

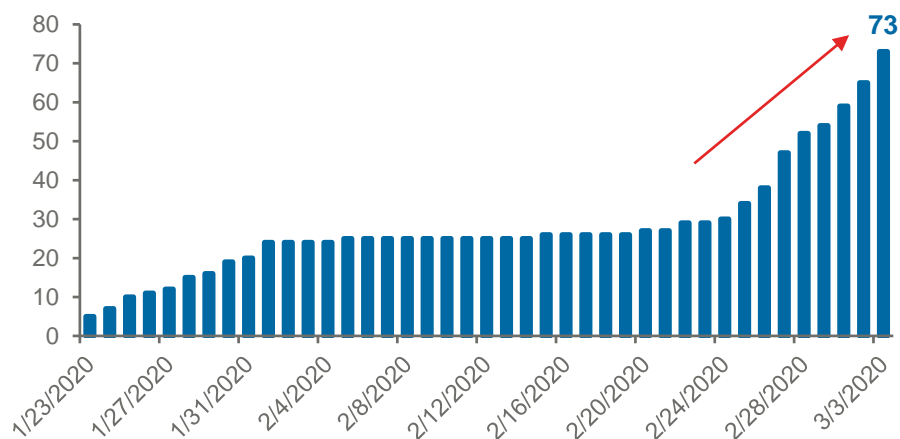
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# An Issuer Playbook for Navigating COVID-19

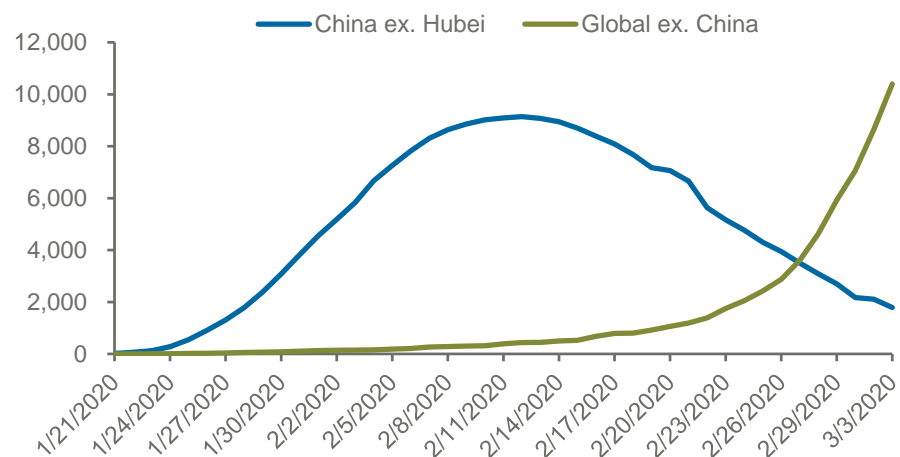
March 4, 2020

# The increase of COVID-19 cases outside China has shocked markets

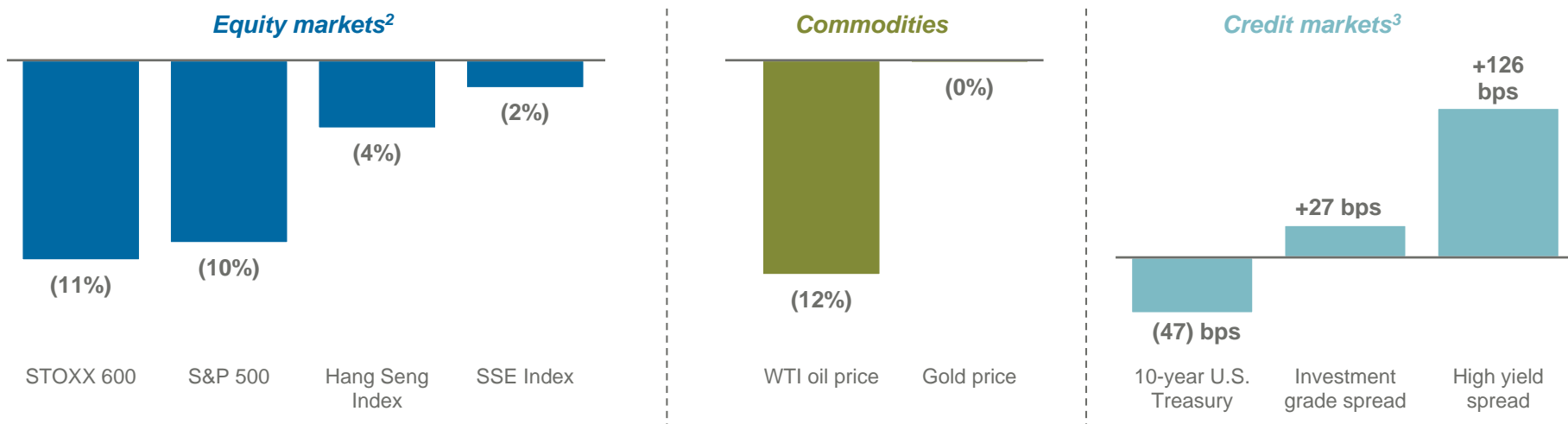
## Number of countries with at least 1 case of COVID-19



## Number of active confirmed cases of COVID-19<sup>1</sup>



## Performance over the past several days (02/21/2020 – 03/03/2020)

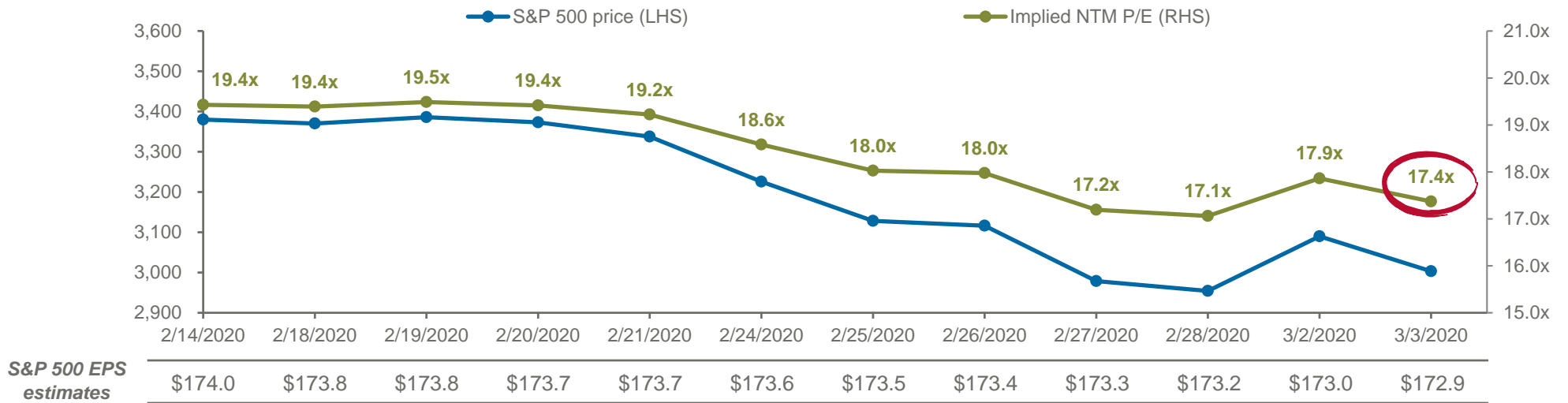


Source: J.P. Morgan's DataQuery, Bloomberg, World Health Organization, National Health Commission of PRC

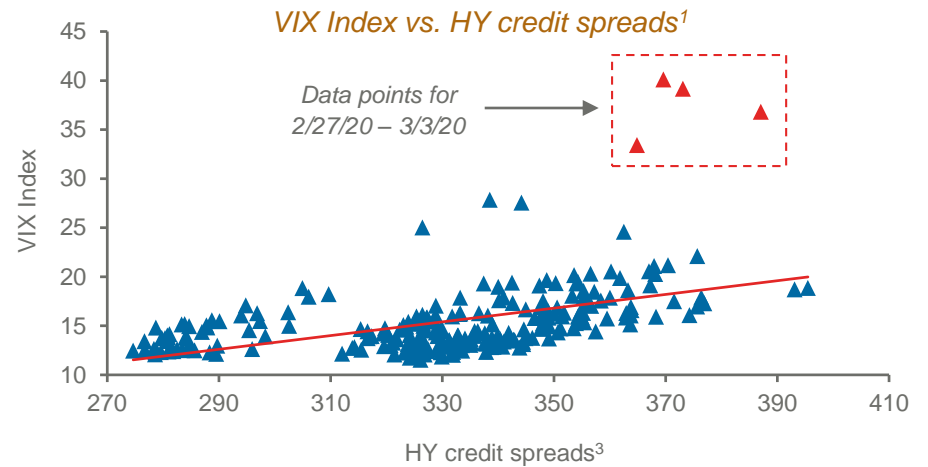
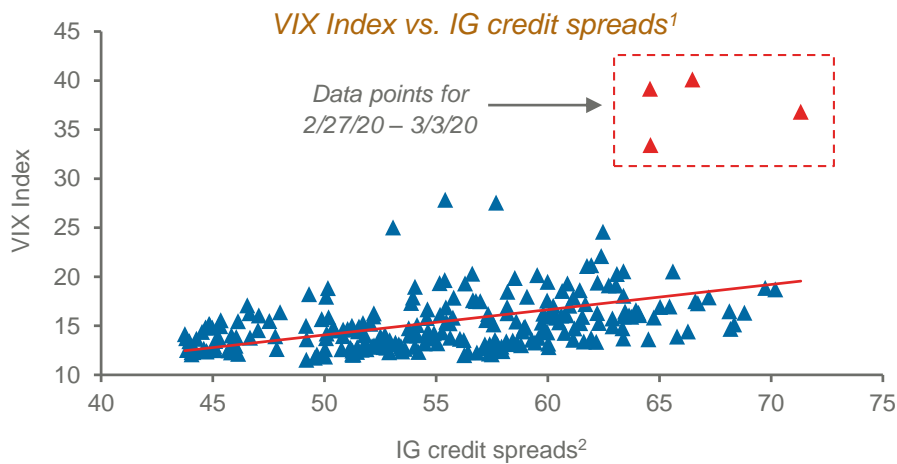
Note: Data as of 03/03/2020; <sup>1</sup> Active confirmed cases = total confirmed cases – total deceased / recovered; <sup>2</sup> Represents price return over the period; <sup>3</sup> Investment grade refers to the JULI index, High yield refers to the J.P. Morgan Global HY Index

# It remains to be seen whether markets are appropriately pricing virus risk

## S&P 500 P/E ratios have declined rapidly, but the impact to earnings remains uncertain

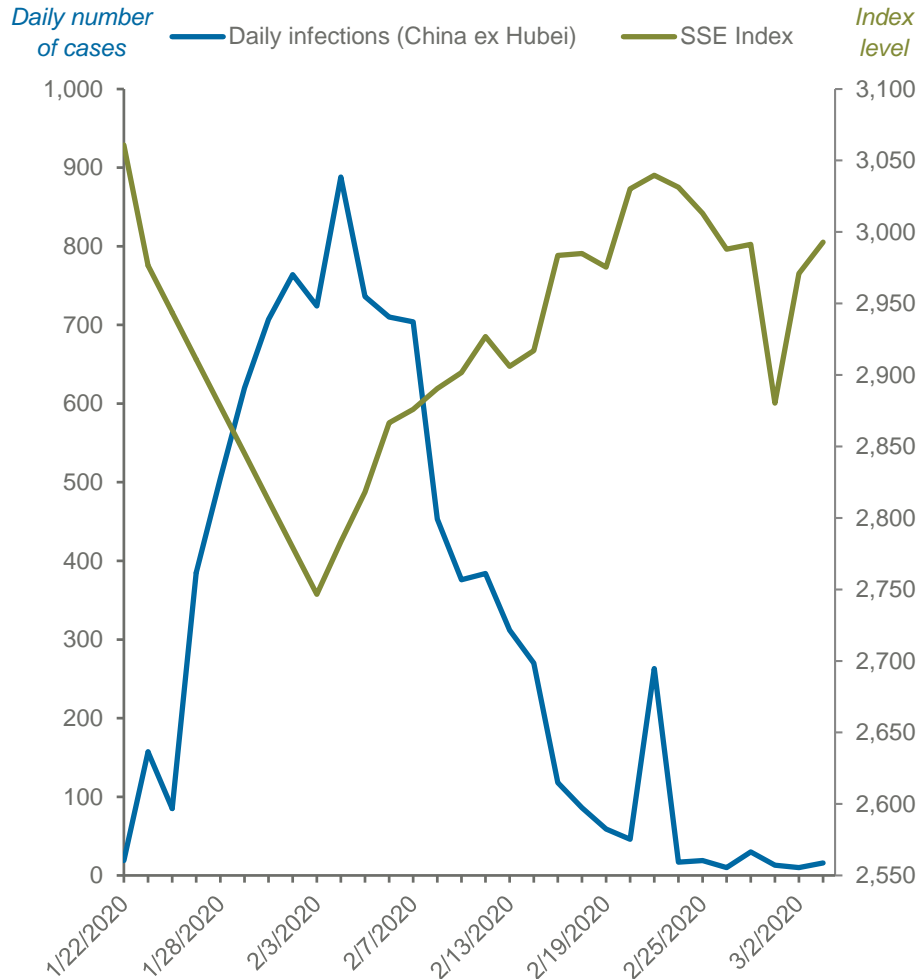


## In contrast to equity markets, credit spreads have widened less than what may be implied by equity volatility

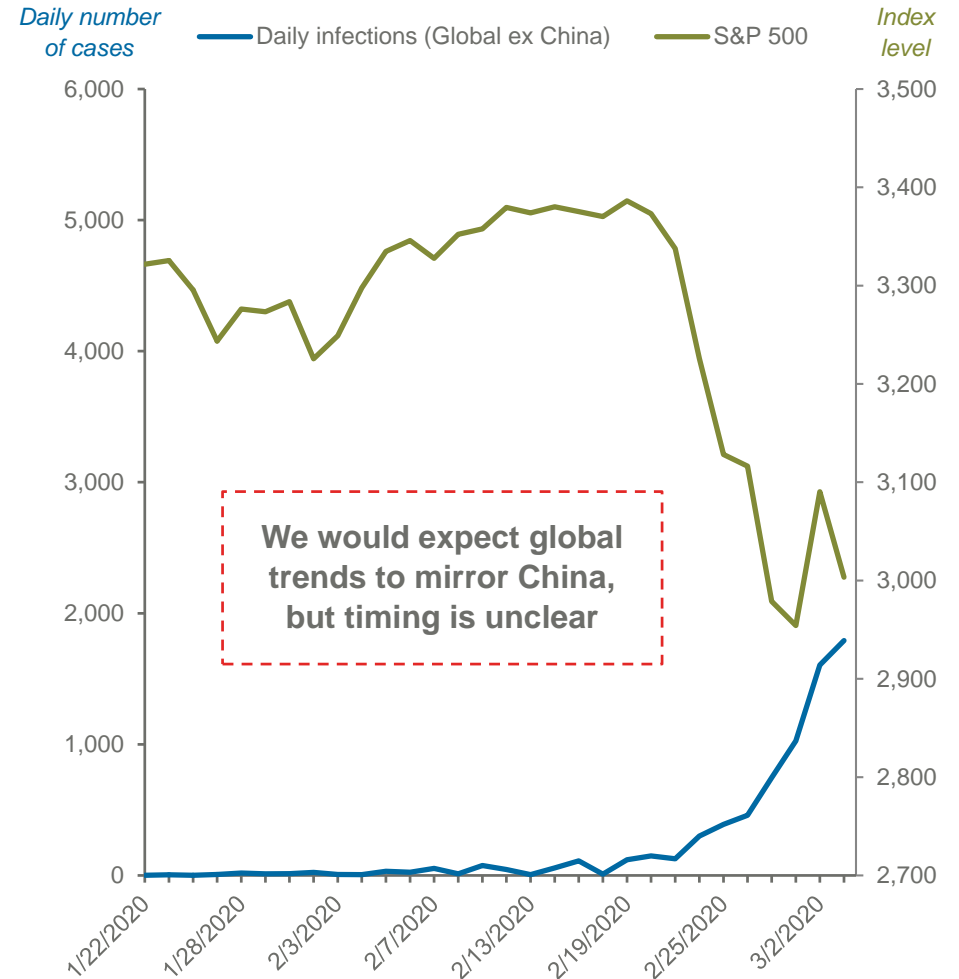


# Chinese markets recovered as coronavirus cases peaked; will the U.S. markets follow a similar pattern?

Daily infections in China ex Hubei and Chinese market performance



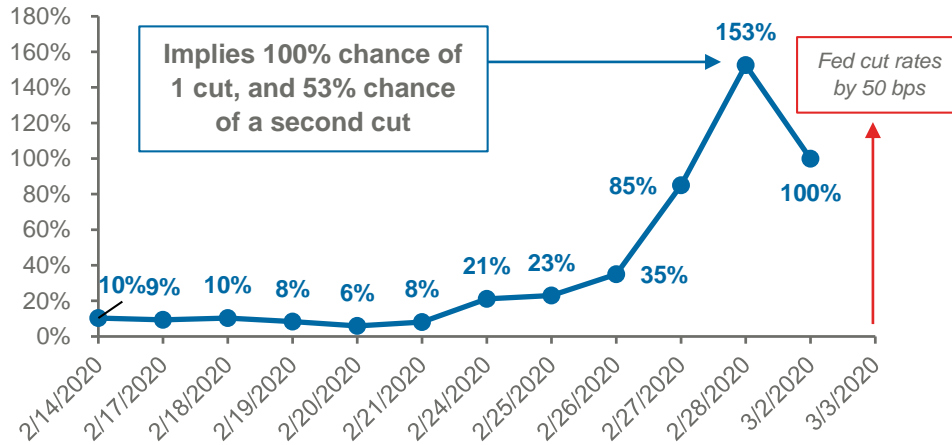
Daily infections globally ex China and U.S. market performance



# It seems too early to know if the impacts of COVID-19 will be short-lived or ultimately have longer-lasting consequences, up to and including a recession

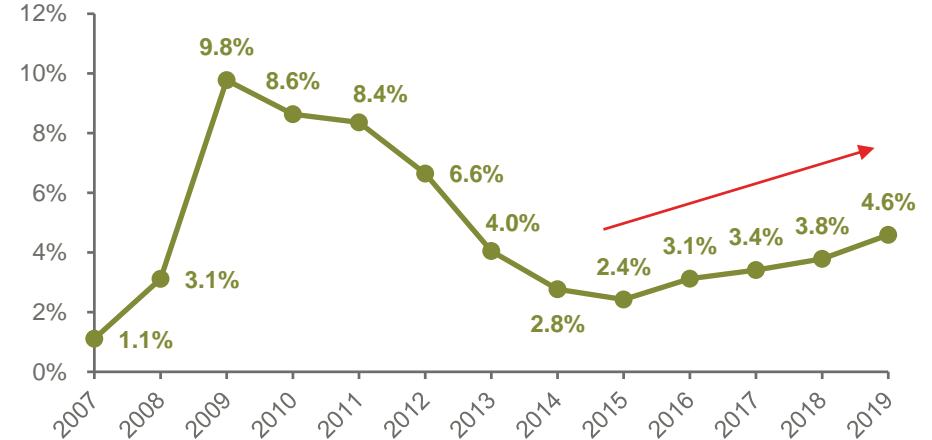
## The market was already expecting the Fed to take action...

Probability of the number of Federal Funds Rate cuts for the 3/18/20 meeting



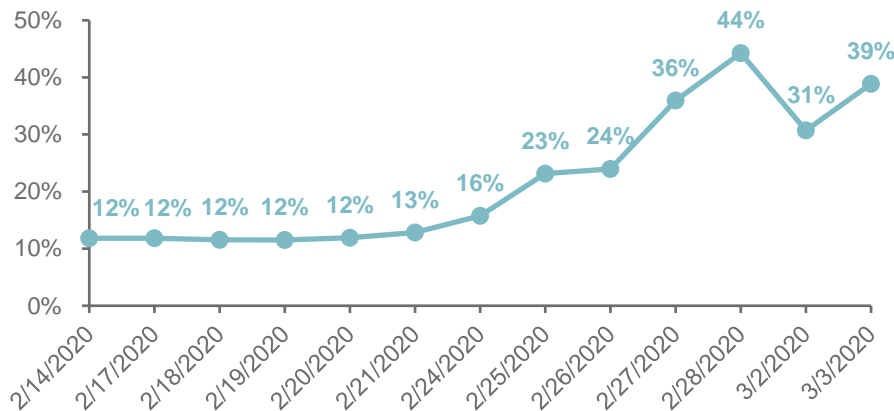
## ...but a widening budget deficit may limit overall stimulus

Deficit to GDP ratio for the U.S.



## Implied recession probabilities have spiked

Probability of recession within 12 months based on S&P 500 and BBB spread



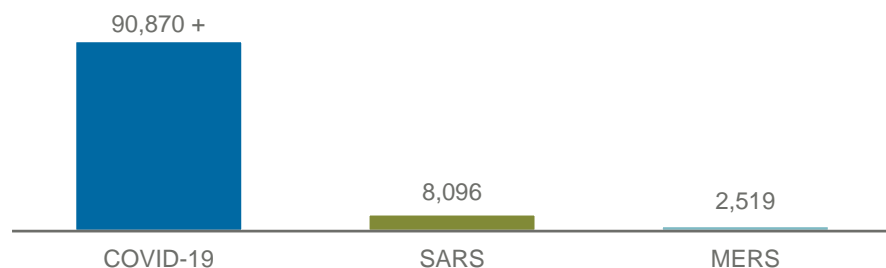
## Key takeaways

- While central banks have begun to take action to blunt the economic impact of COVID-19, there may be little stimulus can do to remedy uncertainty
- Unlike other recent market moving events (e.g., trade), COVID-19 won't be swayed by market pressures
- While we hope for a quick resolution to COVID-19 uncertainty, firms should prepare for a more prolonged downturn to ensure financial resilience

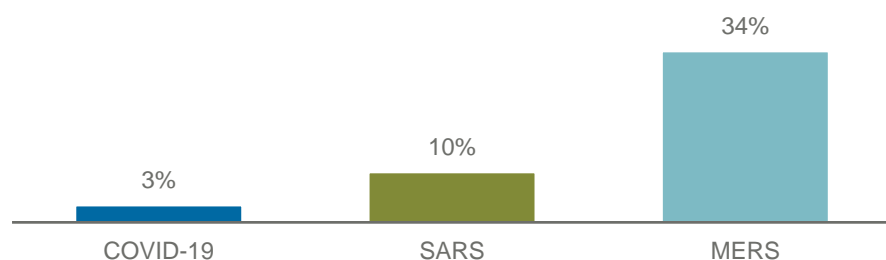
# Precedents may be informative, but uncertainty remains

## Comparing COVID-19, SARS, and MERS

### Number of confirmed cases

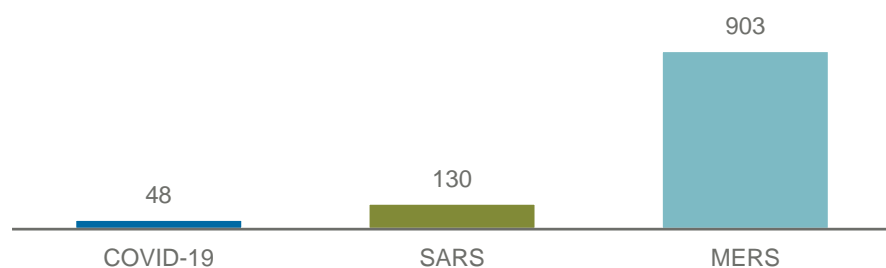


### Fatality rate



### Velocity of the virus

Number of days for the first 1,000 people to be infected



### Comparing viral outbreaks

	COVID-19	SARS	MERS
Central bank actions	✓ <sup>1</sup>	✓ <sup>2</sup>	✓ <sup>3</sup>
Widespread travel restrictions	✓	✓	✗
Number of countries affected	73+	29	27
Duration	?	~6 months	8+ years

### Key takeaways

- While precedents exist, the exponential rise of COVID-19 is unlike severe viral outbreaks seen in the recent past
- SARS began in 2002, but was short lived
  - Spread rapidly, but still not as fast as COVID-19
  - Tapered off in around 6 months and ended in almost 8 months
- MERS began in 2012, but took much longer to spread
  - After 1 year, MERS only infected 108 people
  - Took 8 years for MERS to infect over 2,500 people

## Questions firms should be asking themselves

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- 1 What happens if the virus **continues to spread** to other areas of the world?
- 2 What impact will this have on **suppliers, customers, and employees**?
- 3 What happens if this **precipitates a global recession**?
- 4 What happens if **capital markets remain challenging** for a prolonged period of time?
- 5 What happens if **rates are cut and long term rates go even lower**?
- 6 What happens if the **dollar gets stronger** as a safe haven?
- 7 What happens if the **damage is more contained and there is a “v-shaped” recovery**?

## A playbook for navigating current volatility

- Firms should prioritize keeping their greatest assets – their employees – healthy and safe
- CFOs and finance teams should be proactive to ensure financial preparedness and stability during this time

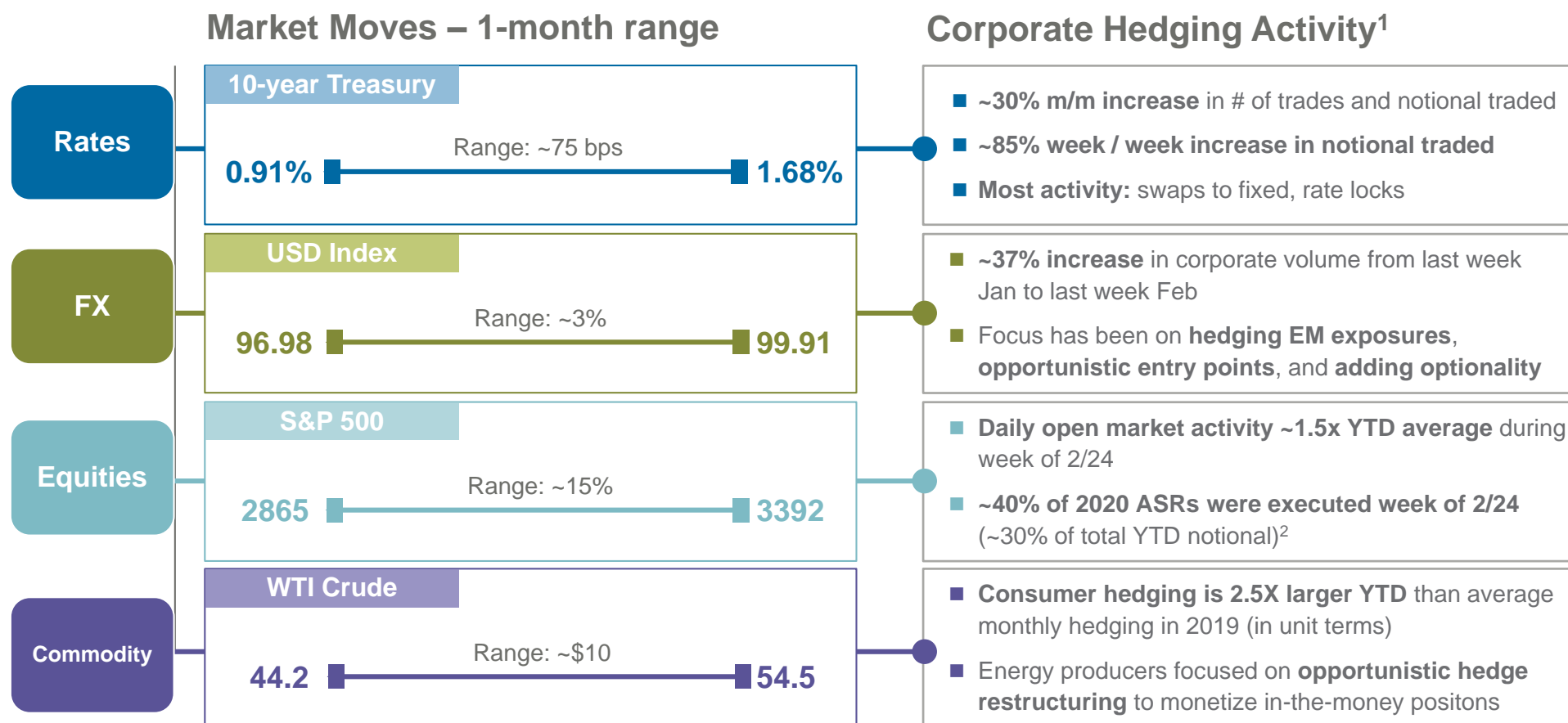
### Preparation

### Potential actions

	Preparation	Potential actions
<b>Capital structure</b>	<ul style="list-style-type: none"> <li>✓ Revisit near- and medium-term capital market dependencies. What are contingency plans?</li> <li>✓ Sensitize leverage metrics to account for different financial outcomes</li> <li>✓ Anticipate regional cash flow shortfalls and funding needs in different jurisdictions</li> </ul>	<ul style="list-style-type: none"> <li>✓ Opportunistically tap capital markets during windows of market stability to take advantage of historically low interest rates, term out CP, and/or near-term maturities?</li> <li>✓ Reallocate capital from discretionary expenditures (e.g. share repurchases) to debt paydown?</li> </ul>
<b>Liquidity</b>	<ul style="list-style-type: none"> <li>✓ Assess the risk of near-term liquidity needs under downside scenarios</li> <li>✓ Monitor access to commercial paper (if applicable)</li> <li>✓ Evaluate downside case “bookends” that account for both a short-term shock as well as a longer-term downturn into recession</li> </ul>	<ul style="list-style-type: none"> <li>✓ Engage with rating agencies to ensure that tapping sources of liquidity to leave on balance sheet doesn’t result in ratings actions?</li> <li>✓ Look for embedded gains in derivatives for a possible source of liquidity?</li> </ul>
<b>Risk management</b>	<ul style="list-style-type: none"> <li>✓ Evaluate hedging opportunities for rates, currencies, and commodities</li> <li>✓ Consider pension implications of weak equity performance and low interest rates</li> </ul>	<ul style="list-style-type: none"> <li>✓ Lock rates, FX, and commodity costs?</li> <li>✓ Reduce pension funding to regulatory minimum to preserve cash flow?</li> </ul>
<b>Supply chain</b>	<ul style="list-style-type: none"> <li>✓ Assess the impact of recent events on vendors and suppliers</li> <li>✓ Consider building inventory in cases where disruptions are anticipated</li> </ul>	<ul style="list-style-type: none"> <li>✓ Extend financing / payable terms to more vulnerable suppliers?</li> <li>✓ Seek payment term extensions from customers?</li> </ul>
<b>Capital allocation</b>	<ul style="list-style-type: none"> <li>✓ Contemplate opportunistic return of capital if capital structure / liquidity support it</li> </ul>	<ul style="list-style-type: none"> <li>✓ Consider changing pace of share buybacks to either preserve flexibility or to be opportunistic?</li> <li>✓ Evaluate investment opportunities at new valuation levels?</li> </ul>



# Risk management themes across asset classes



## Call to action

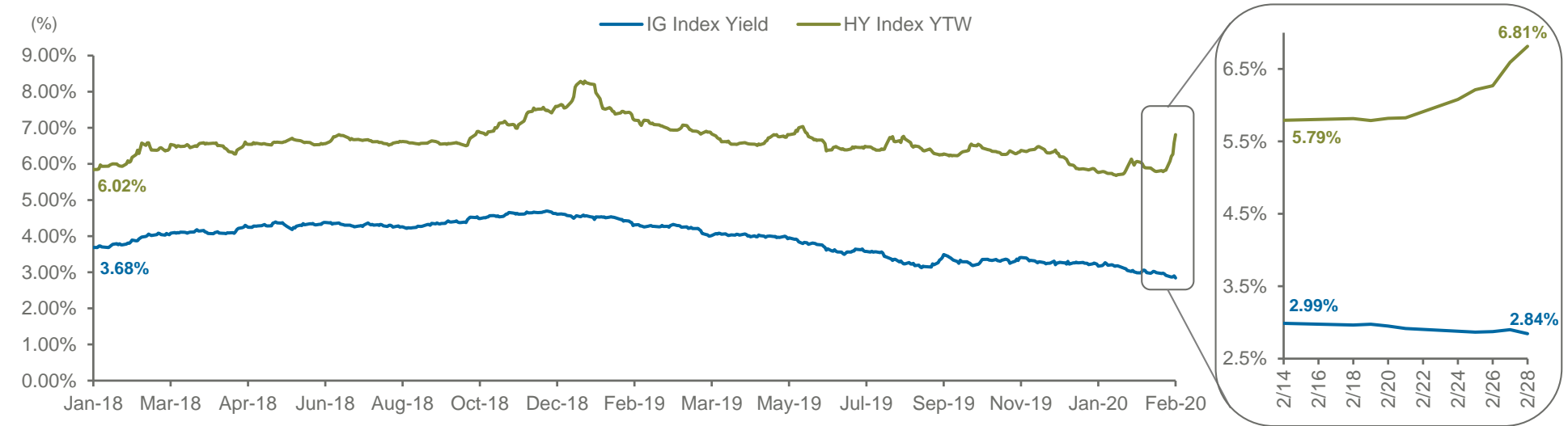
1. Re-evaluate unhedged risks in current market backdrop
2. Determine risk tolerance levels
3. Seek internal approvals for risk management strategies

<sup>1</sup> Based on JPM Corporate Derivative execution only  
<sup>2</sup> Based on JPM activity and public filings

Note: This material was prepared by an Associated Person with responsibilities for the marketing and sale of swaps and other derivatives. All questions related to swaps referenced in these materials must be directed to US.swaps.marketing@jpmorgan.com

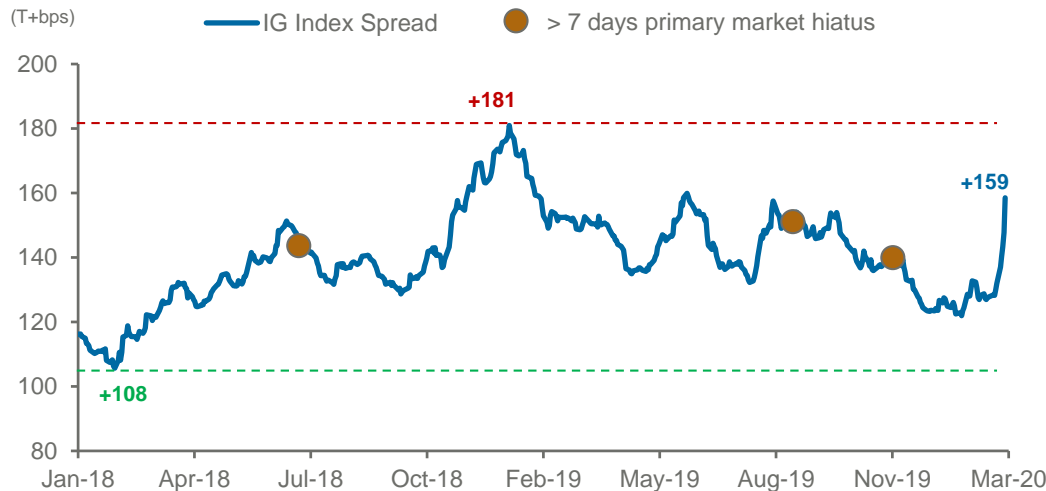
# Investment grade borrowing costs dropped to all-time lows despite the volatility

Borrowing costs have diverged in light of recent volatility, as IG credit risk premiums have not fully offset the move lower in UST yields



Source: J.P. Morgan Dataquery as of 2.28.2020

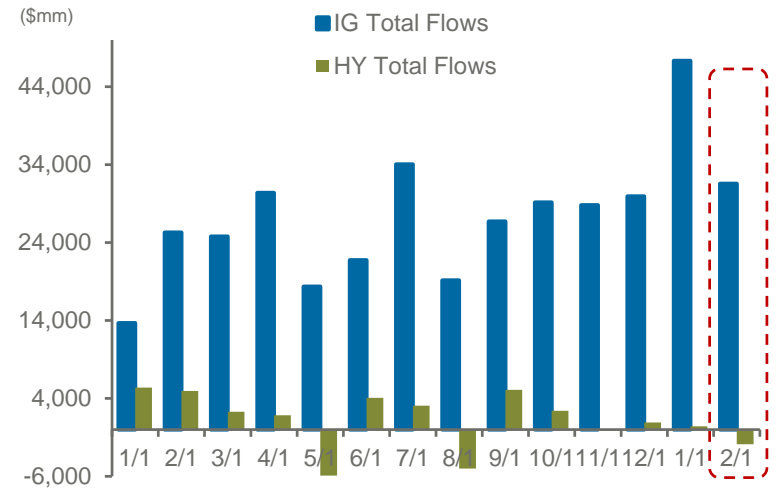
The recent hiatus in primary issuance is not unique relative to other periods of market volatility...



9

Source: J.P. Morgan's DataQuery as of 2/28/2020

...with overall supply/demand dynamics supported by IG credit's status as a safe haven asset for investors

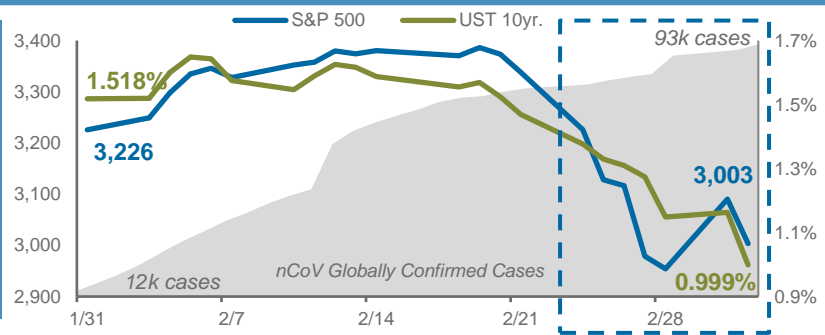


Source: J.P. Morgan's DataQuery as of 2.28.2020

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# Coronavirus fears have weighed on leveraged finance markets

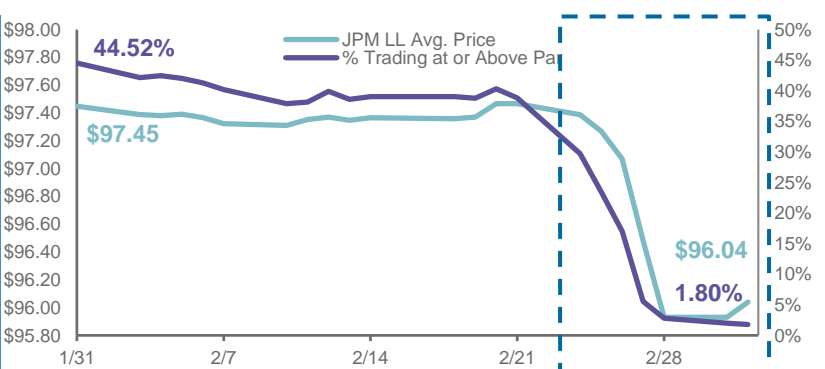
## Macro



Since Friday 2/21	
SPX	(10.02%)
10yr UST	(47)bps
VIX	115.57%
WTI	(11.61%)

- Coronavirus concerns have dominated the market, leading to an emergency 50bps Fed Funds rate cut from the FOMC on Tuesday Morning. S&P500 finished down (3%) after climbing ~5% on Monday. Since February 21<sup>st</sup>, the S&P is collectively off 10% and the VIX has spiked 116%
- The dovish outlook on rates drove the 10yr UST yield to 0.999%, its first sub-1.00% level in history

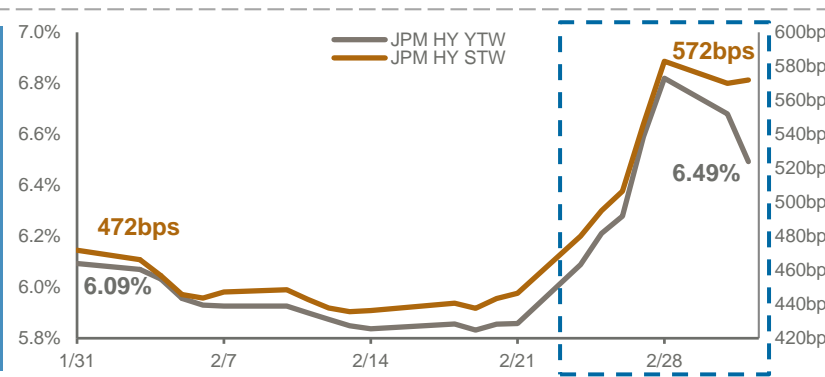
## Leveraged loans



Since Friday 2/21	
LL Avg Price	(\$1.43)
% at or above par	(37.01%)
Fund Flows	(\$2.8bn)
CLO issuance	\$4.7bn

- The leveraged loan market came off a record issuance month in January to what is now an extremely light new issue calendar
- The % of loans trading at or above par has fallen to less than 2% from 39% two weeks ago and 61% in mid-January, driven by a \$1.43 decline in the average price on the JPM LL Index since February 21<sup>st</sup>
- The softer market has led to a pullback in opportunistic activity, and the rate outlook has re-introduced the concept of a 1% LIBOR floor

## High yield bonds



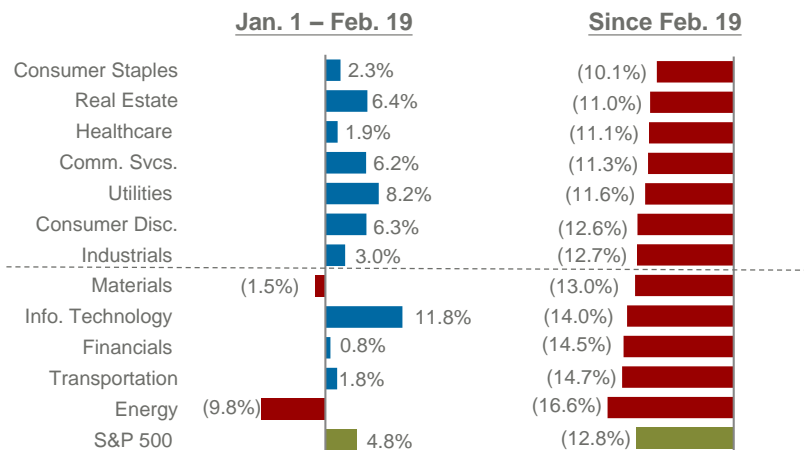
Since Friday 2/21	
HY YTW	64bps
BB YTW	48bps
B YTW	74bps
CCC YTW	127bps
HY STW	126bps
Fund Flows	(\$8.7bn)

- The high yield market has widened alongside other asset classes since 2/21 (collectively 64bps wider), but in light of rates movements, YTW and STW have tightened 33bps and 10bps, respectively, this week
- To put the magnitude of recent volatility in context, the 96bps move in yields last week compares to a ~140bps peak-to-trough move in the HY index in the entire 12 months prior

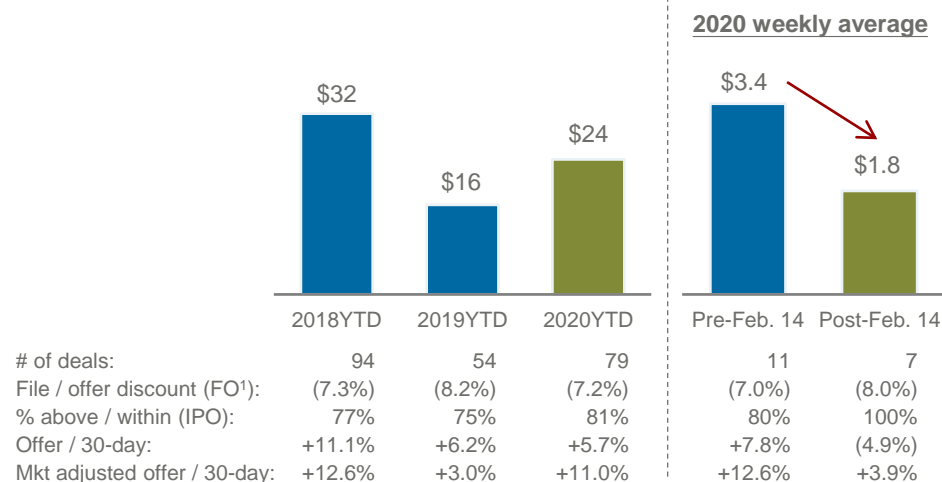
**Strong leveraged finance technicals (only ~\$35bn in the fwd M&A calendar) will contest escalating fundamental concerns (coronavirus, US election) to drive market sentiment in and out of issuer's favor. It is increasingly important to stay nimble to take advantage of windows of opportunity as they present themselves**

# S&P 500: Valuations remain above long term averages, despite recent market sell-off

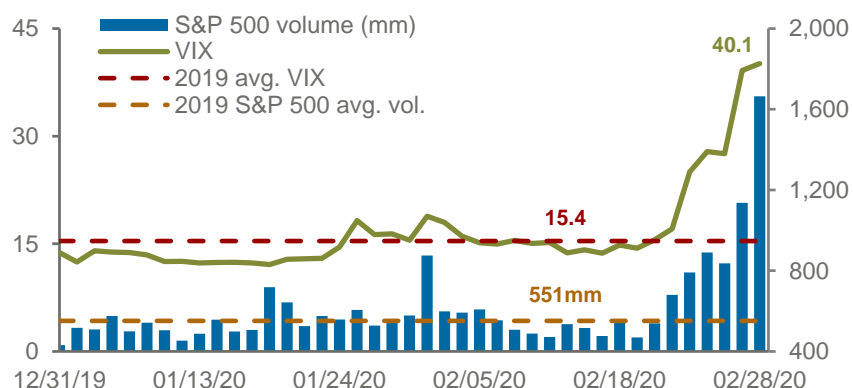
## S&P 500 subsector price performance



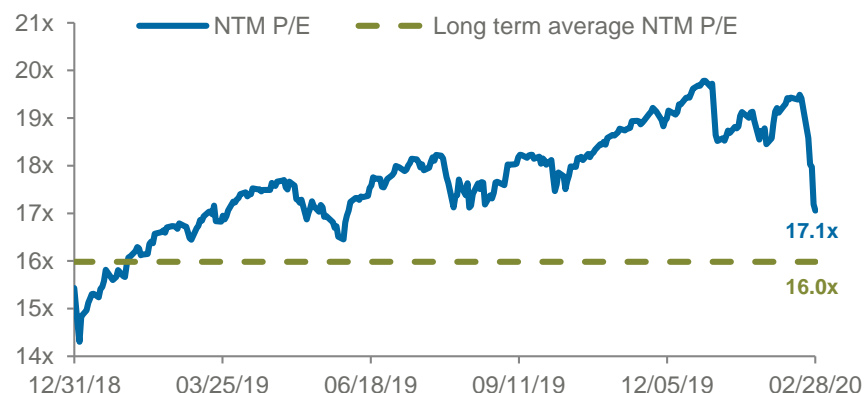
## U.S. equity issuance (\$bn)



## Market volatility & trading volume, 2020YTD



## S&P 500 NTM P/E multiples, 2019 – 2020YTD



Source: Bloomberg, Dealogic, FactSet as of 02/28/20  
 Note: Issuance data excludes offerings <\$50mm; <sup>1</sup> Excludes bought offerings

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