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# COVID-19 and USD Corporate Bond Liquidity

## Insights from Daily LCS<sup>®</sup>

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# Motivation for the Study

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- Liquidity is invariably affected by stressful market conditions
- Investors need to monitor liquidity conditions as they evolve, on a daily basis
- The current pandemic-caused economic and financial crisis is unprecedented in many ways:
  - An exogenous underlying cause
  - Near-complete shutdown of several industries
  - Extreme volatility exceeding that during any prior market crisis
- Transaction cost increases not seen since 2008, in both magnitude and speed

# Key Metric: Barclays' Proprietary *Liquidity Cost Score (LCS)*

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- LCS measures the cost of an *immediate, institutional-size, round-trip* transaction
- It is expressed as a percent of the bond's price
- LCS is computed in two different but conceptually identical ways:

$\text{OASD} \times (\text{Bid spread} - \text{Ask spread})$  *if quoted on spread*

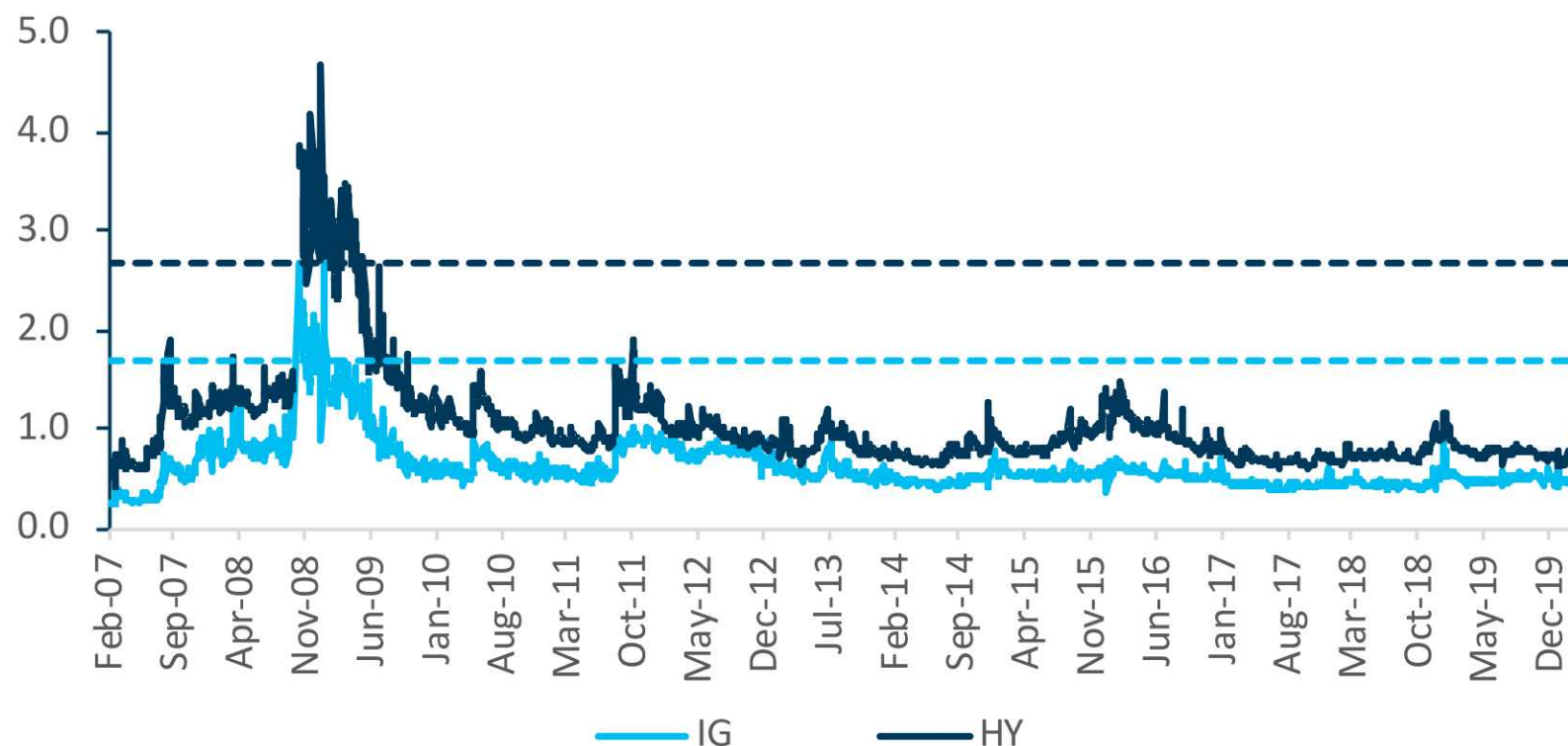
*or*

$(\text{Ask price} - \text{Bid price})/\text{Bid price}$  *if quoted on price*

- Example
  - For a bond with an OASD of 5, a trader quotes a bid spread of 140bp and an ask spread of 125bp
  - Given the bid-ask spread of 15bp, the bond's  $\text{LCS} = 5 \times 0.15 = 0.750\%$
  - In other words, an immediate, round-trip trade would cost 75bp of the bond's value
- LCS relies on simultaneous bid-ask quotes issued by Barclays traders
  - The quotes are mapped to bond-level indicative and analytical attributes
  - Econometric models are used to estimate LCS for bonds without trader quotes

# Liquidity Deterioration Comparable to 2008

Daily LCS, January 1 2007 - March 20 2020, %



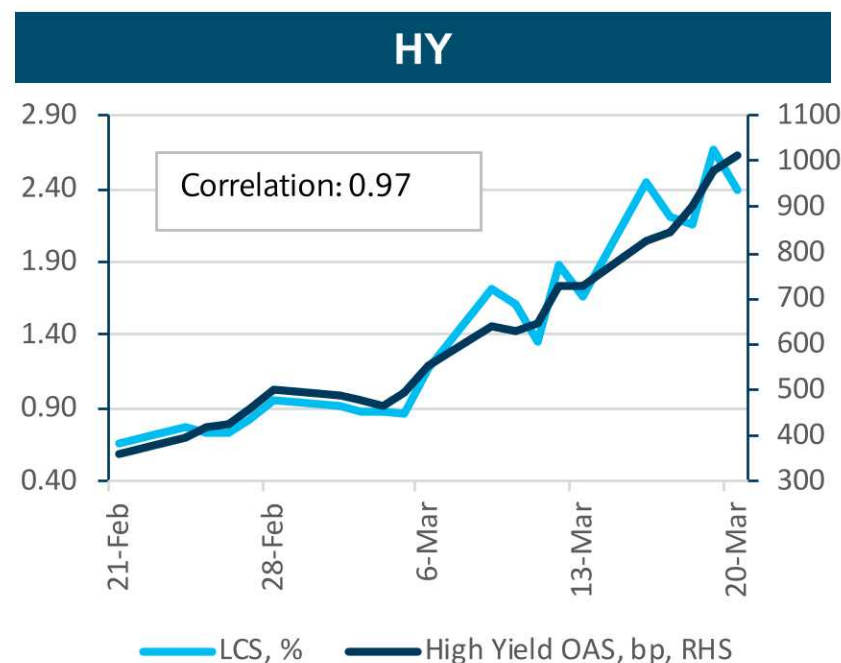
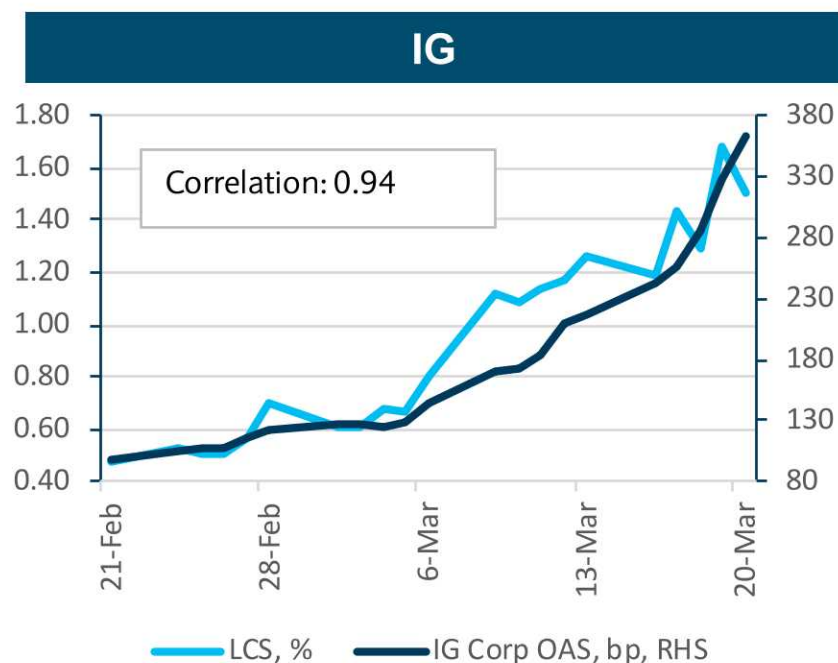
- Current LCS levels were exceeded only in 2008-2009.
- Liquidity is not yet as bad as then, but getting uncomfortably close

Source: Barclays Research



# Liquidity Decline in Market Context: LCS and Credit Spreads

LCS vs. OAS, IG Corporates and High Yield, February 21 – March 20

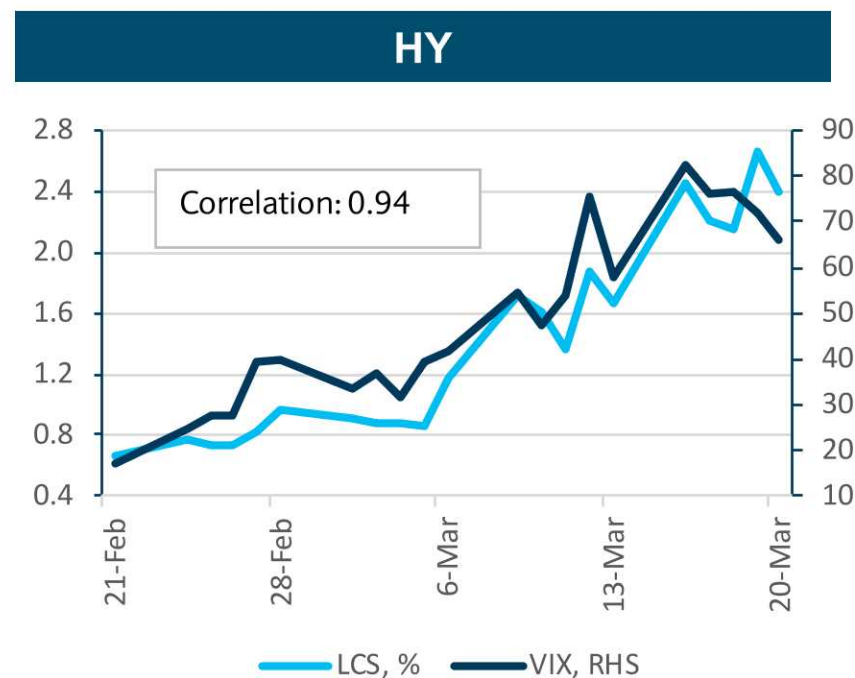
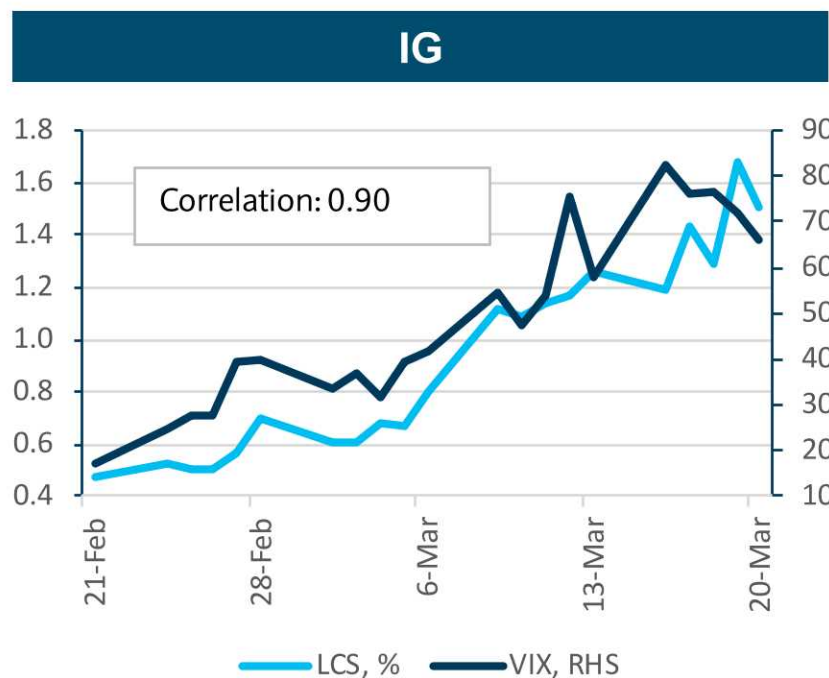


- Credit spreads are one of the most important drivers of bond liquidity
- As spreads have widened, LCS have increased accordingly in both IG and HY

Source: Barclays Research

# Liquidity Decline in Market Context: LCS and Volatility

LCS vs. VIX, IG Corporates and High Yield, February 21 – March 20

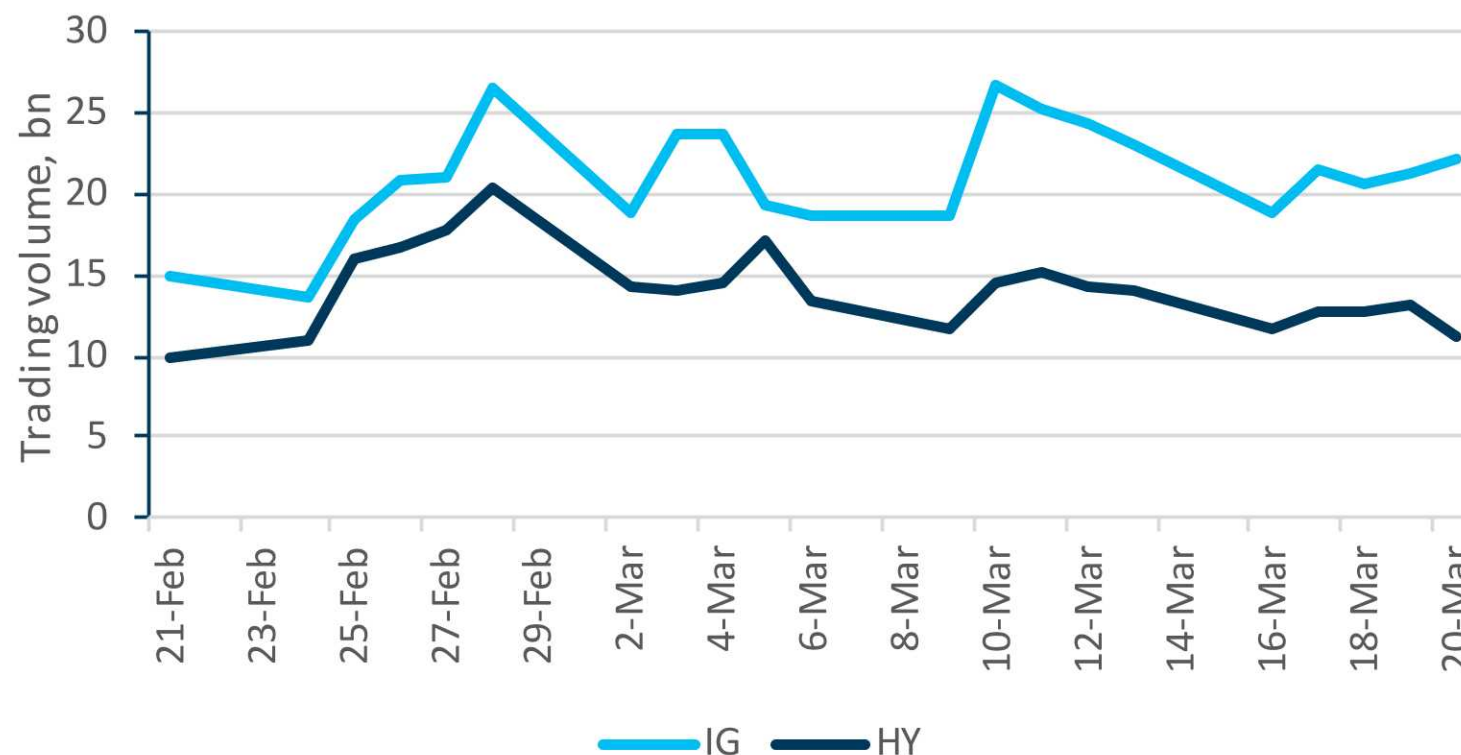


- Bid-offer spreads are closely linked with market volatility
- Although the VIX index measures volatility in equity markets, increases in VIX are often accompanied by rising bond transaction costs.
- The relationship holds despite the unprecedented, almost five-fold, increase in VIX.

Source: Barclays Research

# But Market Activity has Not Slowed Down

Daily Trading Volume in the USD Credit Markets, February 21 – March 20

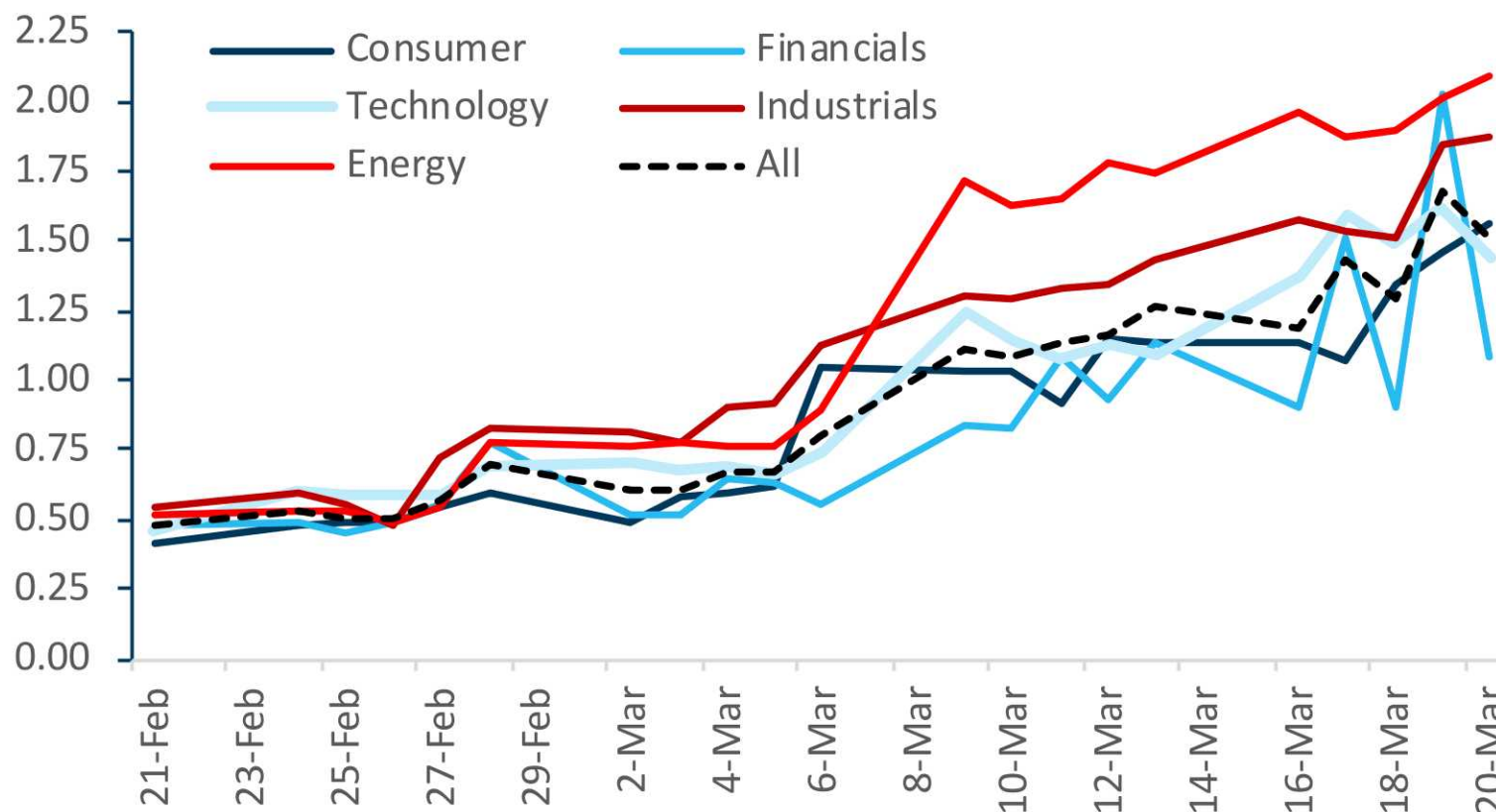


- Reduction in liquidity is often reflected in a reduction in trading volume
- This has not happened in this case – despite the rise in LCS, volume has been strong

Source: Barclays Research

# Liquidity Effects Vary by Sector

Daily LCS by Sector, IG Corporates, February 21 – March 20, %



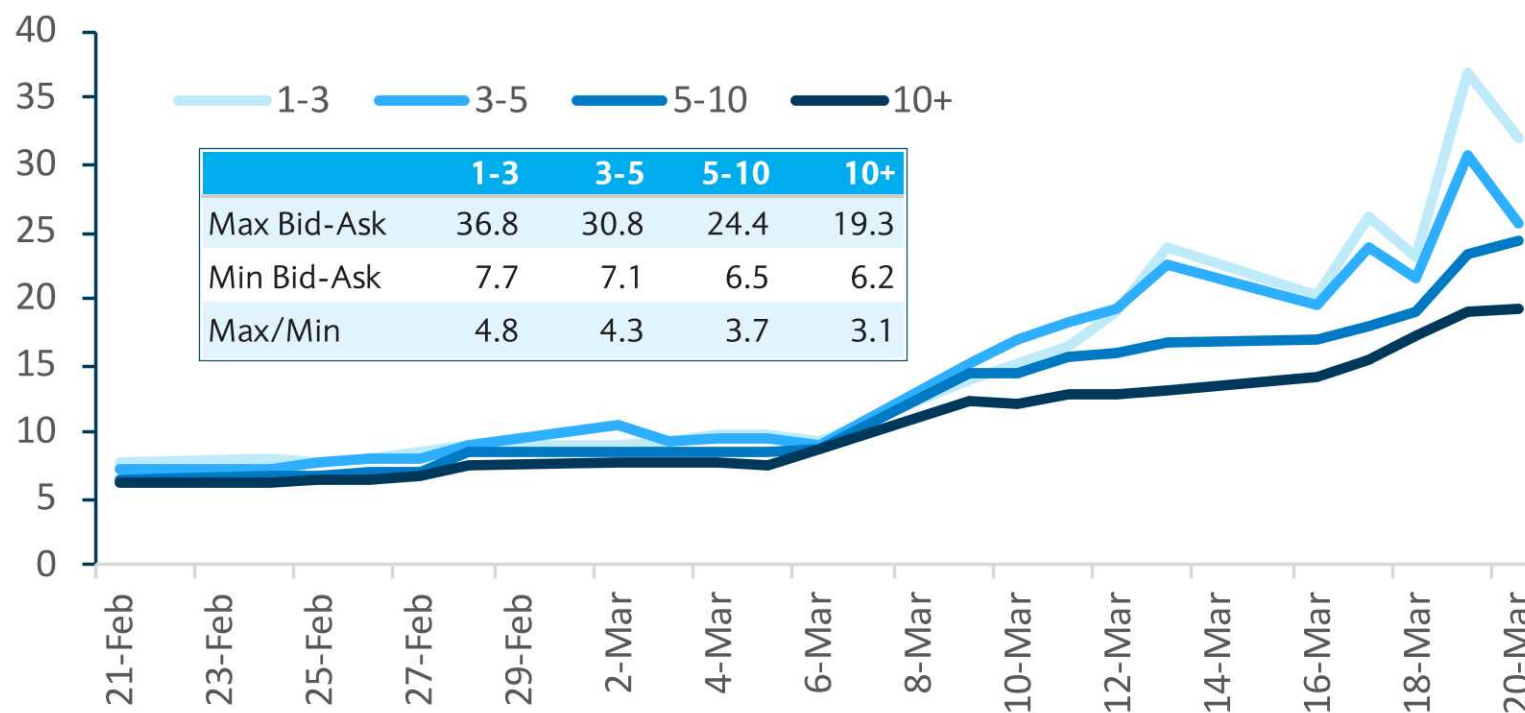
- LCS increased across all sectors, but the most dramatic rise was in energy bonds.
- This is unlike 2008, when financials were hardest hit
- The virus-induced slowdown in fuel consumption, together with the oil price war, has placed US energy firms under severe pressure

Source: Barclays Research



# Extra Pressure at the Short End

Daily Bid-Offer Spread by Maturity Bucket, IG Corporates, bp, February 21 – March 20

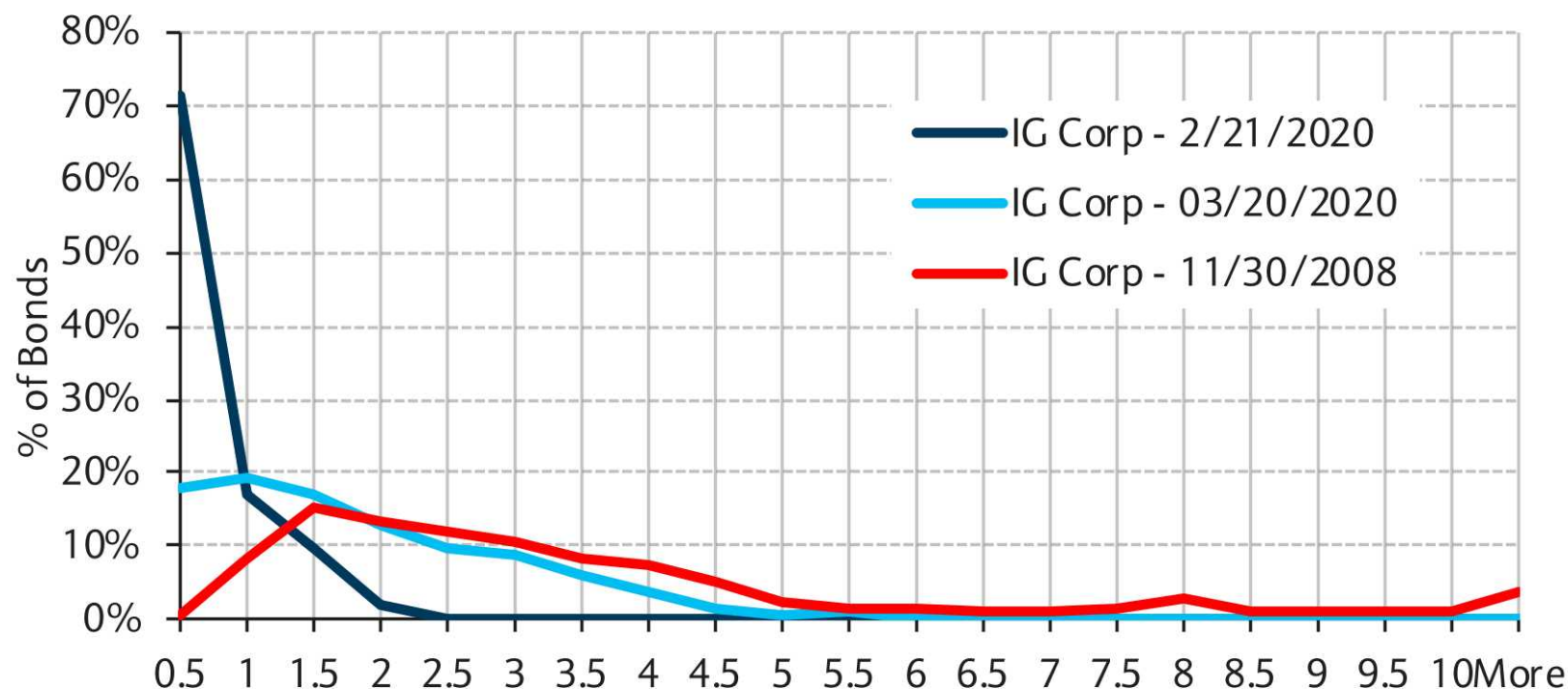


- The increase in LCS has been greatest for the shortest-maturity bonds
- Short-dated debt has come under significant selling pressure

Source: Barclays Research

# Cross-Sectional Dispersion Widens as LCS Increase

## Cross-Sectional Distribution of LCS (%) in Different Market Regimes

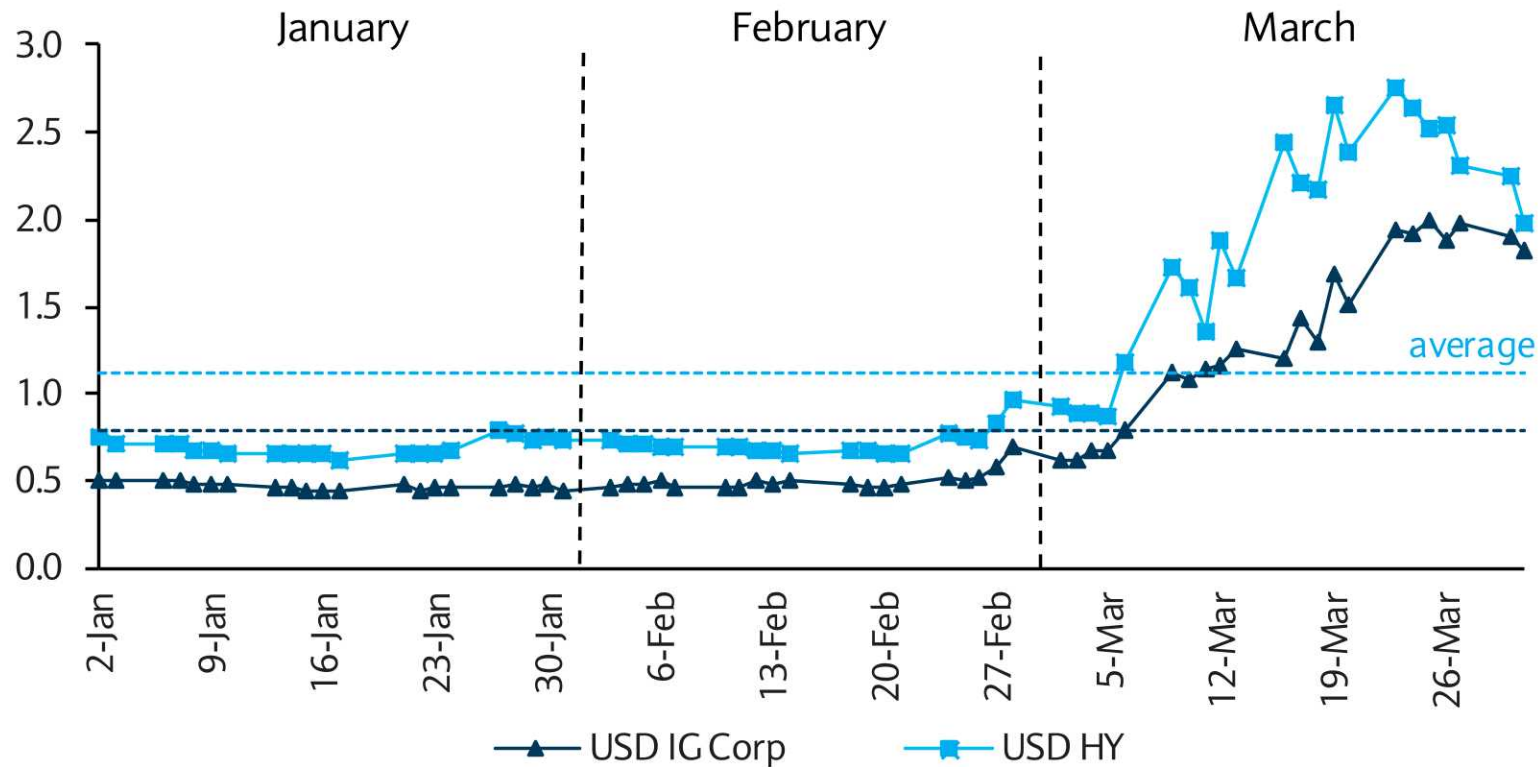


- Increased levels of LCS come with widening of LCS dispersion across bonds - “fat tails”
- Dispersion of LCS is much wider than normal, but still not quite as wide as in 2008

Source: Barclays Research

# Where do Things Stand Now?

YTD Daily LCS (%) in USD IG and HY Corporate Markets



- Markets started to show cautious optimism as the virus seems to be peaking

Source: Barclays Research

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