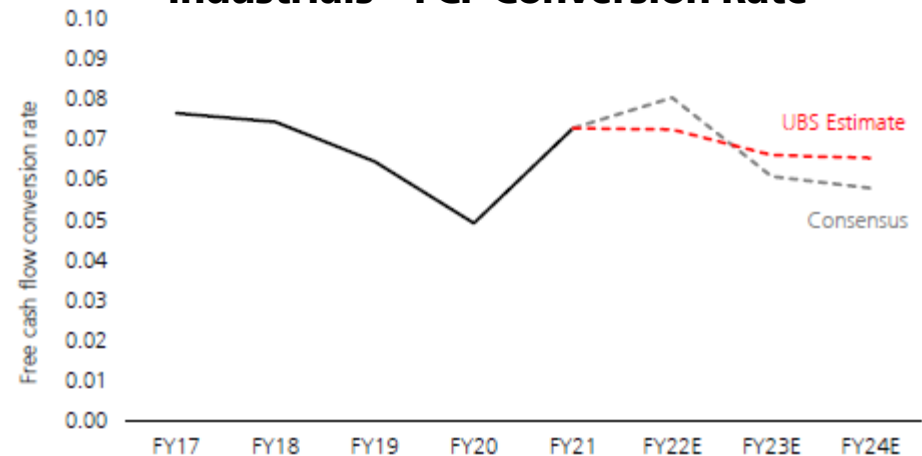
- Stronger free cash flow conversion during the pandemic

## Consumer Discretionary – FCF Conversion Rate



Source: UBS, Visible Alpha

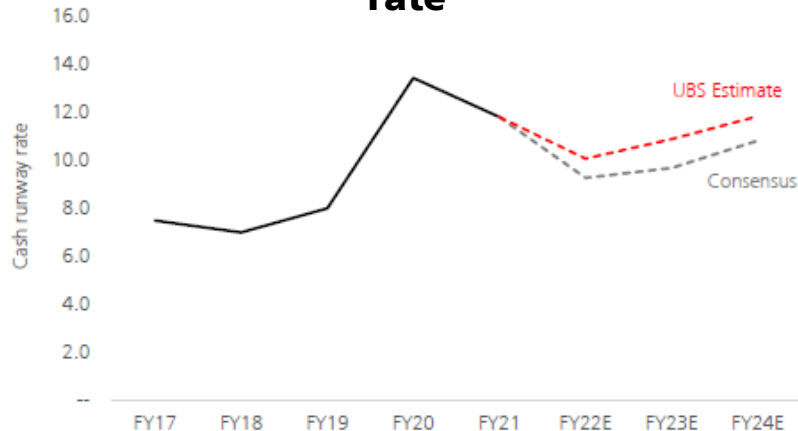
## Industrials – FCF Conversion Rate



Source: UBS, Visible Alpha

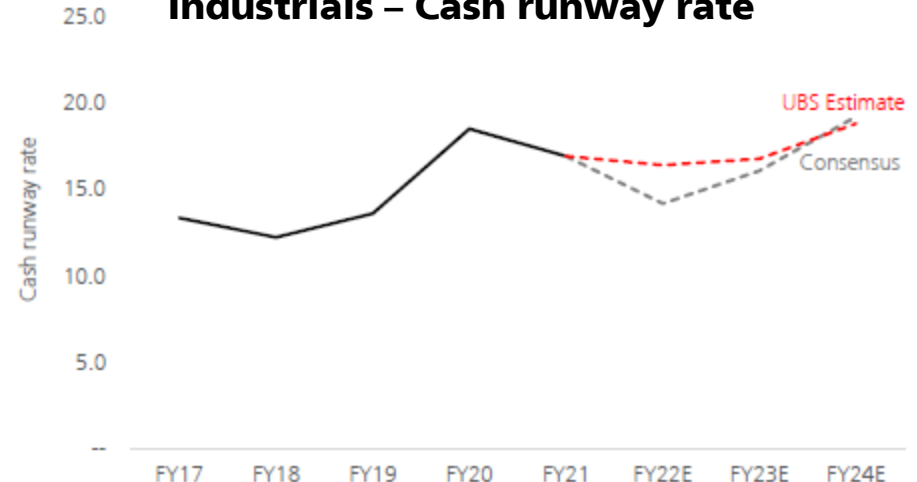
- Higher cash runway rate as a result

## Consumer Discretionary – Cash runway rate



Source: UBS, Visible Alpha

## Industrials – Cash runway rate

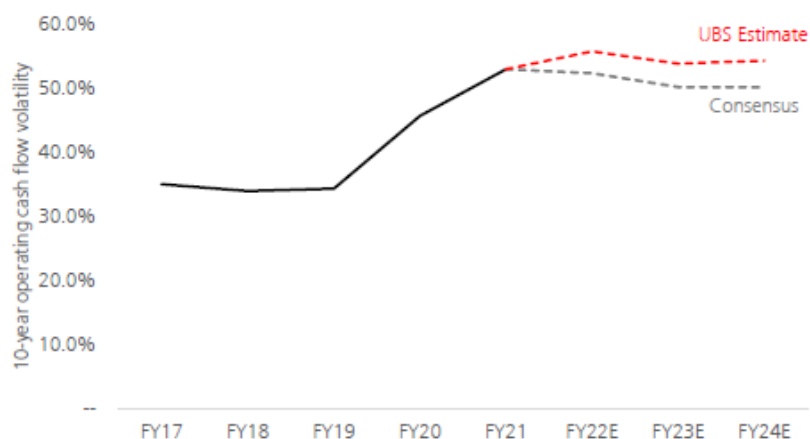


Source: UBS, Visible Alpha

# Volatility

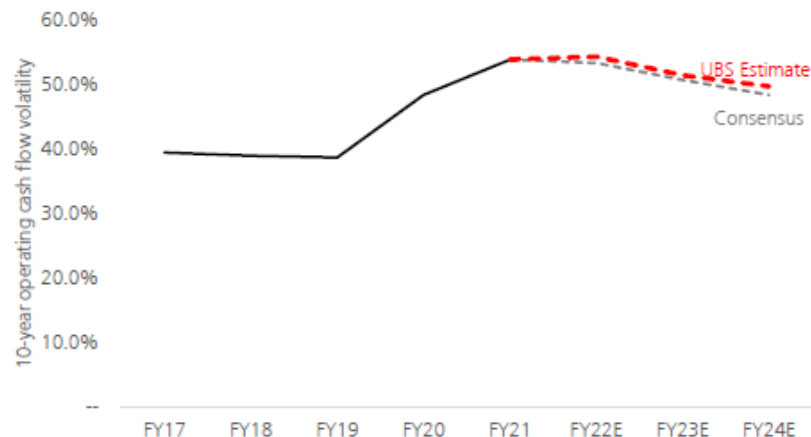
- Higher operating cash flow volatility and EBIT margin volatility since pandemic

## Health Care – OCF Volatility



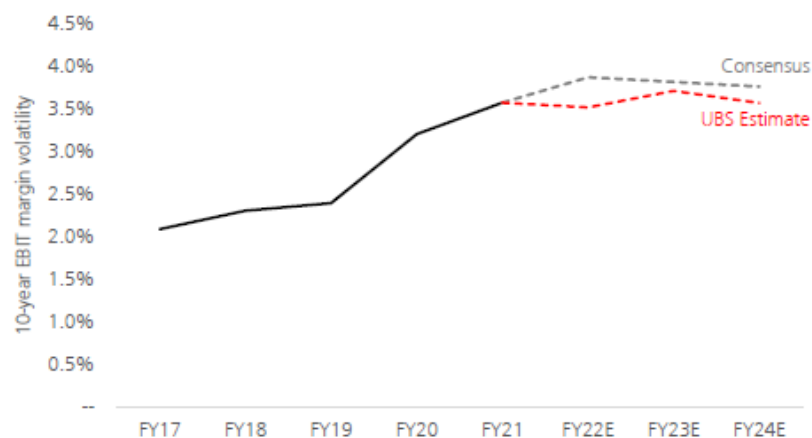
Source: UBS, Visible Alpha

## Consumer Discretionary – OCF Volatility



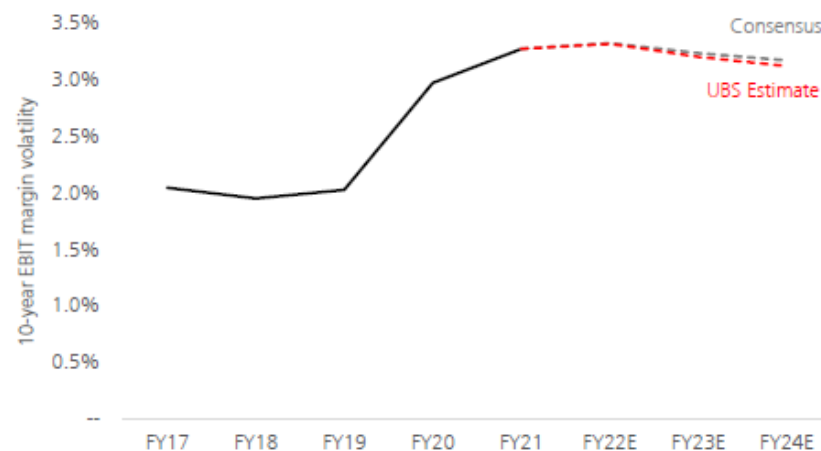
Source: UBS, Visible Alpha

## Health Care – EBIT Margin Volatility



Source: UBS, Visible Alpha

## Consumer Discretionary – EBIT Margin Volatility

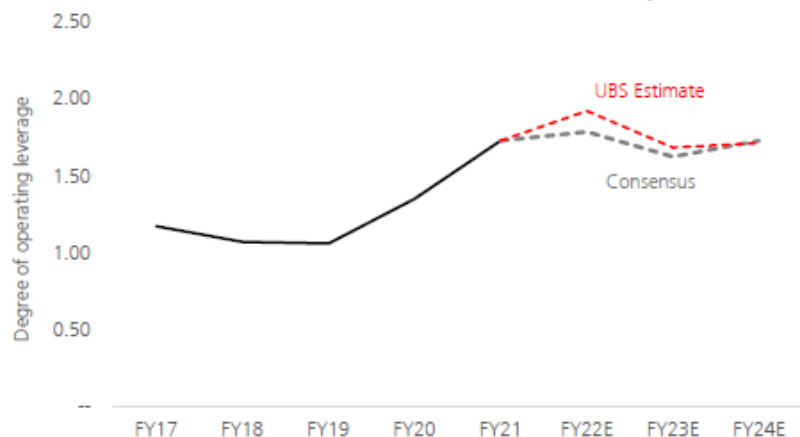


Source: UBS, Visible Alpha

# Degree of operating leverage

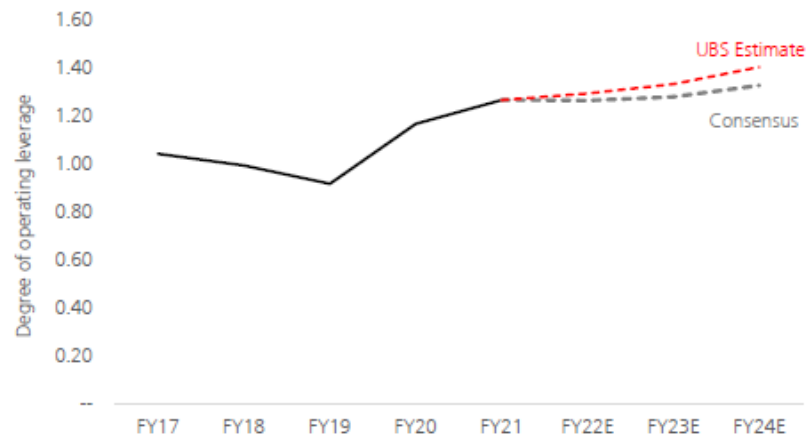
- Increased DOL since the pandemic

## Consumer Discretionary



Source: UBS, Visible Alpha

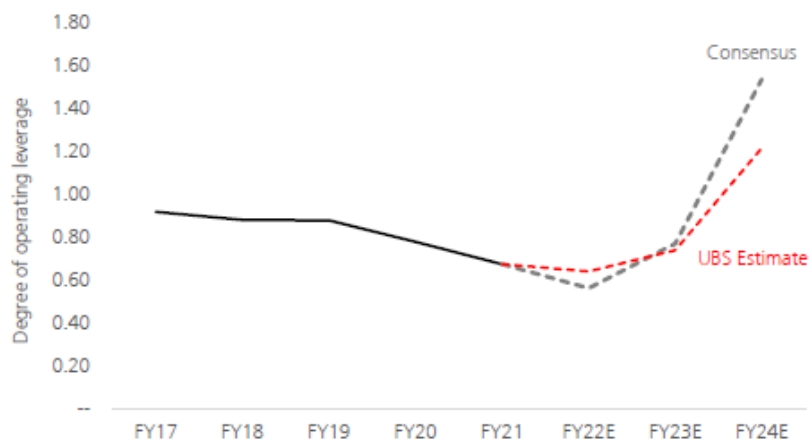
## Health Care



Source: UBS, Visible Alpha

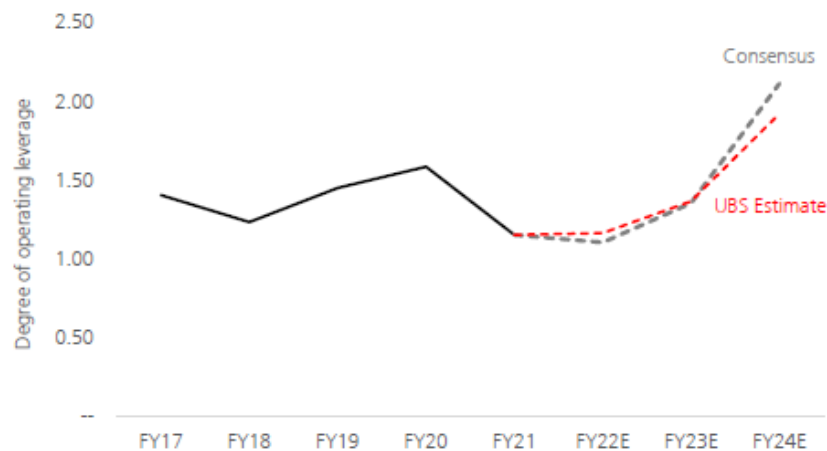
- Forecasted increase in DOL over next three years

## Utilities



Source: UBS, Visible Alpha

## Telecom

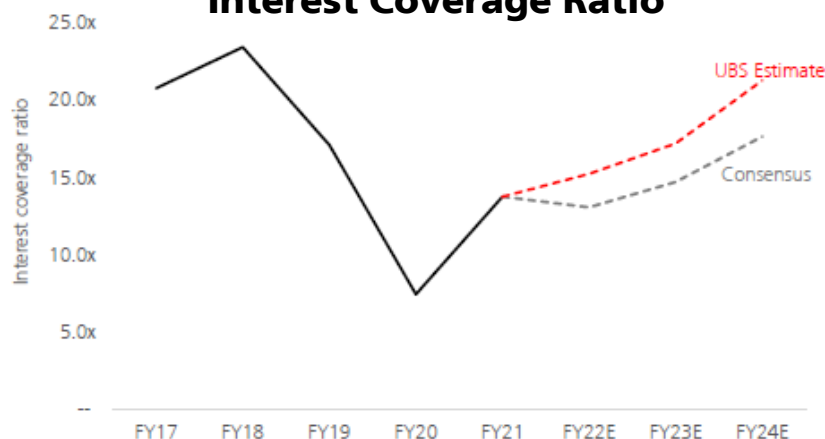


Source: UBS, Visible Alpha

# Financial leverage deteriorated during pandemic

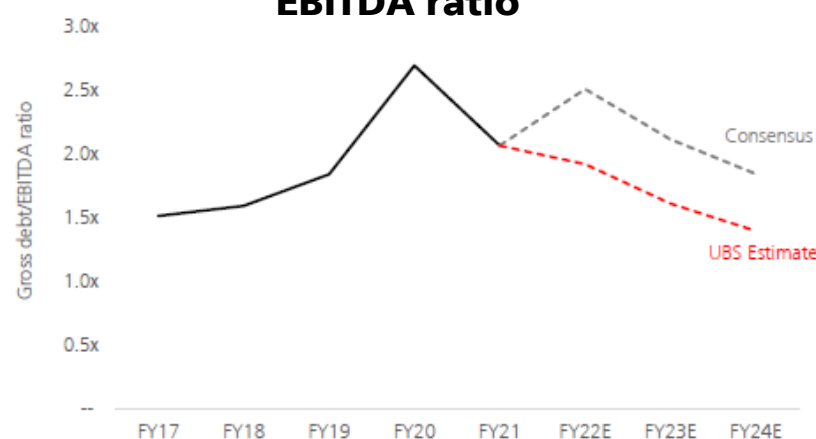
- Financial leverage metrics worsened during COVID-19 but we see recovery in FY21

**Consumer Discretionary – Interest Coverage Ratio**



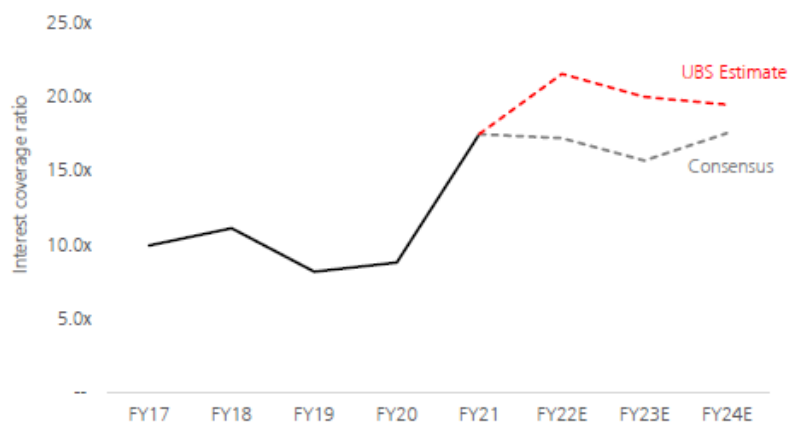
Source: UBS, Visible Alpha

**Consumer Discretionary – Gross debt / EBITDA ratio**



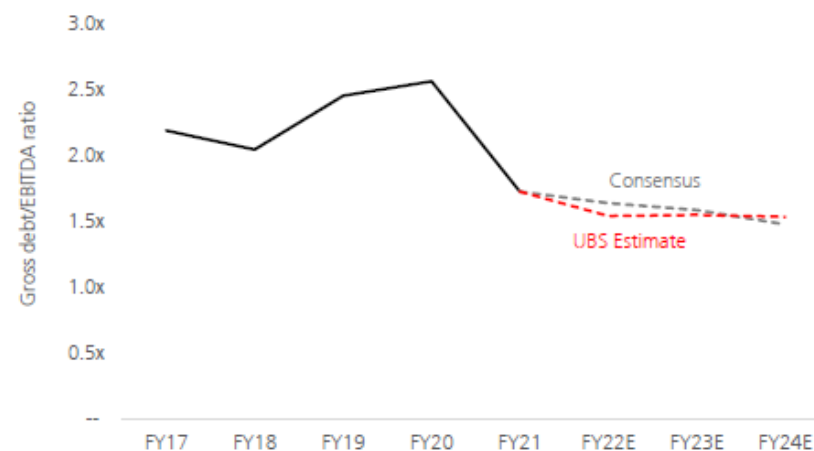
Source: UBS, Visible Alpha

**Materials – Interest Coverage Ratio**



Source: UBS, Visible Alpha

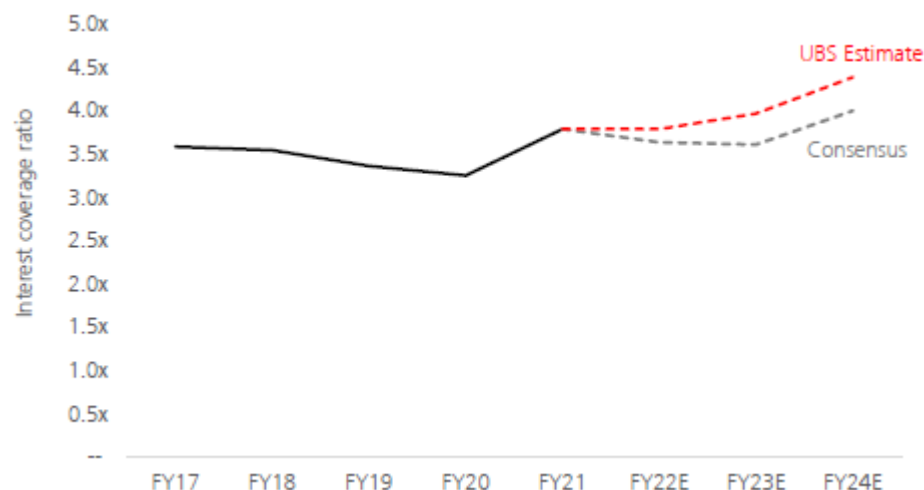
**Materials – Gross debt / EBITDA ratio**



Source: UBS, Visible Alpha

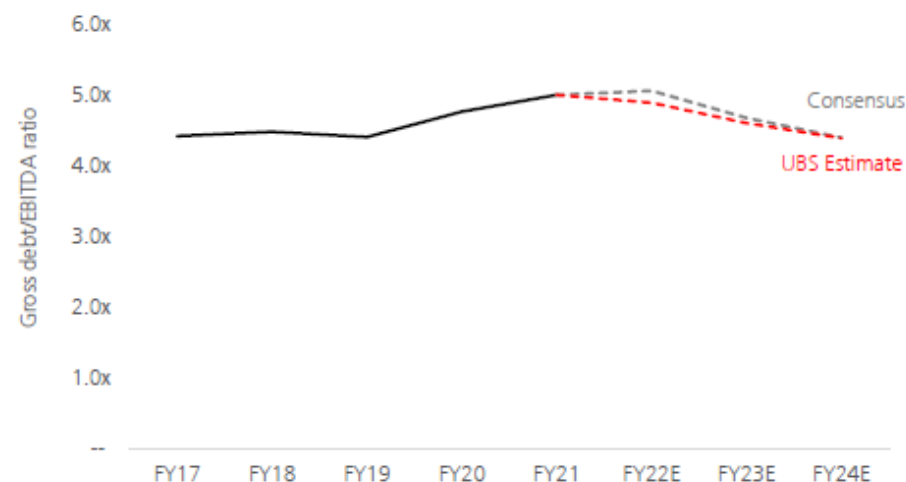
# More cautious of Sectors with high leverage

## Utilities – Interest Coverage Ratio



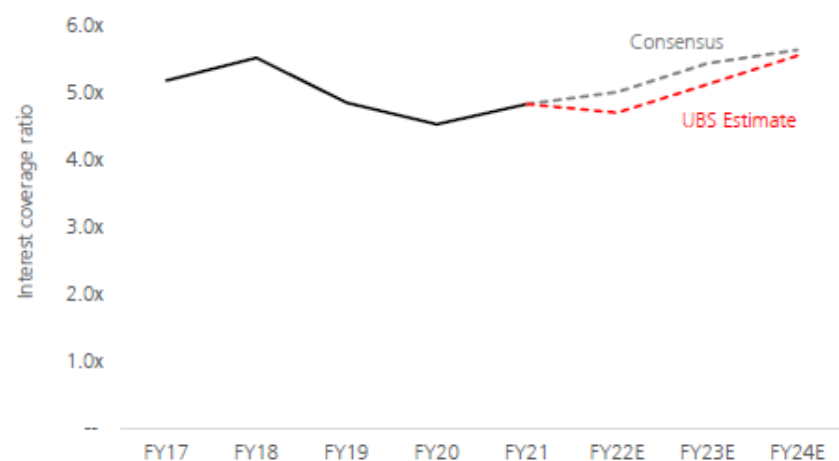
Source: UBS, Visible Alpha

## Utilities – Gross debt / EBITDA ratio



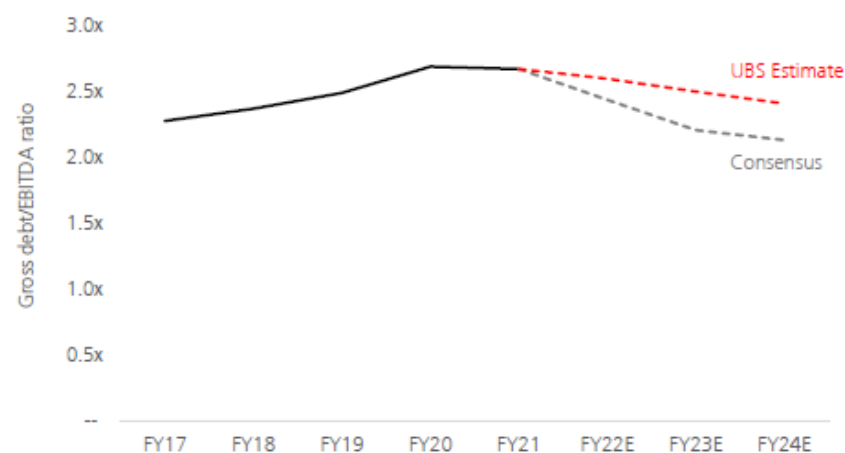
Source: UBS, Visible Alpha

## Telecom – Interest Coverage Ratio



Source: UBS, Visible Alpha

## Telecom – Gross debt / EBITDA ratio



Source: UBS, Visible Alpha

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<b>Buy</b>	FSR is > 6% above the MRA.	57%	32%
<b>Neutral</b>	FSR is between -6% and 6% of the MRA.	35%	26%
<b>Sell</b>	FSR is > 6% below the MRA.	9%	21%
Short-Term Rating	Definition	Coverage <sup>3</sup>	IB Services <sup>4</sup>
<b>Buy</b>	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
<b>Sell</b>	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 30 June 2022.

1: Percentage of companies under coverage globally within the 12-month rating category.

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