

# WELCOME

On Track Insights – For index investors October edition

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# Defensive Equities and Commodities

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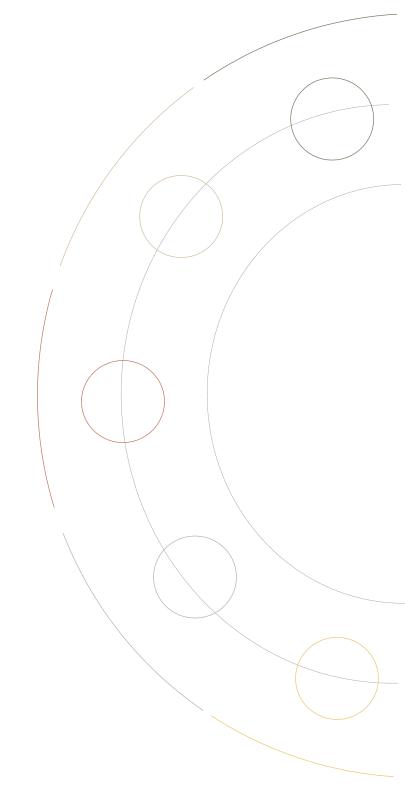
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# Global equity volatility landscape

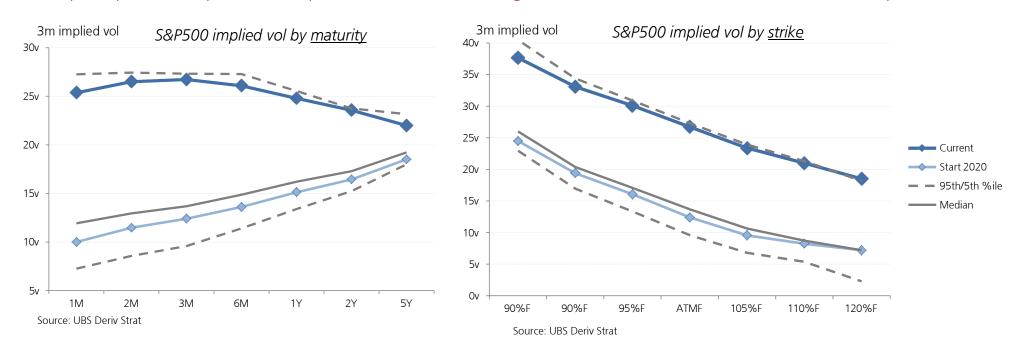
Current dislocations, and persistence of equity volatility risk premium



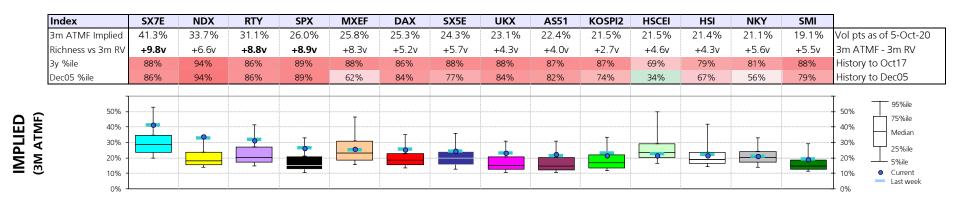


# Equity index implied vols remain extremely elevated

S&P option prices are up near the top-end of the historical range, out across the term-structure, and for both puts and calls



### Similar picture across major global equity indices (implieds elevated, and very rich vs trailing realised volatility)

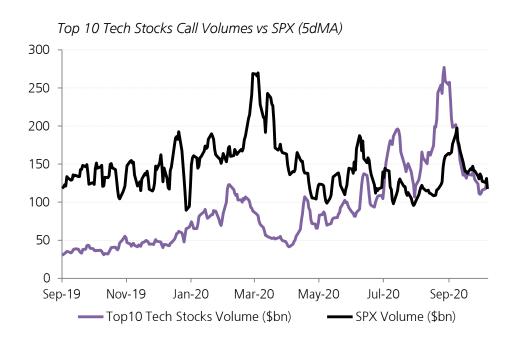


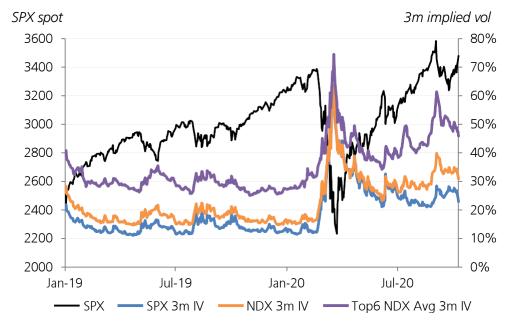


# This is driven both by supply-demand balance, and by market concerns

Option notional traded in the top 10 US tech names has been huge – outstripping that of the broader S&P500

The associated re-hedging demand, as well as ongoing macro-economic uncertainty, has left vols unusually high for a market also trading up near all-time highs:

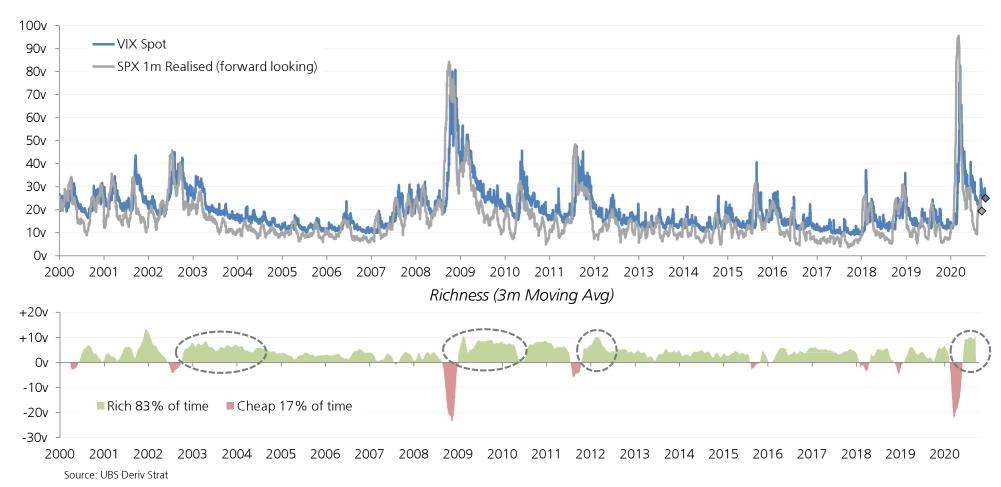






# Equity vols generally trade rich

Since 2000, the VIX has averaged ~20, while 1m S&P realised has averaged ~16.5.
This "richness" is generally most pronounced coming off vol spikes, with the larger spikes having the longest "memory"

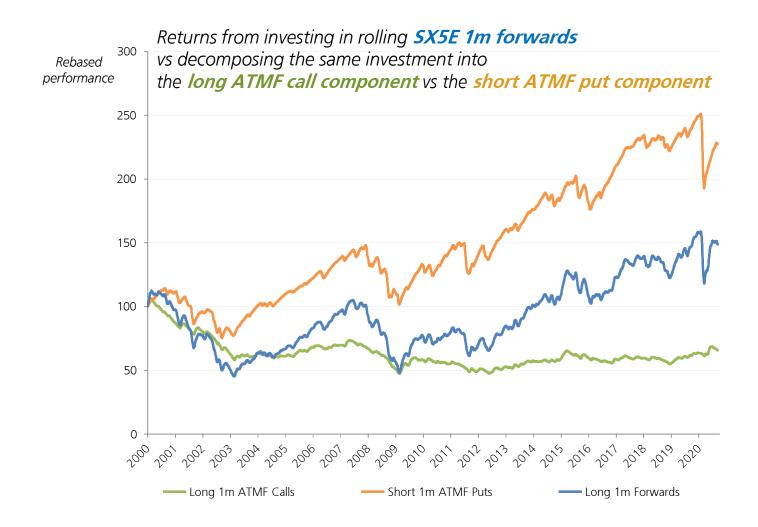


That's not to say that low vol periods are necessarily a bad time to sell options though; low implied vol periods tend to be very "rich" vs realised, with low vol most likely to be followed by... ...more low vol.



# Splitting equity forward returns into short-put vs long-call is revealing

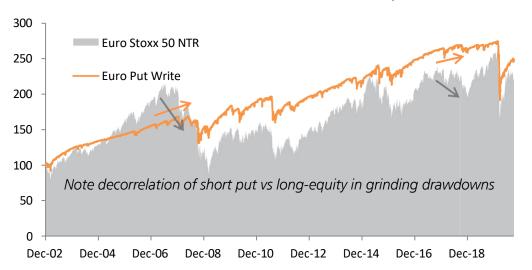
In Europe, all the positive SX5E returns are attributable to the short put leg and to divs (long calls consistently lost money)





# Spot near highs, with elevated vols, encourages a defensive allocation

Put selling (as an alternative to outright long equity) arguably makes most sense when spot is near highs, and when forward-looking returns look more challenging. In Europe, put-writing has more than kept pace with long equity, with much lower vol, smaller drawdowns, and quicker time-to-recovery after corrections:



|                                       | Euro Stoxx 50 NTR | <b>Euro Put Write</b> |
|---------------------------------------|-------------------|-----------------------|
| Annualized return                     | 4.58%             | 5.26%                 |
| Annualized volatility                 | 22.02%            | 11.48%                |
| Sharpe ratio                          | 0.21              | 0.46                  |
| Maximum drawdown                      | -58.58%           | -30.24%               |
| Global Financial Crisis               | -57.63%           | -14.82%               |
| European sovereign debt crisis        | -11.71%           | -3.44%                |
| US credit rating downgrade            | -27.30%           | -11.53%               |
| Drop in oil prices, China instability | -18.96%           | -10.38%               |
| February 2018 flash crash             | -7.29%            | -3.88%                |
| Q4 2018 drawdown                      | -11.52%           | -2.84%                |
| COVID-19 virus crisis                 | -35.66%           | -25.80%               |

|   |      | Euro Stoxx | Euro Put |
|---|------|------------|----------|
|   |      | 50 NTR     | Write    |
|   | 2003 | 17.97%     | 23.51%   |
| ä   | 2005 | 24.29%     | 6.96%    |
| 출   | 2006 | 18.05%     | 8.38%    |
| ¥a  | 2009 | 25.51%     | 19.13%   |
| Bull Market   | 2012 | 17.65%     | 8.65%    |
| B   | 2013 | 21.61%     | 7.71%    |
|   | 2019 | 28.96%     | 4.22%    |
|   |      |            |          |
| et  | 2004 | 9.81%      | 8.53%    |
| 素   | 2007 | 9.72%      | 8.34%    |
| 2004<br>Ways Market<br>2010<br>2016<br>2016<br>2017 |      | -2.36%     | 3.42%    |
|   |      | 3.93%      | 3.49%    |
| ۸a  | 2015 | 7.44%      | 8.59%    |
| <del>d</del>  | 2016 | 3.07%      | 4.65%    |
| Si  | 2017 | 9.15%      | 6.02%    |
|   |      |            |          |
| t   | 2008 | -42.37%    | -9.11%   |
| Bear<br>Market                                      | 2011 | -14.54%    | -4.35%   |
| Bear<br>Aarke                                       | 2018 | -12.46%    | -0.78%   |
|   | 2020 | -13.18%    | -8.65%   |

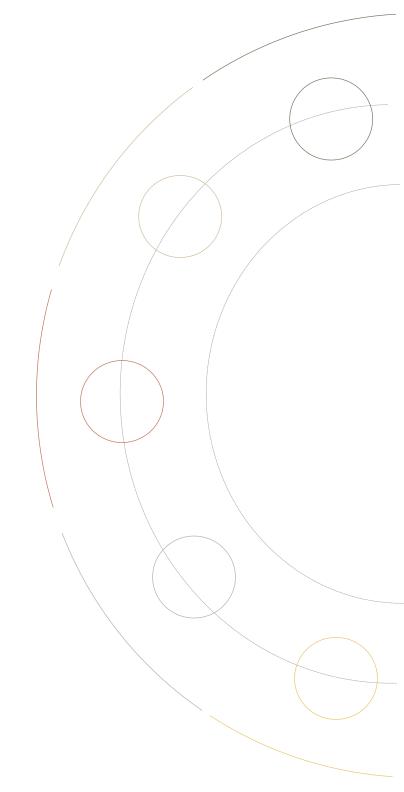
**Bull Market**: SX5T >10%; **Bear market**: SX5T < -10%; **Sideways Market**: Otherwise

Source: UBS, Bloomberg. Data as of 30 September 2020. This material contains data derived as a result of back-testing of data and is provided by UBS in good faith using our standard methodology for information of this kind. Time series up to 1st Feb 2007 is provided using OTC methodology on listed monthly options as proxy when listed weeklies options were not available. **Past performance is not indicative of future performance**, please refer to important back-testing disclaimer at the end of the presentation.



# UBS Defensive Equity ETFs

For investors in search for yield and defensive assets





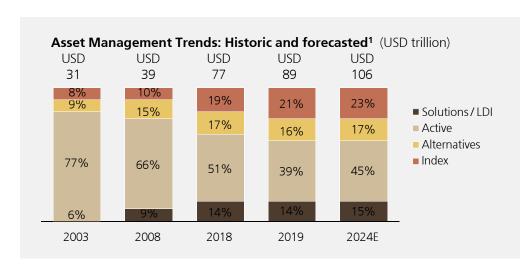
# Defensive Equity ETFs – Why now?

Equity valuations are at the top of range and returns are likely to be volatile

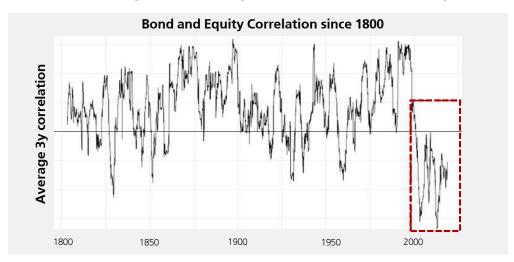
Bond yields are repressed and unclear if negative correlation with equites will continue

Since 1985, gold has acted as a hedge to the worst equity crises, however currently trading at top of its range

### Capitalise on the growing trend from active to systematic in AM



### Bonds: historical precedent for positive correlation with equities





Source:

## Investment concept – Covered Call and Put Write

Covered call overlays long equity exposure with short calls. Put Write systematically sells put options aiming to create income-based equity exposure

### Covered Call

Long position in equity benchmark + systematic short OTM call options.

Risk premium from selling 104% OTM call options (4-week maturity) on the underlying equity benchmark.

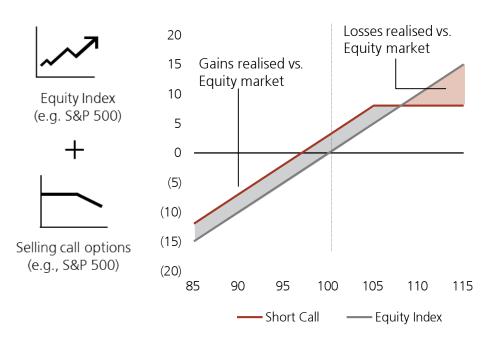
Staggered rolls, 25pc each week.

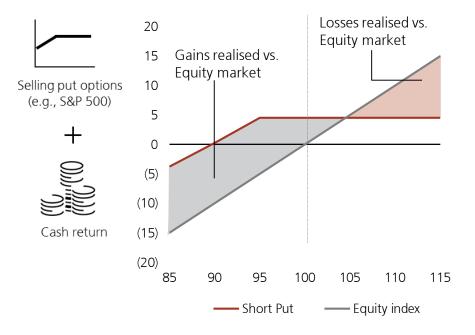
### Put Write

Systematic short OTM put options + cash position

Earns the risk premium from selling 97% OTM put options (4-week maturity) on the underlying equity benchmark

Staggered rolls, 25pc each week.







# Defensive Equities: Backtested performance summary

Shows drawdown reduction across both covered call and put write and improved risk adjusted profile

### US equity (S&P 500)



| Dec-02 Dec-04 Dec-06 Dec-             | 08 Dec-10 Dec-12 | Dec-14 Dec-  | 16 Dec-18 |  |
|---------------------------------------|------------------|--------------|-----------|--|
| E                                     | uro Stoxx 50 NTR | Covered Call | Put Write |  |
| Annualized return                     | 4.58%            | 5.99%        | 5.26%     |  |
| Annualized volatility                 | 22.02%           | 18.75%       | 11.48%    |  |
| Sharpe ratio                          | 0.21             | 0.32         | 0.46      |  |
| Maximum drawdown                      | -58.58%          | -44.67%      | -30.24%   |  |
| Global Financial Crisis               | -57.63%          | -43.87%      | -14.82%   |  |
| European sovereign debt crisis        | -11.71%          | -10.47%      | -3.44%    |  |
| US credit rating downgrade            | -27.30%          | -23.62%      | -11.53%   |  |
| Drop in oil prices, China instability | -18.96%          | -17.56%      | -10.38%   |  |
| February 2018 flash crash             | -7.29%           | -7.24%       | -3.88%    |  |
| Q4 2018 drawdown                      | -11.52%          | -10.72%      | -2.84%    |  |

-35.66%

-34.08%

### **Euro equity (EURO STOXX 50)**



|                                       | S&P 500 NTR | Covered Call | Put Write |
|---------------------------------------|-------------|--------------|-----------|
| Annualized return                     | 9.38%       | 9.58%        | 5.12%     |
| Annualized volatility                 | 19.35%      | 16.56%       | 9.95%     |
| Sharpe ratio                          | 0.48        | 0.58         | 0.51      |
| Maximum drawdown                      | -55.71%     | -44.76%      | -28.83%   |
| Global Financial Crisis               | -55.71%     | -44.76%      | -21.18%   |
| European sovereign debt crisis        | -15.74%     | -13.72%      | -4.08%    |
| US credit rating downgrade            | -18.87%     | -17.03%      | -6.01%    |
| Drop in oil prices, China instability | -11.82%     | -11.12%      | -3.37%    |
| February 2018 flash crash             | -10.12%     | -9.93%       | -4.95%    |
| Q4 2018 drawdown                      | -19.49%     | -18.82%      | -9.66%    |
| COVID-19 virus crisis                 | -33.83%     | -31.70%      | -24.67%   |

Source: UBS, Bloomberg. Data as of 30 September 2020. This material contains data derived as a result of back-testing of data and is provided by UBS in good faith using our standard methodology for information of this kind. Time series up to 1<sup>st</sup> Feb 2007 is provided using OTC methodology on listed monthly options as proxy when listed weeklies options were not available. **Past performance is not indicative of future performance**, please refer to important back-testing disclaimer at the end of the presentation.

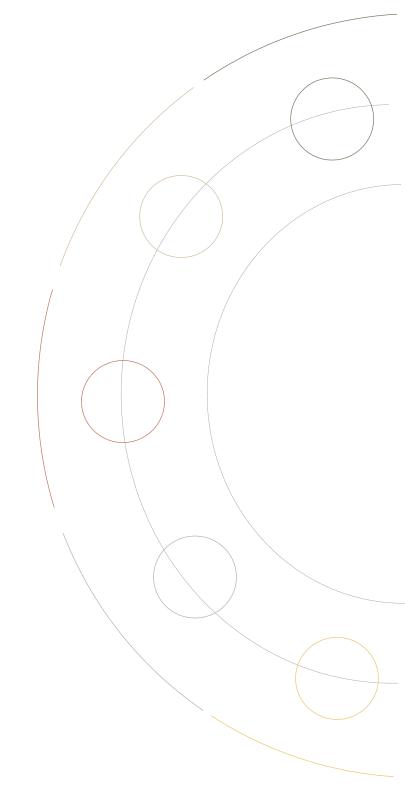
-25.80%



COVID-19 virus crisis

# **UBS** Commodities Carry ETF

Uncorrelated absolute returns based on unique CMCI methodology with defensive properties in stressed markets





## CMCI – Constant Maturity index innovation

CMCI – the first benchmark to diversify across all liquid futures tenors, live in 2007

### **Innovative Constant Maturity approach**

Small proportions of the underlying futures are rolled daily thereby avoiding problems associated with punctual rolls of traditional indices.

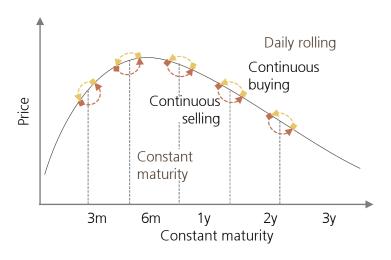
### **Diversification across tenors**

CMCI takes positions across the liquid part of the futures curve and does not concentrate exposure on the front part of the curve.

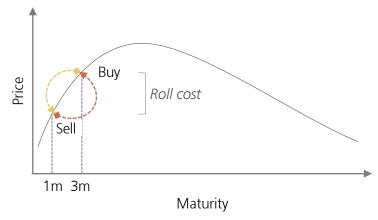
### Minimizing negative roll yield

Aim to reduce the problems of negative roll yield and maximize tracking to underlying spot commodity prices.

### **CMCI** daily rolling methodology



### **Traditional monthly rolling methodology**





## **UBS Commodities Carry ETF**

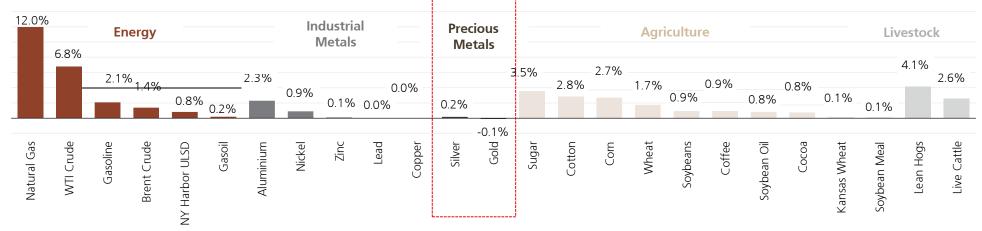
Yield generated from the outperformance of CMCI methodology with exposure adjusted to provide ~7% volatility. Low to negative correlation to main asset classes both during normal market and stress periods.

|                       | UBS Bloomberg COSI 2.5x ex. PM |
|-----------------------|--------------------------------|
| Return (p.a.)         | 9.2%                           |
| Annualised Volatility | 7.1%                           |
| Sharpe Ratio          | 1.14                           |
| Max Drawdown          | -9.6%                          |
| Max daily decline     | -3.4%                          |



| Year   | 2007  | 2008  | 2009  | 2010 | 2011  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020  |
|--------|-------|-------|-------|------|-------|------|------|------|------|------|------|------|------|-------|
| Return | 20.5% | 26.1% | 10.2% | 3.3% | 13.1% | 2.0% | 0.5% | 9.5% | 6.3% | 3.4% | 7.7% | 9.5% | 1.2% | 15.6% |

### **Average annual outperformance of CMCI roll** (since 2007)

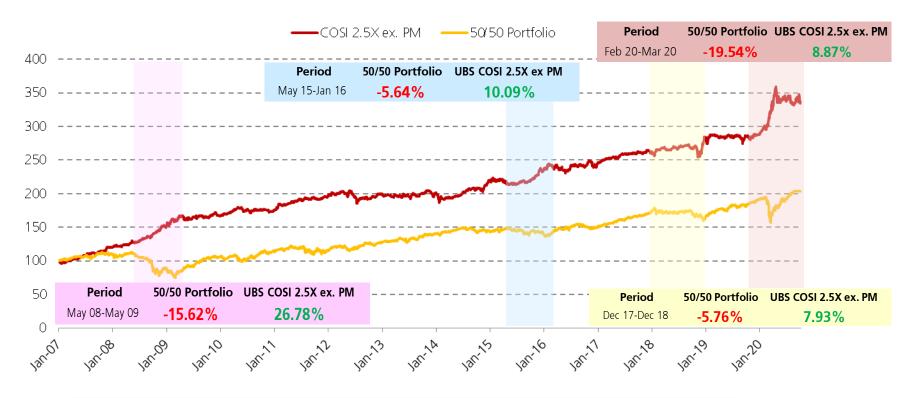




Source: UBS, Bloomberg.

### Correlation to Main Asset Classes

COSI demonstrates low to negative correlation to main asset classes (Equities, Bonds, Commodities, Alternatives) both during normal market and stress periods.



| COSI 2.5X ex. PM<br>Historical Correlation | MSCI<br>World | Barclays<br>Bond | HFRX | ВСОМ |
|--|---------------|------------------|------|------|
| Normal (2007-Present)                      | -17%          | 0%               | -16% | -56% |
| Market Stress*                             | -18%          | 8%               | -18% | -53% |



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