



**ALLIANCEBERNSTEIN®**

March 2020

# Putting The COVID-19 Selloff in Perspective

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# Comparing Past Epidemics with COVID-19

	SARS	Human Swine Influenza	MERS	Avian Influenza	2019-nCOV Coronavirus	
Mainland China	Confirmed Cases	5,327	128,033	1 (traveler)	1,537	81,116
	Fatalities	349	805	—	619	3,231
	Mortality Rate	6.6%	0.6%	—	40.3%	4.0%
	Geographic Spread	75% confirmed cases took place in <b>Beijing and Guangdong</b> , which combined accounted for <b>15% of national GDP</b>	Widespread across the country	—	80% of confirmed cases took place in <b>Zhejiang, Guangdong, Jiangsu, and Shanghai</b> , which combined accounted for <b>30% of national GDP</b>	84% of confirmed cases took place in Hubei, which takes up <b>4% of national GDP</b>
Global	Confirmed Cases	8,098	11% - 21% Global	2,494	1,568	191,127
	Fatalities	774	> 18,449	858	615	7,807
	Mortality Rate	9.6%	0.001% – 0.007%	34.4%	39.2%	4.1%
Period	Date Range*	Feb 03–Apr 03	Apr 09–Aug 10	Sep 12–Nov 12	Jan 04–Sep 04	Dec 19–present
	Trading Days	38	332	48	166	54

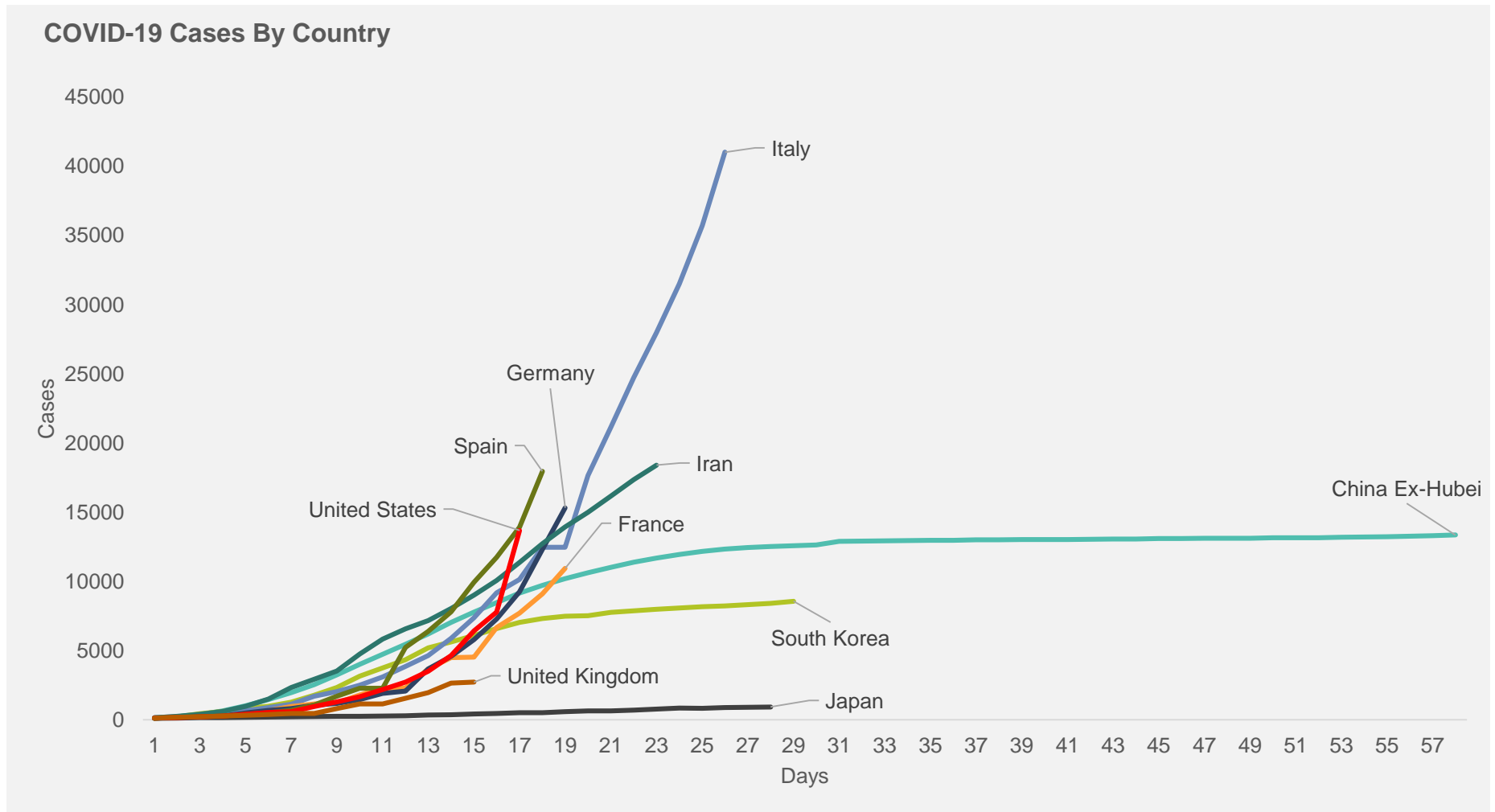
**Analysis provided for illustrative purposes only and is subject to revision.**

As of March 18, 2020

\*Represents periods when the outbreaks initially became endemics or pandemics. These date ranges are not official, rather subjective judgments based on WHO reports. Date range for avian influenza represents initial H5N1 outbreak.

Source: [John Hopkins University](#), Morgan Stanley Research, [WHO](#) and AB; See Disclosures and Important Information.

# Cases By Country: Seeking A Flatter Curve



As of March 19, 2020

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The data tracks cumulative cases by country for select countries/regions that have >100 cases. Day 0 is the day of case 100

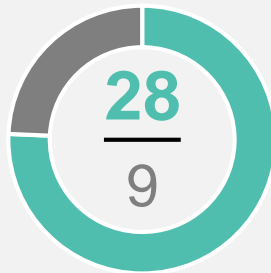
Source: John's Hopkins University, AB

# Time Between Market Selloffs

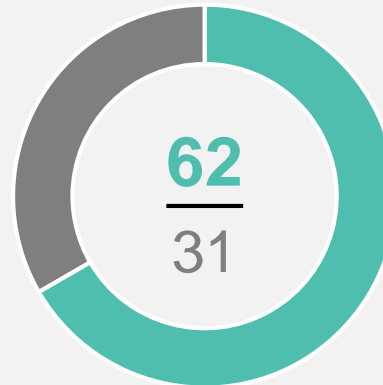
S&P 500 Since 1928 (Total Return)

● Period Ending Feb. 19, 2020

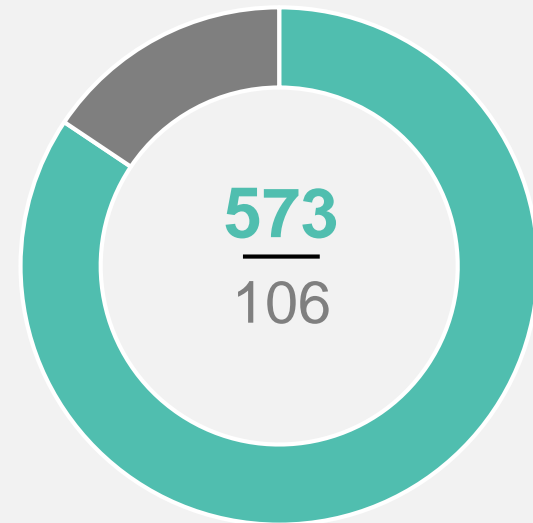
● Average Number of Weeks



**Weeks between  
5% selloff**



**Weeks between  
10% selloff**



**Weeks between  
20% selloff**

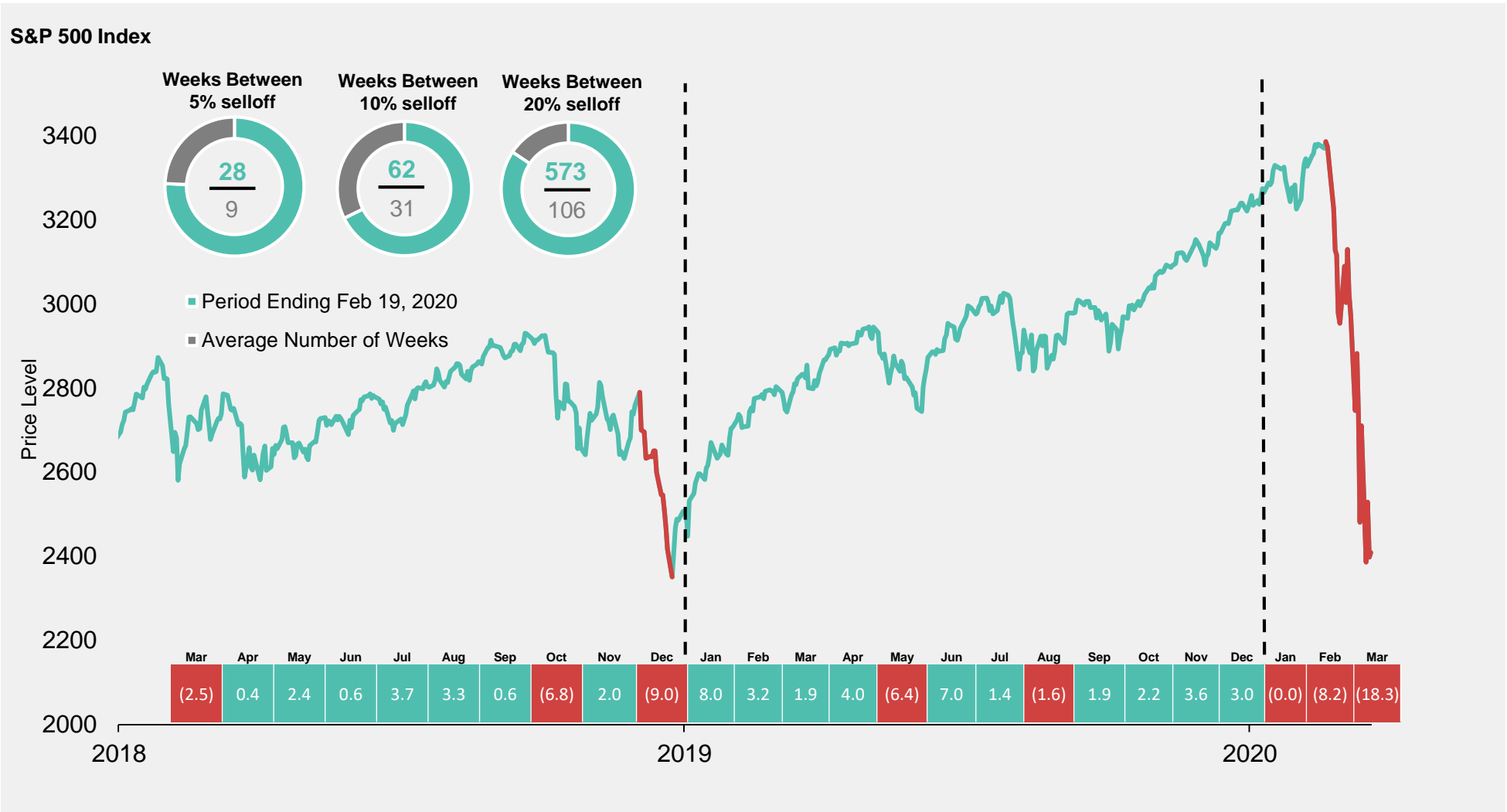
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As of March 19, 2020

Numbers above are as of the recent market high on February 19<sup>th</sup>, 2020.

Source: S&P and AB

# Risk Finally Returned After Period of Calm



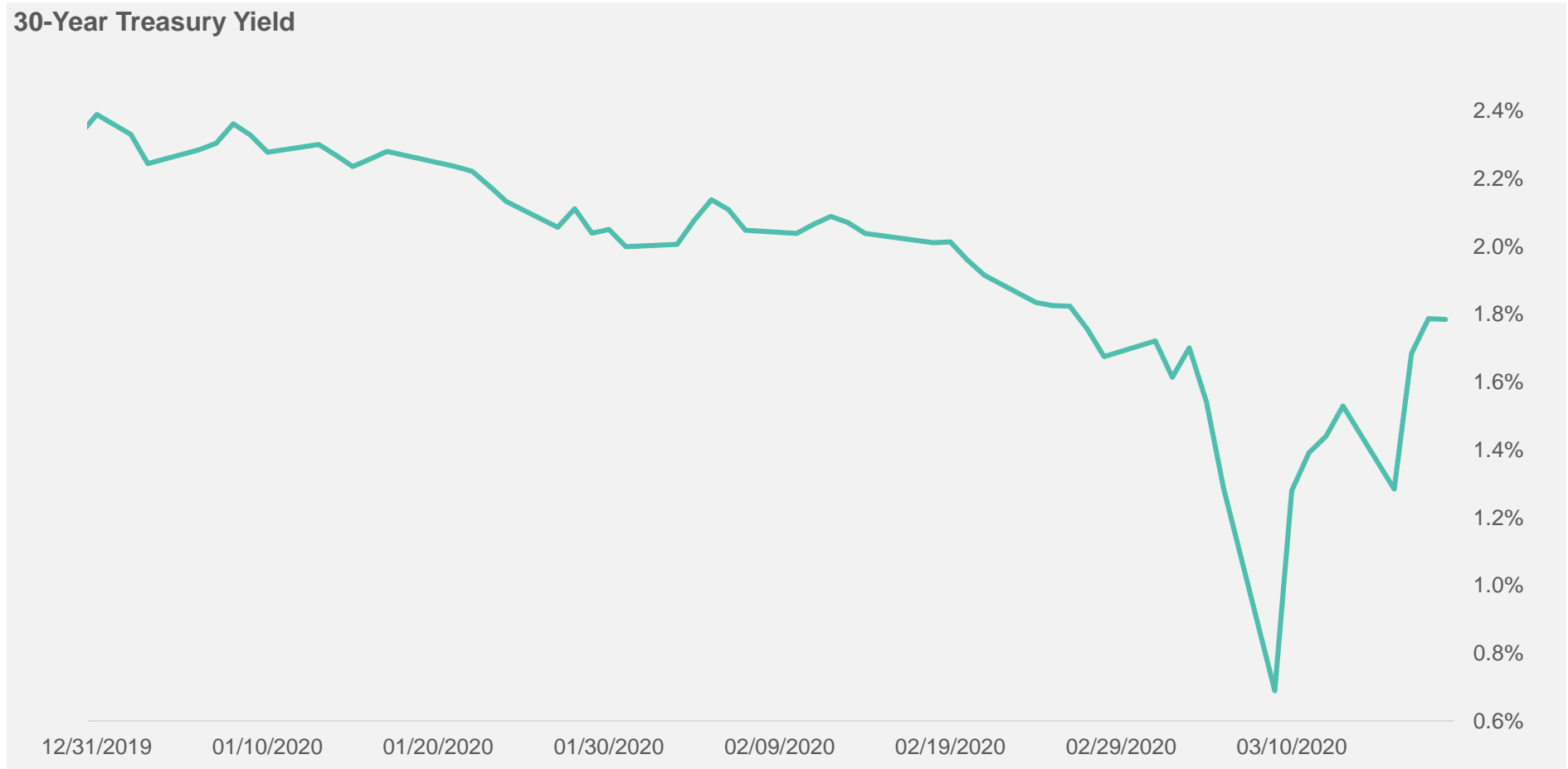
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Monthly return figures are based on total returns for each month, which include dividends.

As of March 19, 2020

Source: S&P and AB

# A Lack of Liquidity in Long-Term Treasuries Caused Volatility in Rates



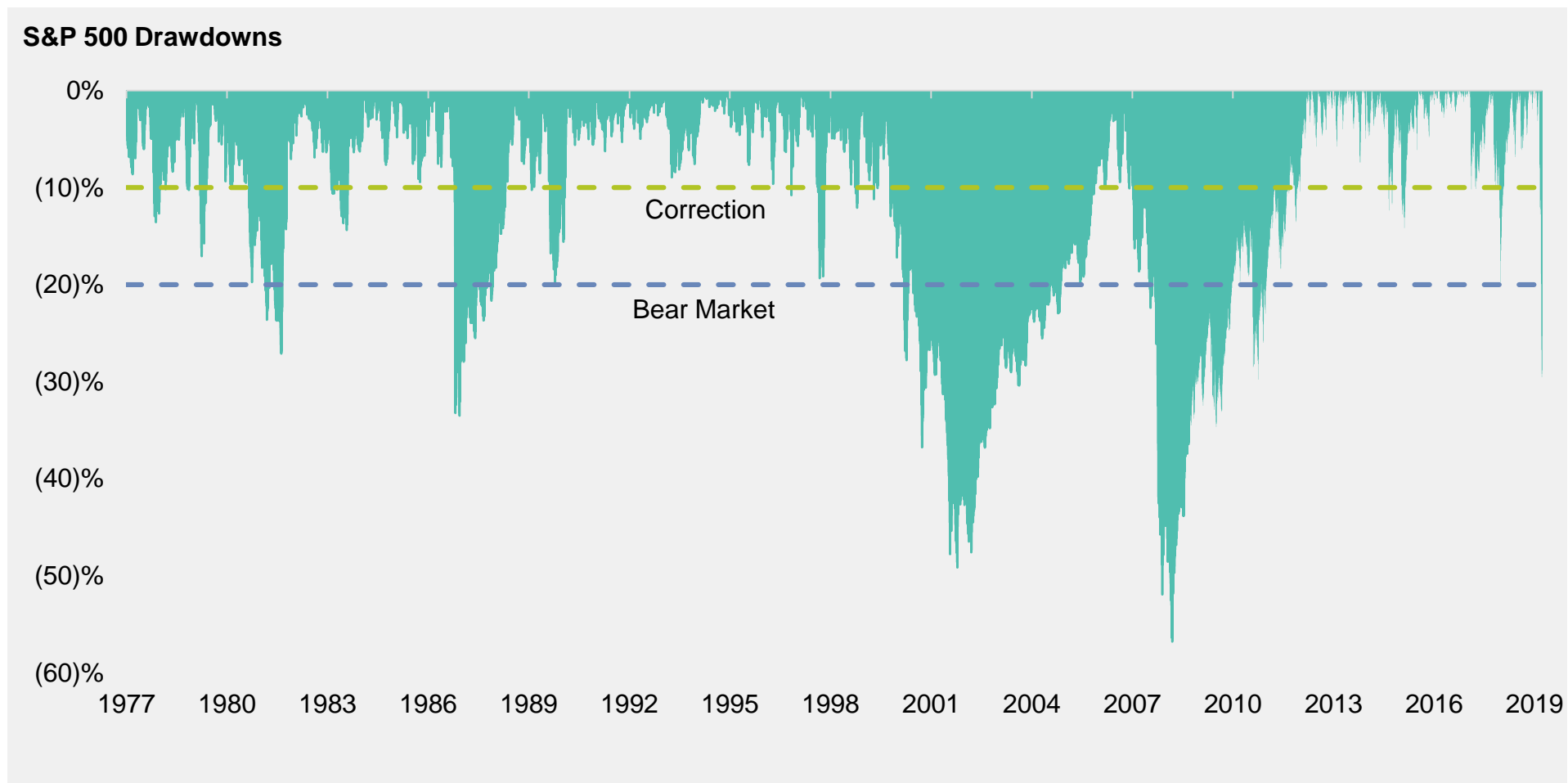
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As of March 19, 2020

The March 9<sup>th</sup> value represents the intraday low. All other values are the daily closing yields.

Source: Bloomberg, Factset, AB

# Corrections and Bear Markets Since 1977



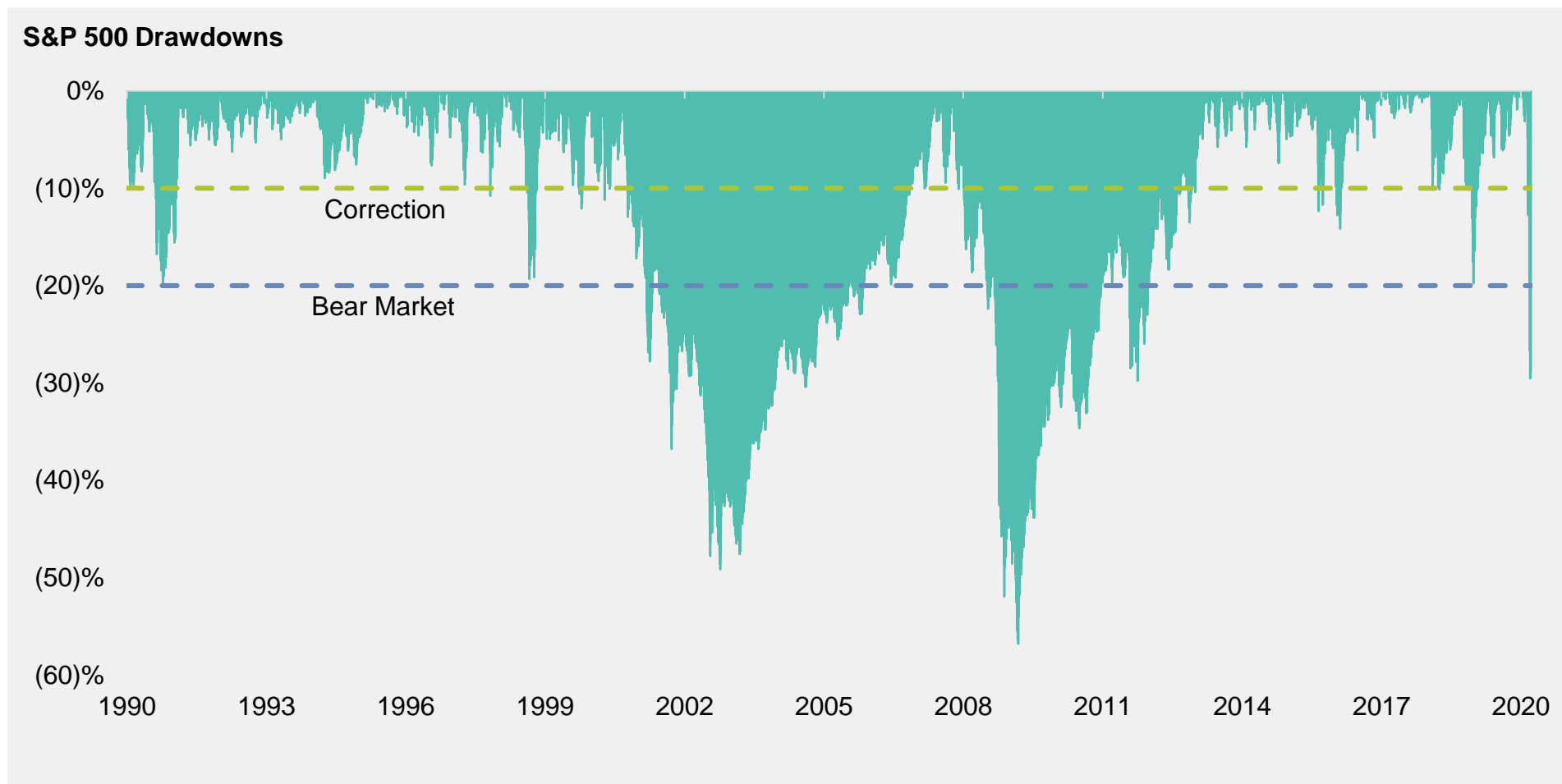
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Source: Factset, Standard & Poor's, AB Analysis



# Corrections and Bear Markets Since 1990

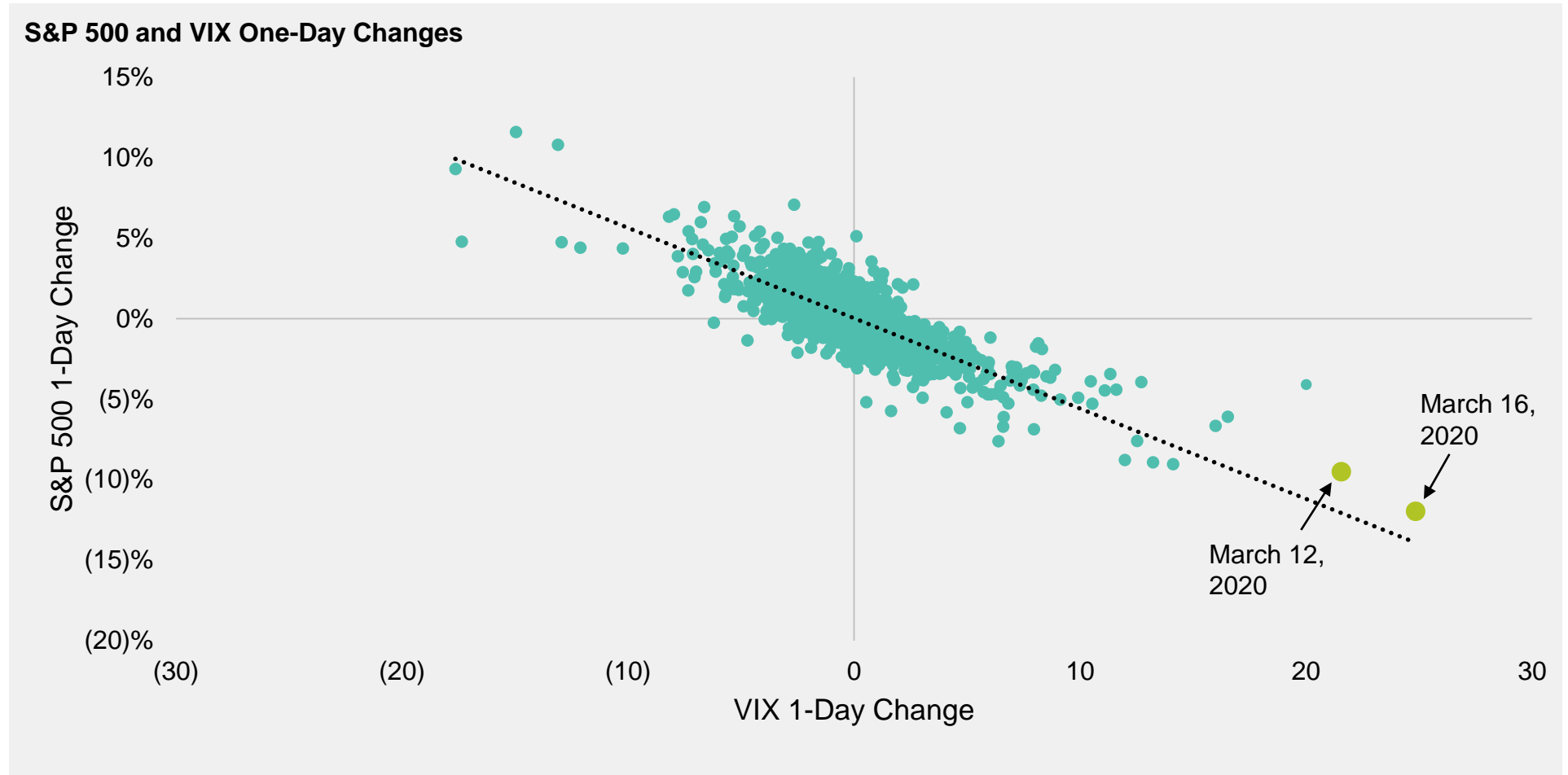


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Source: Factset, Standard & Poor's, AB Analysis

# Daily Change In the S&P and VIX Indexes



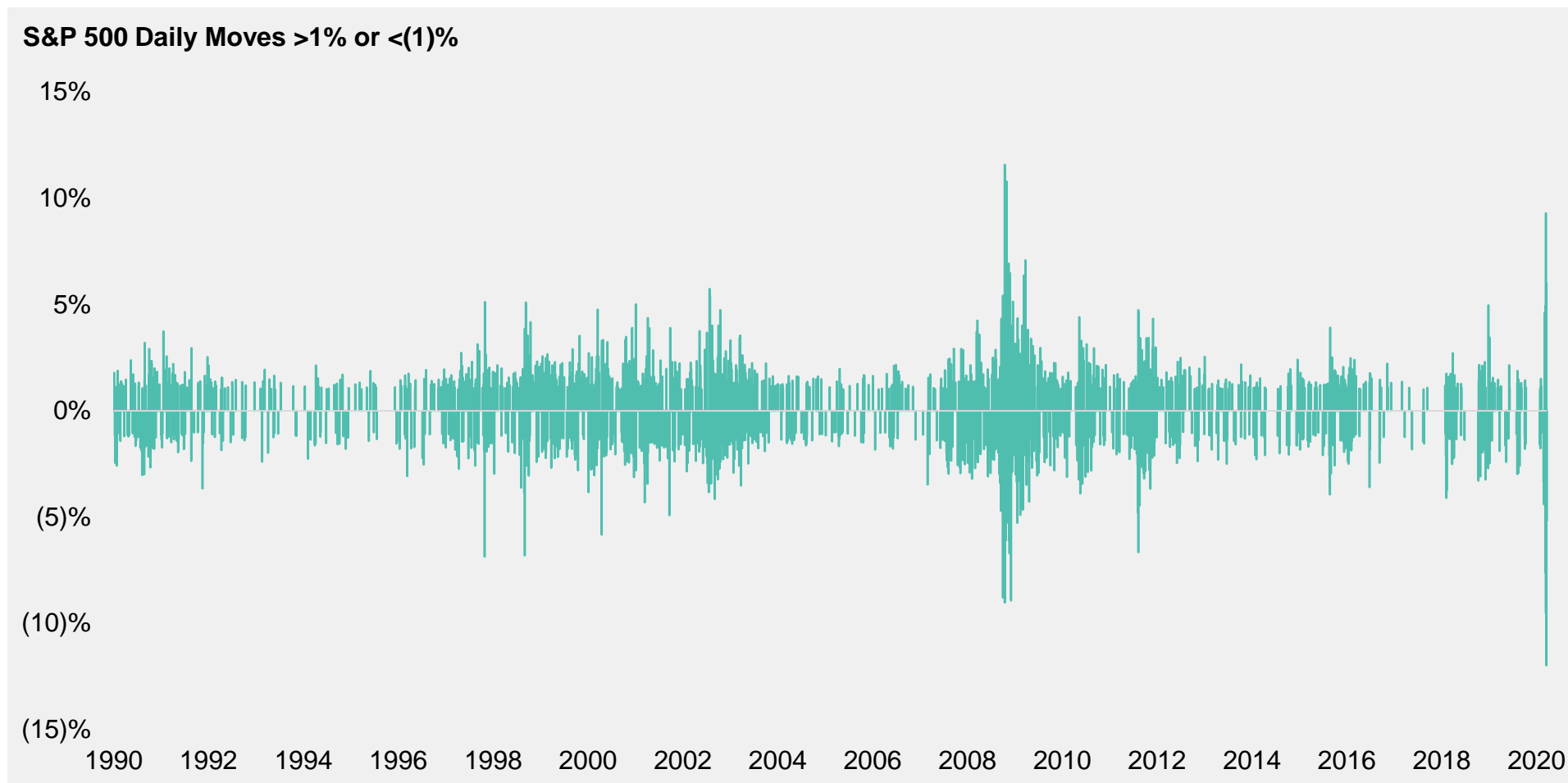
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As of March 19, 2020

Data starts 1/1/1990

Source: Factset, Standard & Poor's, AB Analysis

# 2020 In Perspective – One Day Moves (Since 1990)

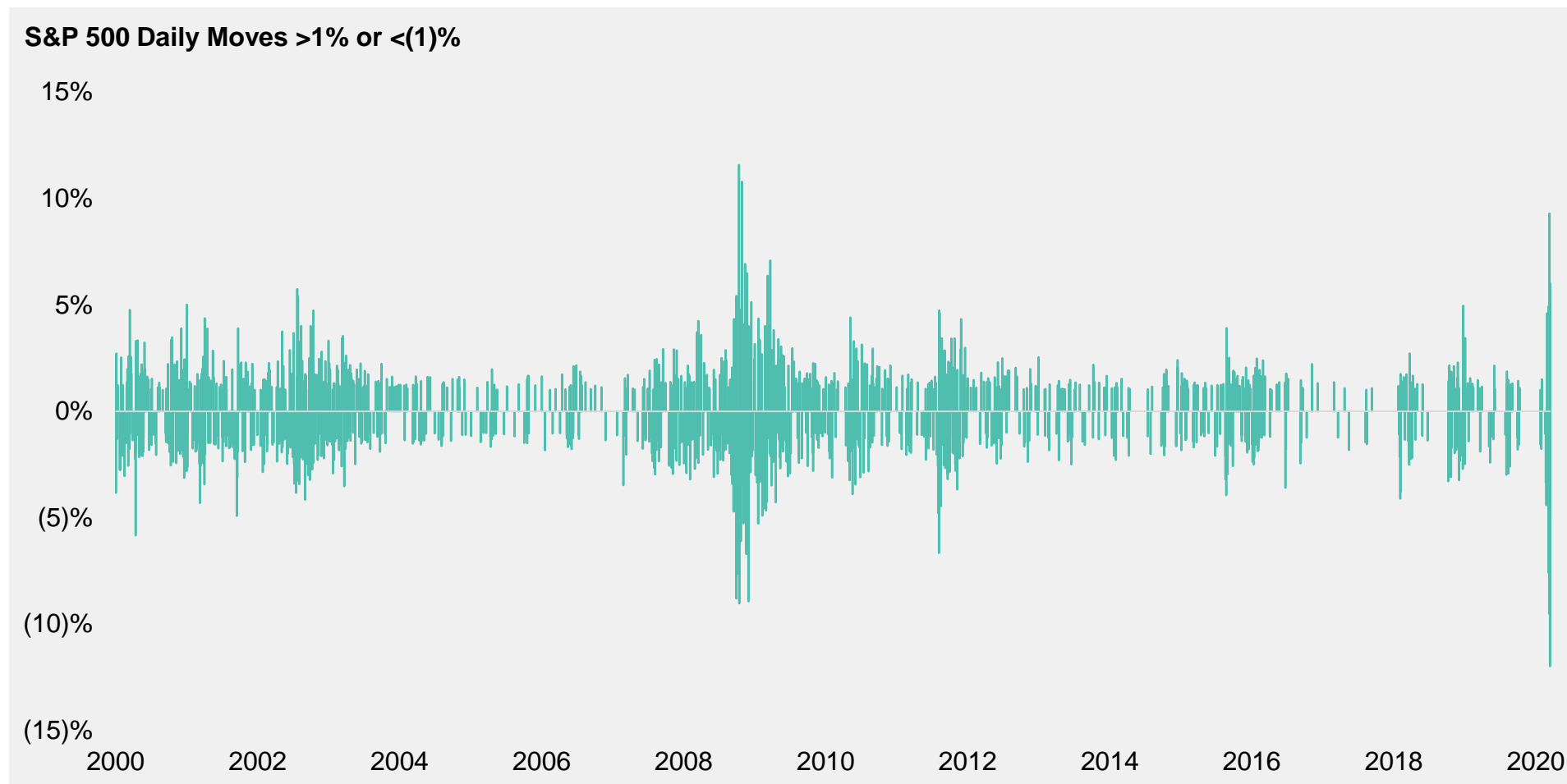


**Past performance does not guarantee future results.**

As of March 19, 2020

Source: Factset, Standard & Poor's, AB Analysis

## 2020 In Perspective – One Day Moves (Since 2000)



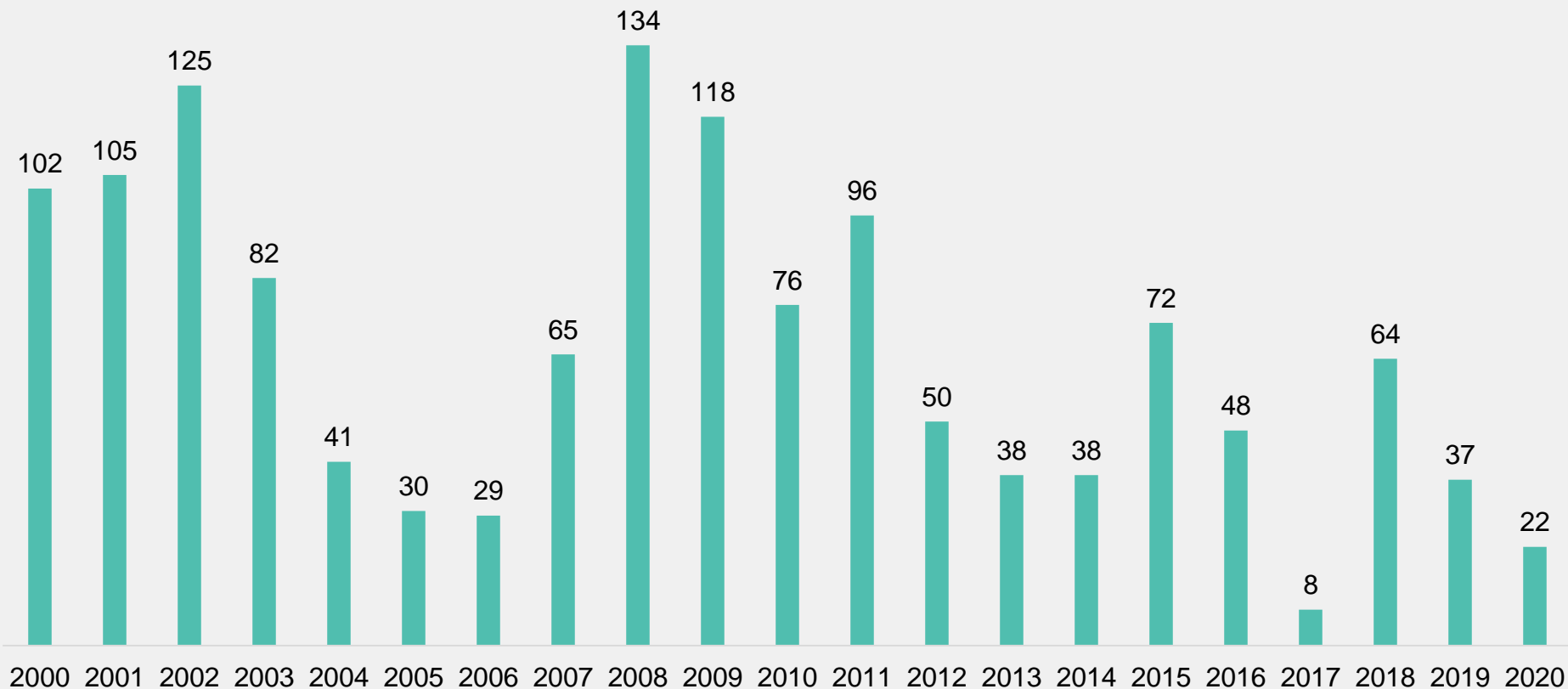
**Past performance does not guarantee future results.**

As of March 19, 2020

Source: Factset, Standard & Poor's, AB Analysis

# Quantifying Large Moves Since 2000

S&P 500 Daily Moves >1% or <(1)%



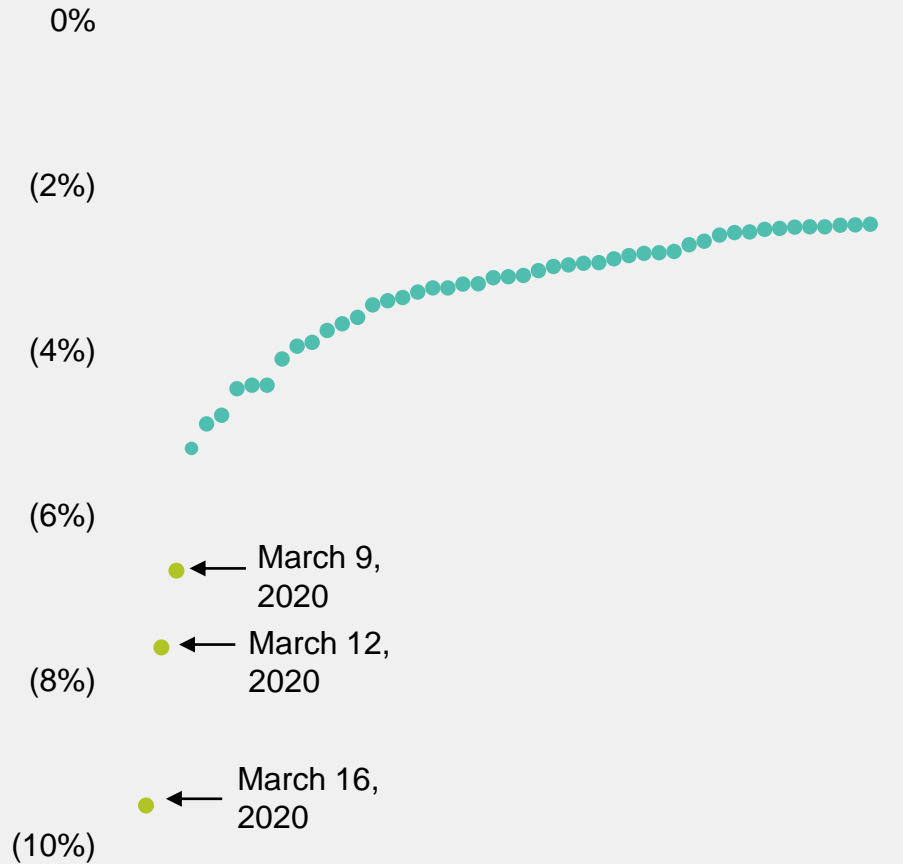
Past performance does not guarantee future results.

As of March 19, 2020

Source: Factset, Standard & Poor's, AB Analysis

# March 2020's Large Declines In Perspective

50 Largest 1-Day Declines in S&P 500, 2010 - Present



50 Largest 1-Day Declines in S&P 500, 2000 - Present



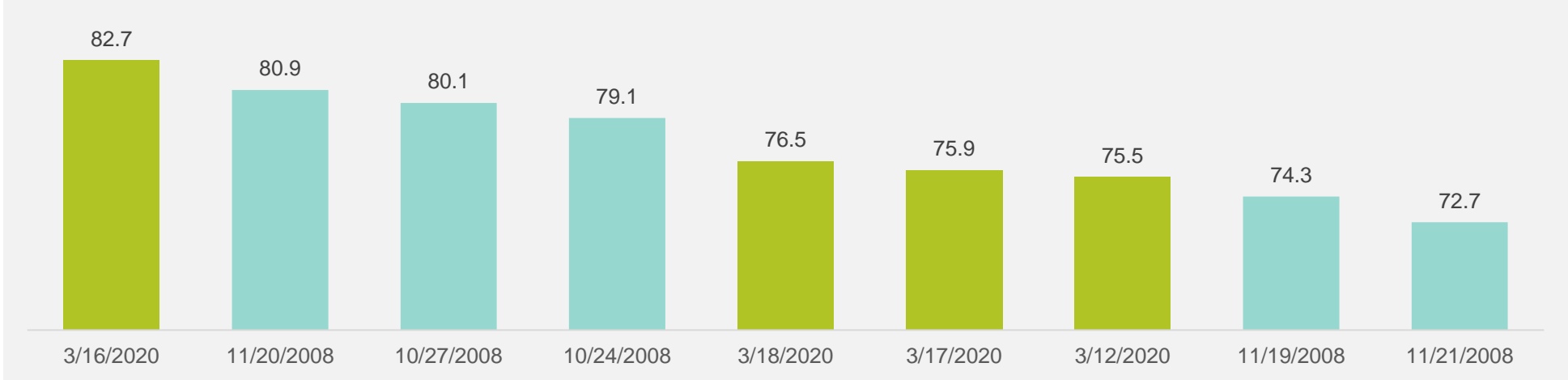
**Past performance does not guarantee future results.**

As of March 19, 2020

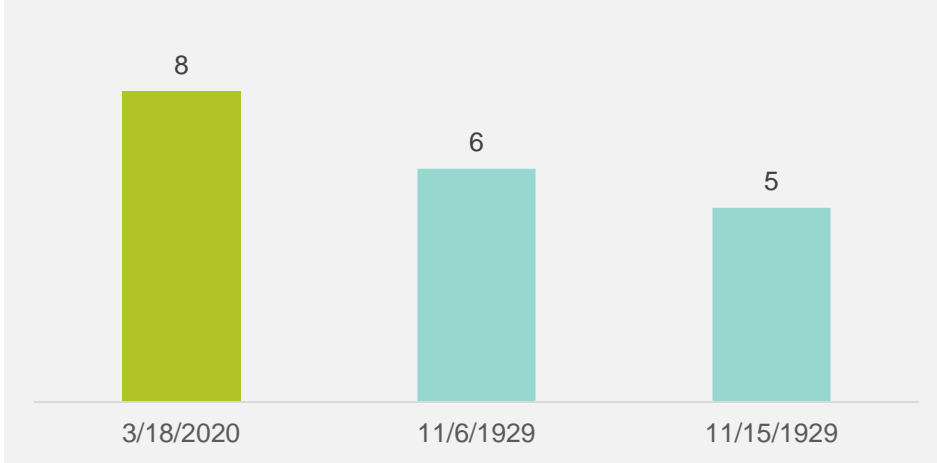
Source: Factset, Standard & Poor's, AB Analysis

# Current Decline & Volatility Among Unique Company

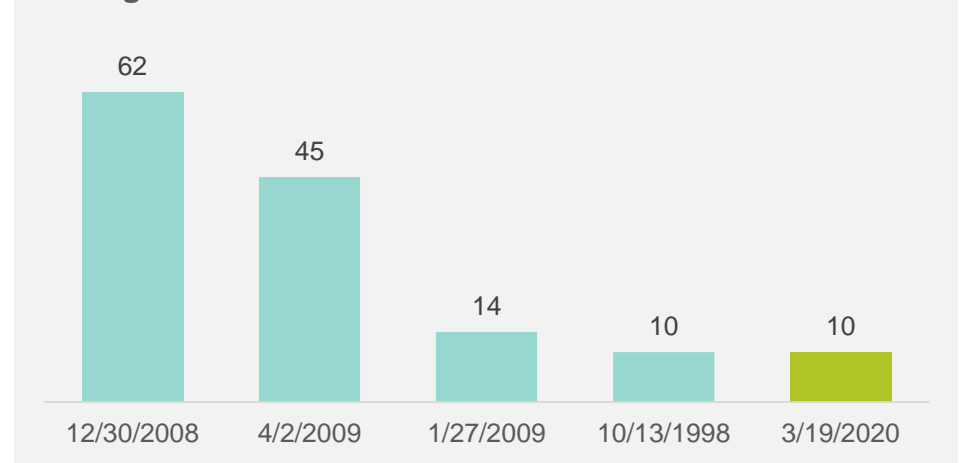
CBOE Volatility Index (VIX) Top 10 Closing Levels



Consecutive Days S&P 500 Absolute Returns at least +/- 4%



Number of Consecutive Days With >40 VIX Closing Level



**Past performance does not guarantee future results.**

As of 3/19/20

Source: Bloomberg, CBOE, S&P, AB

# COVID-19: What's Priced In? An Attempt At Quantification

**2020 S&P EPS and Growth (vs. 2019)**

	\$130	\$136	\$143	\$149	\$156	\$162	\$169	\$175
	(20)%	(16)%	(12)%	(8)%	(4)%	0%	4%	8%
19.0x	(24)%	(20)%	(16)%	(12)%	(8)%	(5)%	(1)%	3%
18.0x	(28)%	(24)%	(20)%	(17)%	(13)%	(10)%	(6)%	EPS +8% P/E 18x
17.0x	(32)%	(28)%	(25)%	(21)%	(18)%	(15)%	(11)%	(8)%
16.0x	(36)%	(33)%	(29)%	(26)%	(23)%	(20)%	(16)%	(13)%
15.0x	(40)%	(37)%	(34)%	(31)%	(28)%	(25)%	(22)%	(19)%

Market's EPS assumption and P/E at end of 2019

Consensus has quickly moved to assuming a double-digit decline in S&P 500 EPS in 2020.

Given that level of earnings contraction, depending on one's P/E assumption, the current market decline seems justified.

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As of March 19, 2020

Source: Factset, Standard & Poor's, AB Analysis



# Market Selloffs Since WWII

Peak Month	Trough Month	Peak to Trough Months	Peak to Trough Fall	Peak to Recovery Months	Weeks from Start to Down 20%
5/29/1946	5/19/1947	12	(25)%	40	15
12/12/1961	6/26/1962	6	(27)%	16	24
2/9/1966	10/7/1966	8	(20)%	13	34
11/29/1968	5/26/1970	18	(33)%	28	73
1/11/1973	10/3/1974	21	(45)%	42	47
11/28/1980	8/12/1982	20	(20)%	22	89
8/25/1987	10/19/1987	2	(33)%	21	8
9/1/2000	10/9/2002	25	(47)%	74	27
10/9/2007	3/9/2009	17	(55)%	54	40
2/19/2020	N/A	N/A	(29)%	N/A	3
Average Excluding 2020		16	(35)%	34	40

As of March 19, 2020

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Bear markets are defined as a market decline of 20% from its previous high through the lowest close after the 20% decline. All returns in this analysis are based on the S&P 500 total return index, which includes gains from price returns and dividend returns. Recoveries are defined as the day after the trough that the total return index reaches a level higher than the prior peak.

Source: Bloomberg, S&P, AB

# Geopolitical Events Only Rarely Have a Lasting Market Impact

## Select Geopolitical Events since 1970 and S&P 500 Returns (%)

Event	First				
	Trading Day	1 Week	1 Month	1 Quarter	1 Year
Watergate	6/19/1972	(0.1)	(1.4)	0.4	(3.0)
Yom Kippur War*	10/8/1973	1.4	(3.9)	(10.0)	(43.2)
Three Mile Island Accident	3/28/1979	(0.1)	(0.7)	(0.2)	(4.2)
Iran Hostage Crisis*	11/5/1979	(1.0)	3.6	12.3	24.3
Reagan Assassination Attempt*	3/30/1981	0.6	0.6	(1.6)	(16.9)
Challenger Space Shuttle	1/28/1986	3.2	9.3	16.8	32.0
Iran-Contra Affair	11/3/1986	0.7	2.1	12.3	3.2
Iraq Invades Kuwait*	8/2/1990	(4.7)	(8.9)	(12.8)	12.8
Desert Storm/First Gulf War*	1/17/1991	4.5	17.2	23.6	36.6
LA Riots	4/29/1992	2.0	2.3	2.8	10.2
WTC Bombing (1993)	2/26/1993	1.2	2.1	2.2	8.3
Oklahoma City Bombing	4/19/1995	1.4	3.1	11.3	30.5
Centennial Park Olympic Bombing	7/29/1996	4.3	4.6	10.8	50.6
Kenya/Tanzania Embassy Bombings	8/7/1998	(1.3)	(10.5)	5.1	21.0
USS Cole Bombing*	10/12/2000	(1.6)	0.2	(2.5)	(18.5)
Bush-Gore Hanging Chad*	11/7/2000	(5.6)	(5.5)	(5.3)	(20.9)
9/11*	9/17/2001	(4.9)	(0.9)	4.7	(15.5)
War in Afghanistan*	10/8/2001	1.9	3.0	9.8	(24.2)

**Key Takeaway:** Stocks have generally shrugged off geopolitical events, since they rarely have a lasting impact on the business cycle.

Event	First				
	Trading Day	1 Week	1 Month	1 Quarter	1 Year
SARS**	2/11/2003	(0.1)	(3.2)	12.2	39.5
Second Gulf War	3/20/2003	(0.5)	2.4	14.3	29.2
Madrid Train Bombings	3/11/2004	0.0	1.5	1.5	9.5
Orange Revolution-Ukraine	11/22/2004	1.1	2.2	3.1	8.6
Asian Tsunami	12/27/2004	0.3	(3.4)	(2.7)	6.8
London Bombings	7/7/2005	2.4	2.7	0.2	8.6
Hurricane Katrina	8/29/2005	1.1	1.0	5.7	9.5
Arab Spring	12/17/2010	1.2	4.2	1.6	0.2
Hurricane Sandy	10/29/2012	1.1	(0.0)	7.0	27.3
Boston Marathon Bombing	4/15/2013	(2.1)	3.0	6.3	16.7
Russia/Ukraine/Crimea	2/27/2014	1.6	0.5	3.5	16.8
Greek Referendum	11/5/2015	(1.2)	(0.3)	(8.4)	1.4
Brexit	6/24/2016	(0.7)	3.1	3.0	17.8
Trump Surprise Election Win	11/8/2016	1.6	5.4	8.1	24.0
Hurricane Harvey/Irma/Maria	8/25/2017	1.4	2.8	7.2	20.2
US-China Trade War†	1/22/2018	2.2	(2.6)	(3.7)	(3.1)
Coronavirus Outbreak	2/19/2020	(7.1)	(28.7)	N/A	N/A

Summary	1 Week	1 Month	1 Quarter	1 Year
Average	0.1	0.2	4.1	9.3
% of Events Negative	40	37	29	29
Conflict/War Avg.	0.7	1.7	4.7	4.7
Terrorism Avg.	(0.1)	0.7	4.4	12.4
Political Avg.	(0.2)	1.1	2.4	5.3
Environmental Avg.	0.8	(0.1)	3.4	11.9
Social Avg.	(0.5)	(3.9)	7.6	16.2

As of 3/19/20

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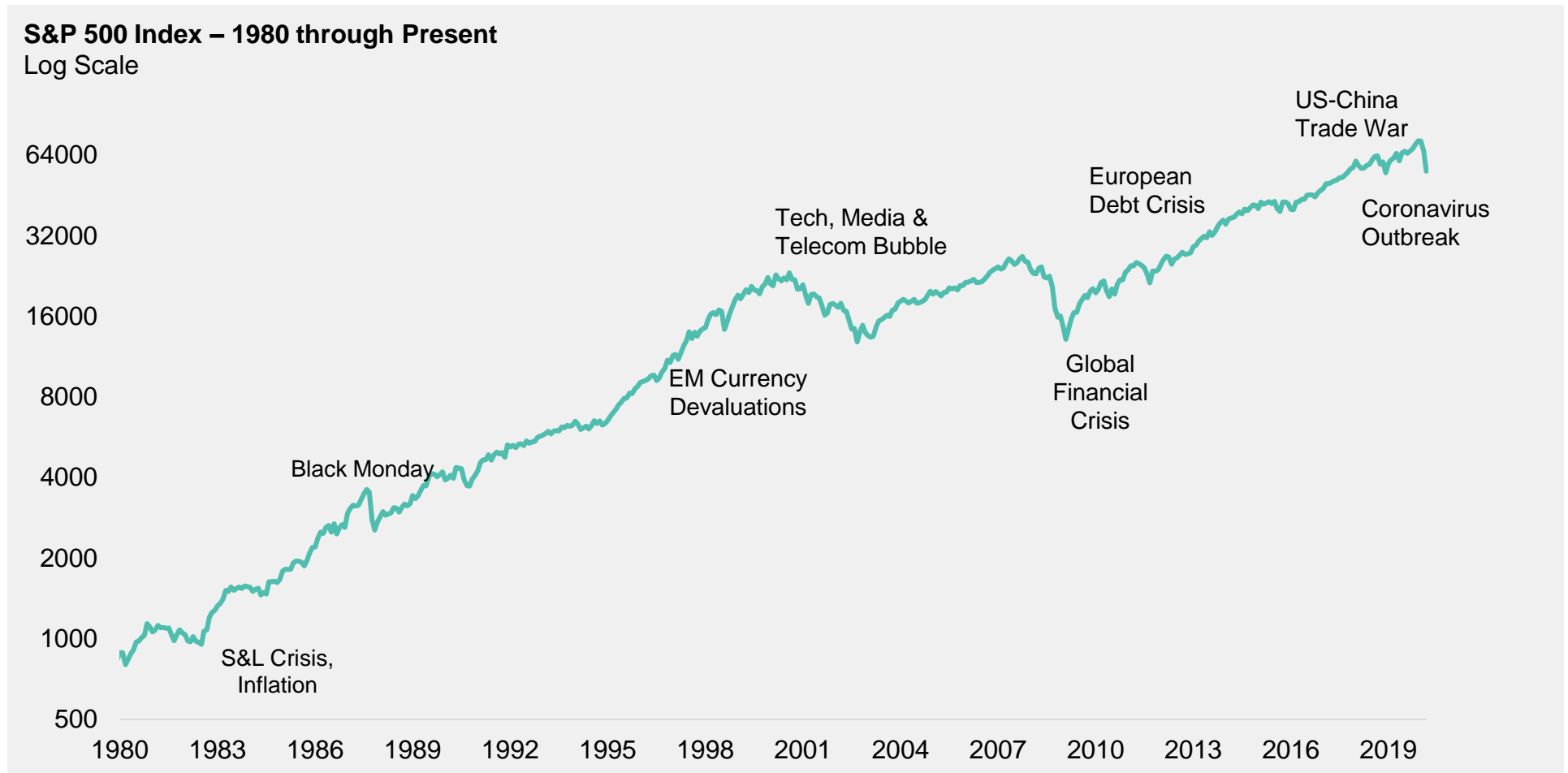
\*Denotes the geopolitical event occurred during a recession or six months prior to the start of a recession

\*\*Date that China officially notified the WHO of the outbreak.

†Tariffs on imports of solar panels and washing machines imposed.

Source: FactSet, National Bureau of Economic Research, World Health Organization, S&P, and AB

# The Price of Long-Term Growth Has Always Been Periodic Uncertainty



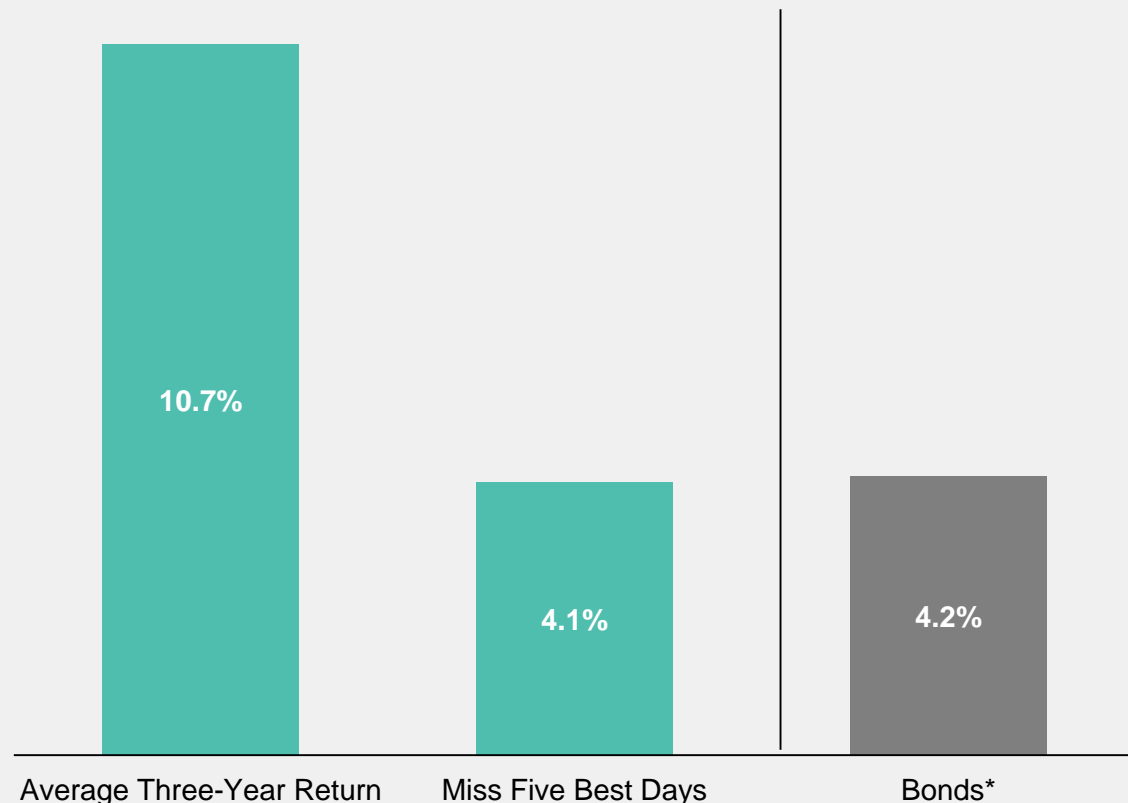
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Source: Bloomberg, S&P and AB

# Timing the Market Means Getting Out *and* Getting Back In

S&P 500 Rolling Three-Year Returns, Annualized from 1988-2019



## The Cost of Missing Out

- Getting out in advance of a major sell off is difficult to time. Getting back in is equally difficult.
- Further, the after-tax impact makes the hurdle for success even higher.
- More often than not, investors miss out on further upside rather than downside.
- Missing just the five best days over a three year period can be detrimental.

As of March 19, 2020

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\*Bonds represented by the Lipper Short/Intermediate Municipal Bond Fund Average

Source: Bloomberg, Lipper, S&P and AB

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