



Market Strategy
Strategic Advisory Solutions

Market and Economic Perspectives

Riding the Storm Out

Candice Tse
Managing Director, US Head of Market Strategy
GSAM, Strategic Advisory Solutions

July 2, 2020

Executive Summary

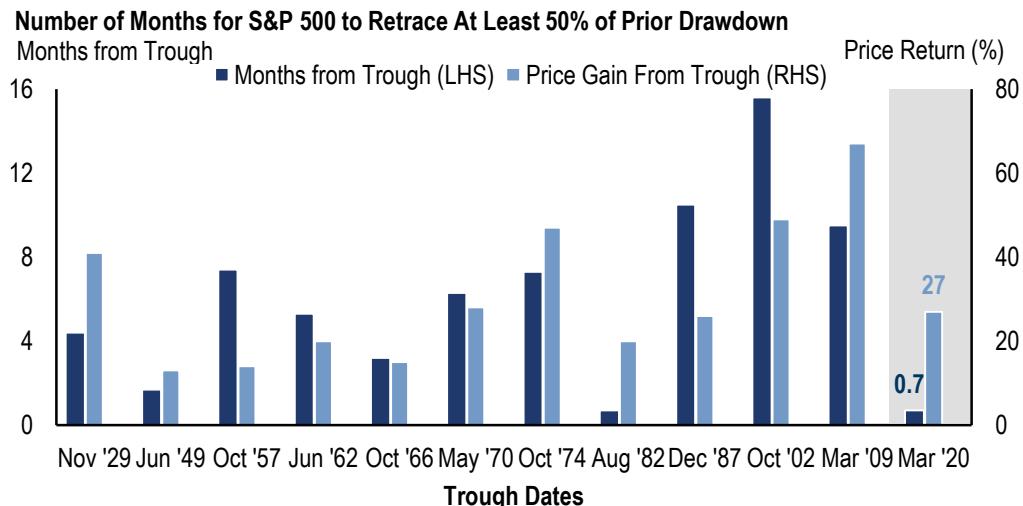
Unprecedented, Uncertain, and Unbelievable

- ❑ **Unprecedented Risk:** Over 80% of COVID-19 cases are mild or asymptomatic, forcing ~95% of economies to lockdown.
- ❑ **Record Speed:** The S&P 500's quick plunge into bear market territory and partial retracement have been historically swift in both directions.
- ❑ **Record Uncertainty:** On March 16th, the VIX Index touched an all-time high of 82.7, reflecting concerns about the scope of coronavirus impact and strained market illiquidity.
- ❑ **Record Lows:** Investors fleeing to safe haven investments pushed the entire US Treasury curve below 1.0% for the first time in history. Additionally, the May WTI Crude Oil contract closed on April 20th at -\$38, reflecting the collision of contract expiration, excess supply, plummeting demand, and limited storage capacity.
- ❑ **Record Highs:** Cumulatively, US Initial Jobless Claims have risen over 47 million since mid-March, suggesting a spike in the unemployment rate to at least 23%.
- ❑ **Record Policy:** As the US CARES Act approaches 13% of US GDP, fiscal policy has been sizeable and well-targeted. The Federal Reserve has lowered interest rates, expanded liquidity facilities, and provided an open-end commitment to broadened balance sheet expansion totaling at least \$5T in financial support.
- ❑ **Bottom Line:** Physical separation policies appear to be working, but have simultaneously unleashed a sudden global economic deceleration. In our opinion, the recovery will be similar to the decline...idiosyncratic and discriminant.

Top 10 Largest Single Day S&P 500 Moves

Date	Positive Return	Date	Negative Return
10/13/08	12%	10/19/87	(20%)
10/28/08	11%	3/16/20	(12%)
3/24/20	9%	3/12/20	(10%)
3/13/20	9%	10/15/08	(9%)
10/21/87	9%	12/1/08	(9%)
3/23/09	7%	9/28/08	(9%)
4/6/20	7%	10/26/87	(8%)
11/13/08	7%	10/9/08	(8%)
11/24/08	6%	3/9/20	(8%)
3/10/09	6%	10/27/97	(7%)

A Swift Retracement

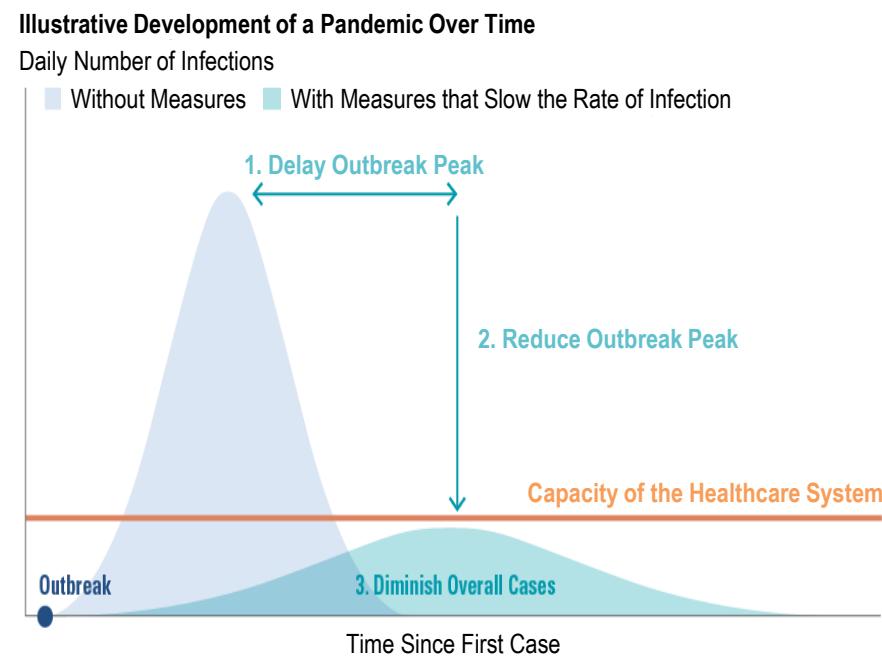
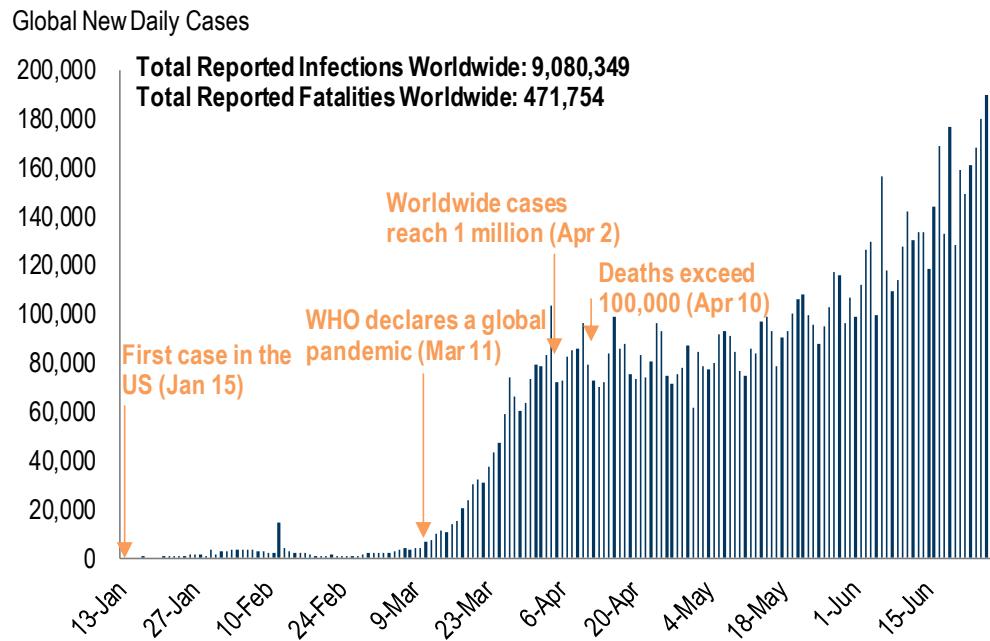


COVID-19 Update



Asset
Management

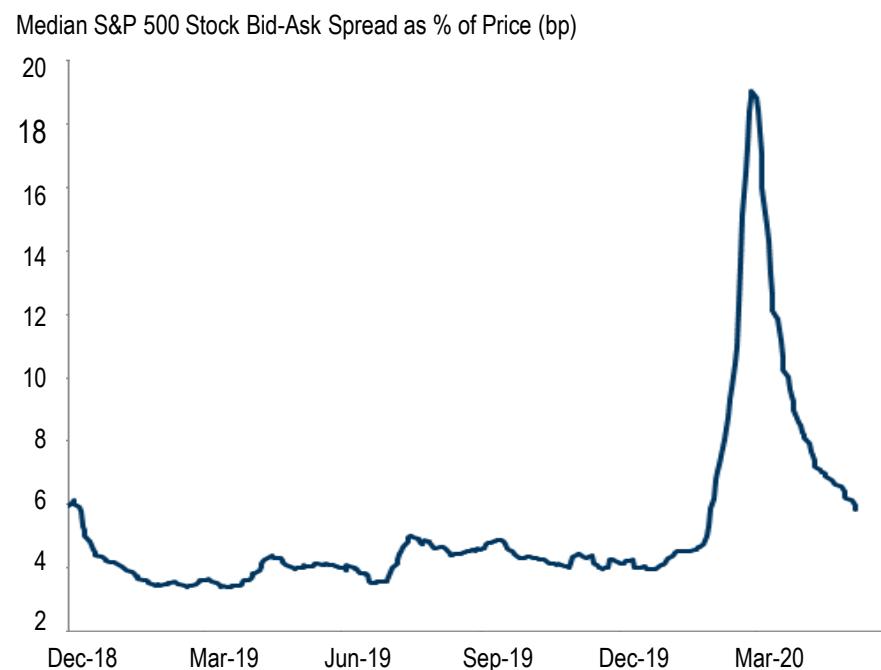
Cases	Virus	Shutdown	Vaccine	Treatment
>10mm Total confirmed cases worldwide	2.3 Estimated coronavirus natural reproduction number	~95% Of global economies were placed under lockdown	12-18 Month condensed timeline to vaccine development	250 Potential treatments, including drug screening initiatives



Source: Bloomberg, World Health Organization, and GSAM. As of June 29, 2020. Past performance does not guarantee future results, which may vary.

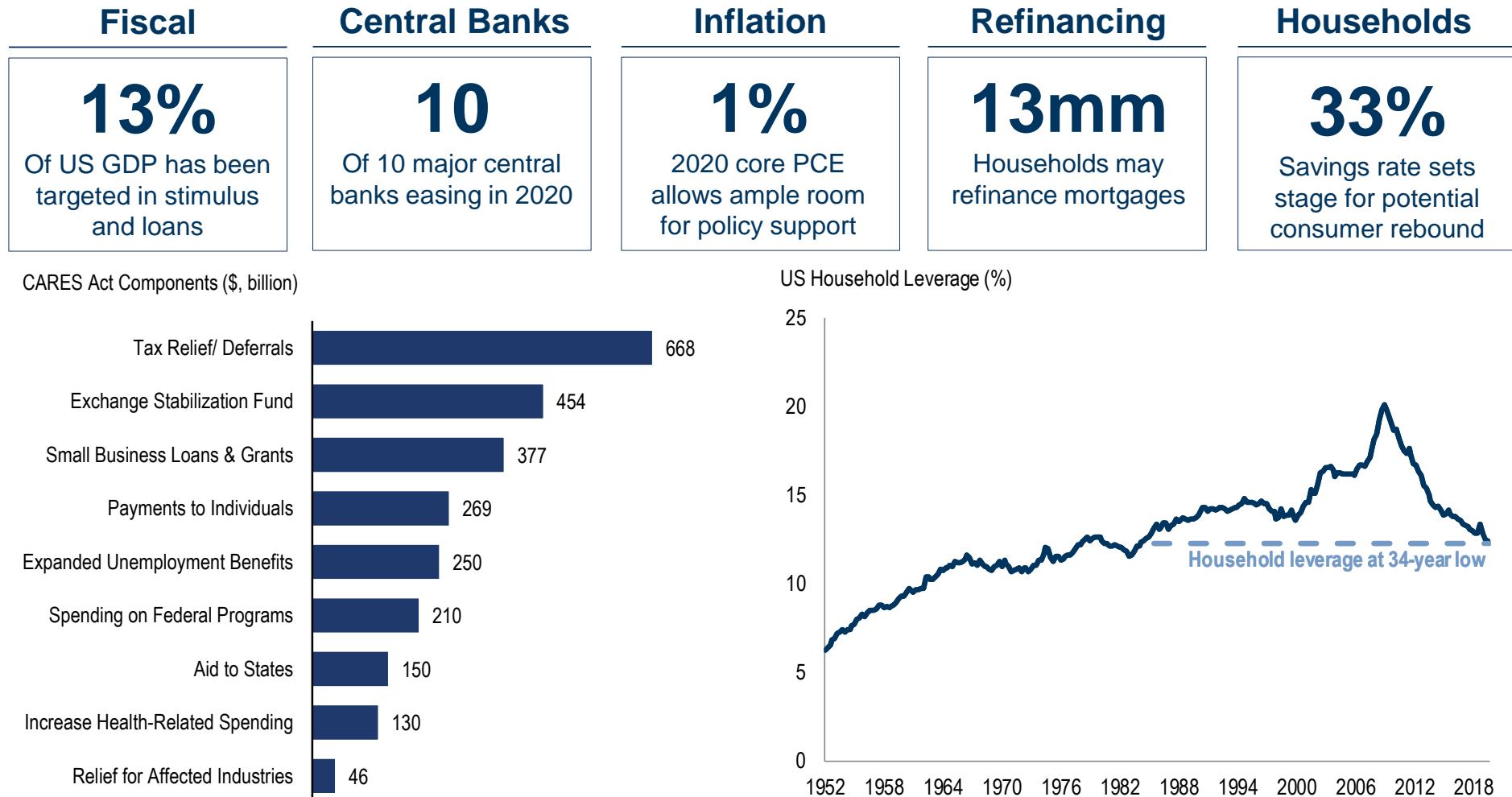
Sources of Volatility

Labor	Elections	Regulation	Credit	Liquidity
47mm Initial Jobless Claims over the last 14 weeks	270 Electoral votes to win, key toss up states: AZ, MI, PA, WI, NC, FL	20% Concentration of large tech companies on Washington DC's radar	12% Energy company representation in the US High Yield Index	72% US equity volume is algorithmically traded



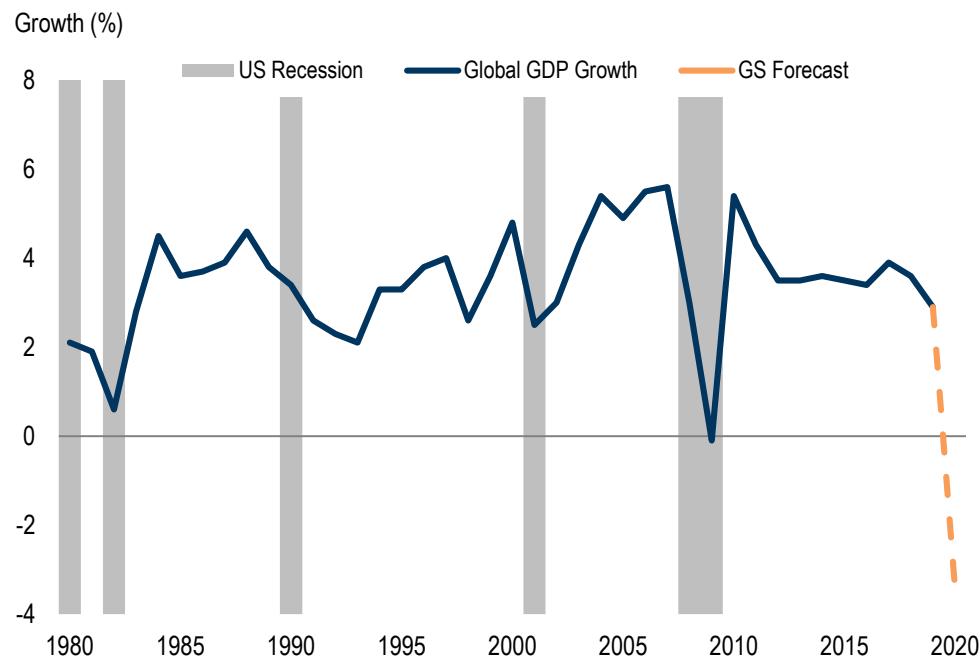
Source: Bloomberg, Goldman Sachs Global Investment Research, and GSAM. As of June 29, 2020. Bottom Left Chart Notes: Chart shows the market capitalization of the five largest companies in the S&P 500 as a share of the S&P 500 Index total. Bottom Right Chart Notes: Chart shows the 10-day average of the median bid-ask spread of companies in the S&P 500 index. "Bp" refers to basis point, equal to 1/100th of 1% or 0.01%. **Past performance does not guarantee future results, which may vary.**

Sources of Stability



Top Table Source: Haver, Federal Reserve, Goldman Sachs Global Investment Research, CNBC, and GSAM. As of May 31, 2020. 'PCE' refers to personal consumption expenditures, the Federal Reserve's target measure of inflation. 'GFC' refers to the Global Financial Crisis, which began in 2007. Bottom Left Chart Source: Goldman Sachs Global Investment Research and GSAM. As of March 31, 2020. Bottom Right Chart Source: Federal Reserve of St Louis and GSAM. As of December 31, 2019, latest available data. Leverage refers to household liabilities as a percent of household assets. **Past performance does not guarantee future results, which may vary.**

Coronavirus is materially impacting the global growth outlook



Things We Know

- Genome sequence
- Vast majority have mild or no symptoms
- Very rare for asymptomatic cases to be contagious, though pre-symptomatic can be
- Transmits more easily indoors than outside
- Fatalities concentrated among elderly
- SARS comparisons unfair as COVID-19 is contagious long before symptoms show, while SARS was critical before contagious

Things We Don't Know

- Seasonal impact
- Mutation or recurrence
- Post-infection immunity

US economic growth drag from COVID-19 likely concentrated in H1 2020



Key Drivers for Lower Growth

- Sharp contraction in March and April
- Consumers and businesses continue to cut back on spending
- Manufacturing and construction recover faster than services
- Policy response mitigates second round income effects

Global Growth Outlook



Growth expectations have been revised

Percent Change YoY	2018	2019	2020 (f)		2021 (f)	
			GS	Cons.	GS	Cons.
US	2.9	2.3	-4.2	-3.9	5.8	3.8
Japan	0.8	1.1	-5.6	-3.4	3.3	1.7
Euro Area	1.9	1.2	-9.4	-5.5	8.8	4.5
UK	1.4	1.3	-10.4	-5.1	7.0	4.0
China	6.6	6.1	3.0	2.0	6.5	8.0
India	7.4	5.2	-3.2	4.5	4.7	2.3
Russia	2.3	1.3	-4.0	-3.0	5.0	3.0
Brazil	1.1	1.2	-7.7	-3.0	4.0	2.9
Developed Markets	2.3	1.8	-6.0	-4.0	6.4	3.5
Emerging Markets	5.1	4.3	-1.1	1.0	6.0	5.5
World	3.8	3.1	-3.4	-1.5	6.1	3.6

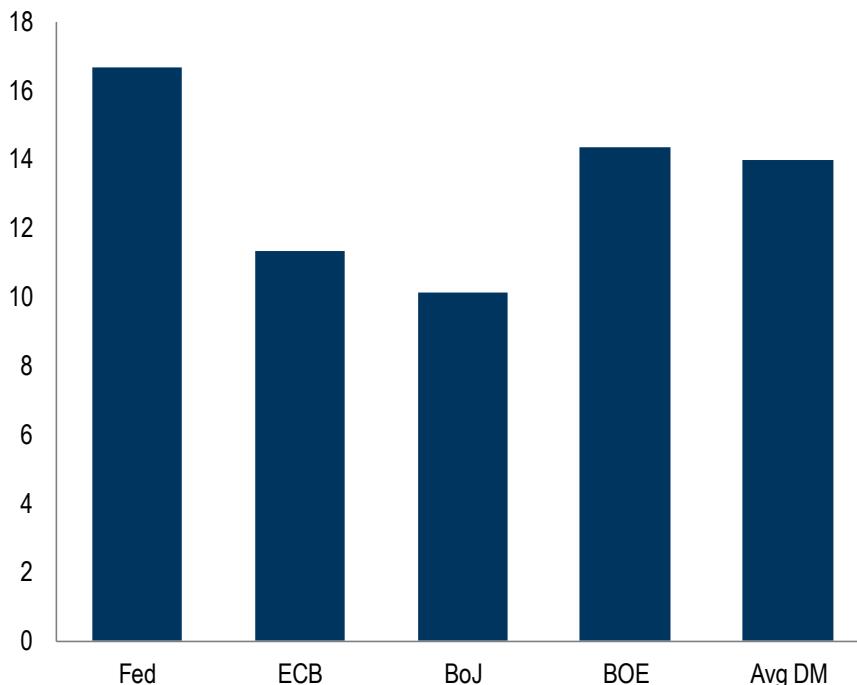
Source: Goldman Sachs Global Investment Research and GSAM. As of June 23, 2020. 'F' refers to forecast. 'Cons.' refers to consensus expectations. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**

Policy Response

Aggressive policy has been supportive of markets

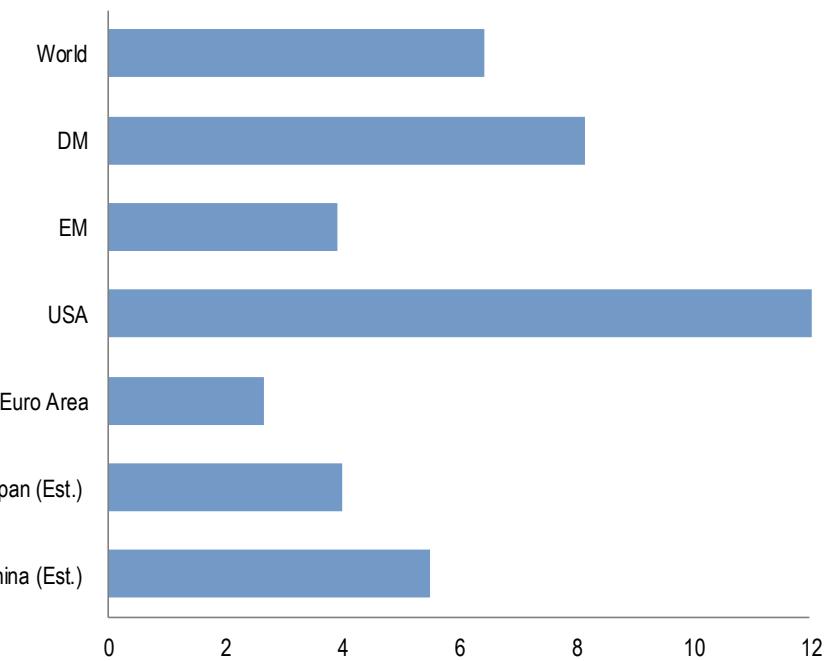
Monetary Policy

2020 Est. Change in Central Bank Balance Sheets (% of GDP)



Fiscal Policy

2020 Discretionary Fiscal Easing (% of GDP)



Source: Goldman Sachs Global Investment Research and GSAM. As of May 31, 2020. 'Avg DM' refers to the GDP-weighted average change in central bank balance sheets for the following: Fed, ECB, BoJ, BOE, and RBA and BOC (not shown on the chart).

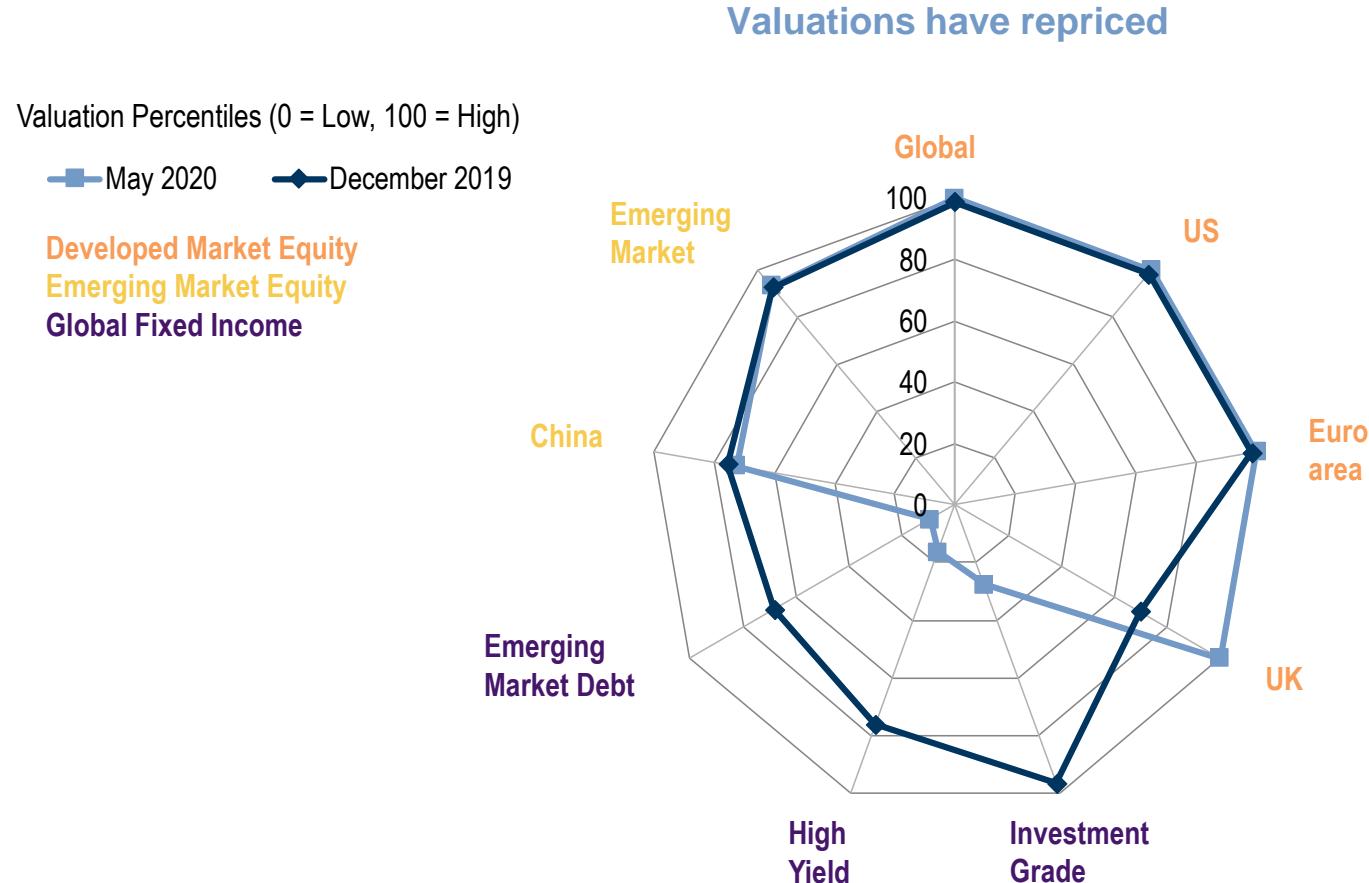
Global Markets Outlook



Risk assets may moderate going forward

	Current Level	12m Forecast	Forecast Upside/Downside (%)
Equities	Index level		Total Return
S&P 500 (\$)	3098	3100	2.0
Stoxx Europe 600 (€)	365	380	7.3
Topix (¥)	1583	1675	8.3
10 Year Gov. Bonds	Yield (%)		Total Return
US	0.70	1.24	-3.9
Germany	-0.42	-0.06	-3.3
Japan	0.01	0.1	-0.5
UK	0.24	0.55	-2.2
Corporate Bonds	Spread		Total Return
Bloomberg Barclays US IG	147	125	1.3
Bloomberg Barclays US HY	577	466	7.2
iBoxx EUR IG	149	121	1.3
BAML EUR HY	506	425	5.1
Commodities	Spot Price		Spot Return
WTI (\$/bbl)	39	48.5	24.9
Copper (\$/mt)	5829	6500	11.5
Gold (\$/troy oz)	1741	2000	14.9

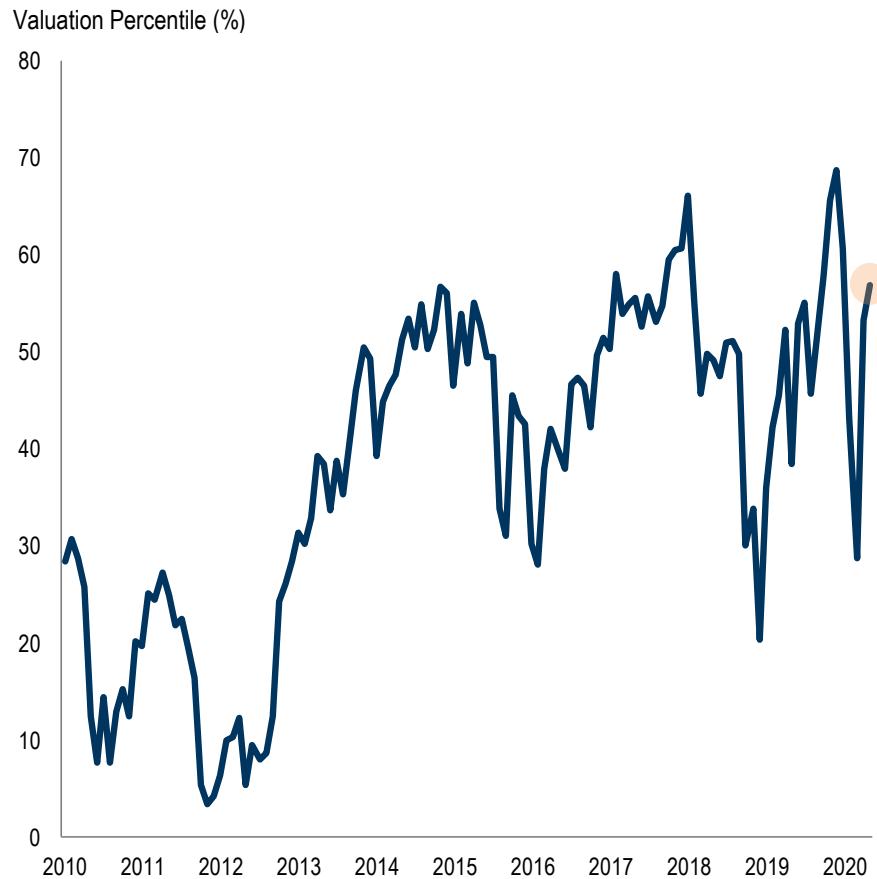
Source: Goldman Sachs Global Investment Research and GSAM. As of June 22, 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**



Source: Bloomberg Barclays and GSAM. Analysis is from May 2005, the common inception point. As of May 31, 2020. Valuation Percentile of equity asset classes refers to the forward Price-to-Earnings Ratio of each asset class as a percentile of the asset class' historical Price-to-Earnings ratio on a monthly basis. For fixed income asset classes, global valuation percentile refers to spreads as a percentile of historical spreads for each asset class. Global refers to the MSCI World Index. US refers to the S&P 500 Index. Euro area refers to the Euro Stoxx 50 Index. UK refers to the FTSE 100 Index. Global Investment Grade refers to Global Investment Grade Corporate Credit measured by the Bloomberg Barclays Global Aggregate Corporate Index. Global High Yield refers to the Bloomberg Barclays Global High Yield Index. Emerging Market Debt refers to the Bloomberg Barclays Emerging Markets USD Aggregate Index. China refers to the MSCI China Index. Emerging Markets refers to the MSCI Emerging Market Index. **Past performance does not guarantee future results, which may vary.**

Global Equity Valuation

The current level of global equity valuation provides a potentially attractive entry point



Valuation %ile		Average Cumulative Forward Return			
		3m	6m	12m	24m
0	10	4%	10%	17%	25%
10	20	2%	5%	12%	32%
20	30	2%	5%	14%	40%
30	40	3%	4%	7%	13%
40	50	1%	1%	5%	14%
50	60	2%	4%	11%	20%
60	70	3%	6%	7%	12%
70	80	2%	5%	9%	14%
80	90	2%	4%	5%	16%
90	100	-2%	-3%	-3%	-3%

Valuation %ile		Frequency of Positive Returns			
		3m	6m	12m	24m
0	10	64%	76%	82%	90%
10	20	68%	72%	91%	98%
20	30	67%	70%	88%	100%
30	40	74%	74%	67%	72%
40	50	59%	62%	63%	58%
50	60	65%	65%	68%	68%
60	70	67%	67%	62%	75%
70	80	62%	68%	74%	76%
80	90	65%	74%	72%	78%
90	100	43%	38%	44%	48%

Source: Goldman Sachs Global Investment Research and GSAM as of May 31, 2020. Valuation for the MSCI ACWI Index from a combination of NTM P/E, LTM P/E, LTM P/B, and LTM P/D data. Analysis from January 31, 1973- May 31, 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**

US Investment Grade Valuation

Attractive probabilities and possibilities



OAS Band	Average Cumulative Forward Return				
	3m	6m	12m	24m	
>=300	---	5%	11%	21%	32%
>=200	<300	0%	0%	5%	18%
>=100	<200	2%	4%	7%	18%
<100	---	2%	4%	7%	13%

OAS Band	Frequency of Positive Returns				
	3m	6m	12m	24m	
>=300	---	82%	91%	100%	100%
>=200	<300	43%	43%	71%	100%
>=100	<200	81%	85%	85%	100%
<100	---	74%	83%	93%	94%

Source: Bloomberg Barclays and GSAM. As of May 31, 2020. Chart refers to the Bloomberg Barclays Corporate Investment Grade Index. 'OAS' refers to Options Adjusted Spread. Analysis from January 31, 1973- May 31, 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**

US High Yield Valuation

Attractive probabilities and possibilities



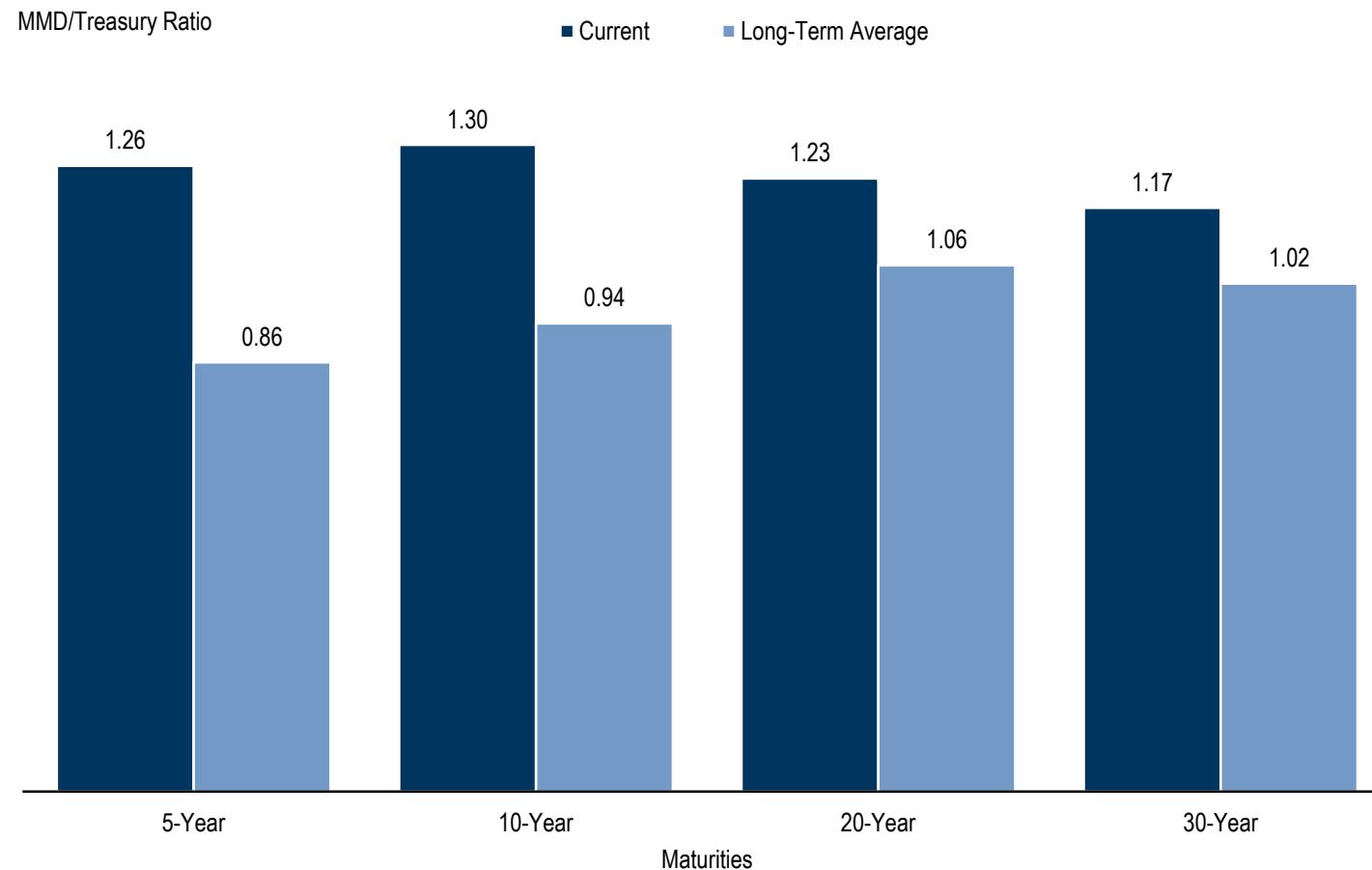
OAS Band	Average Cumulative Forward Return			
	3m	6m	12m	24m
>=900	---	9%	22%	41%
>=700	<900	3%	4%	9%
>=500	<700	1%	3%	6%
>=300	<500	1%	3%	6%
<300	---	2%	3%	5%

OAS Band	Frequency of Positive Returns			
	3m	6m	12m	24m
>=900	---	93%	93%	100%
>=700	<900	76%	73%	70%
>=500	<700	70%	78%	83%
>=300	<500	75%	80%	83%
<300	---	86%	72%	76%

Source: Bloomberg Barclays and GSAM. As of May 31, 2020. Chart refers to the Bloomberg Barclays High Yield Index. 'OAS' refers to Options Adjusted Spread. Analysis from January 31, 1983–May 31, 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**

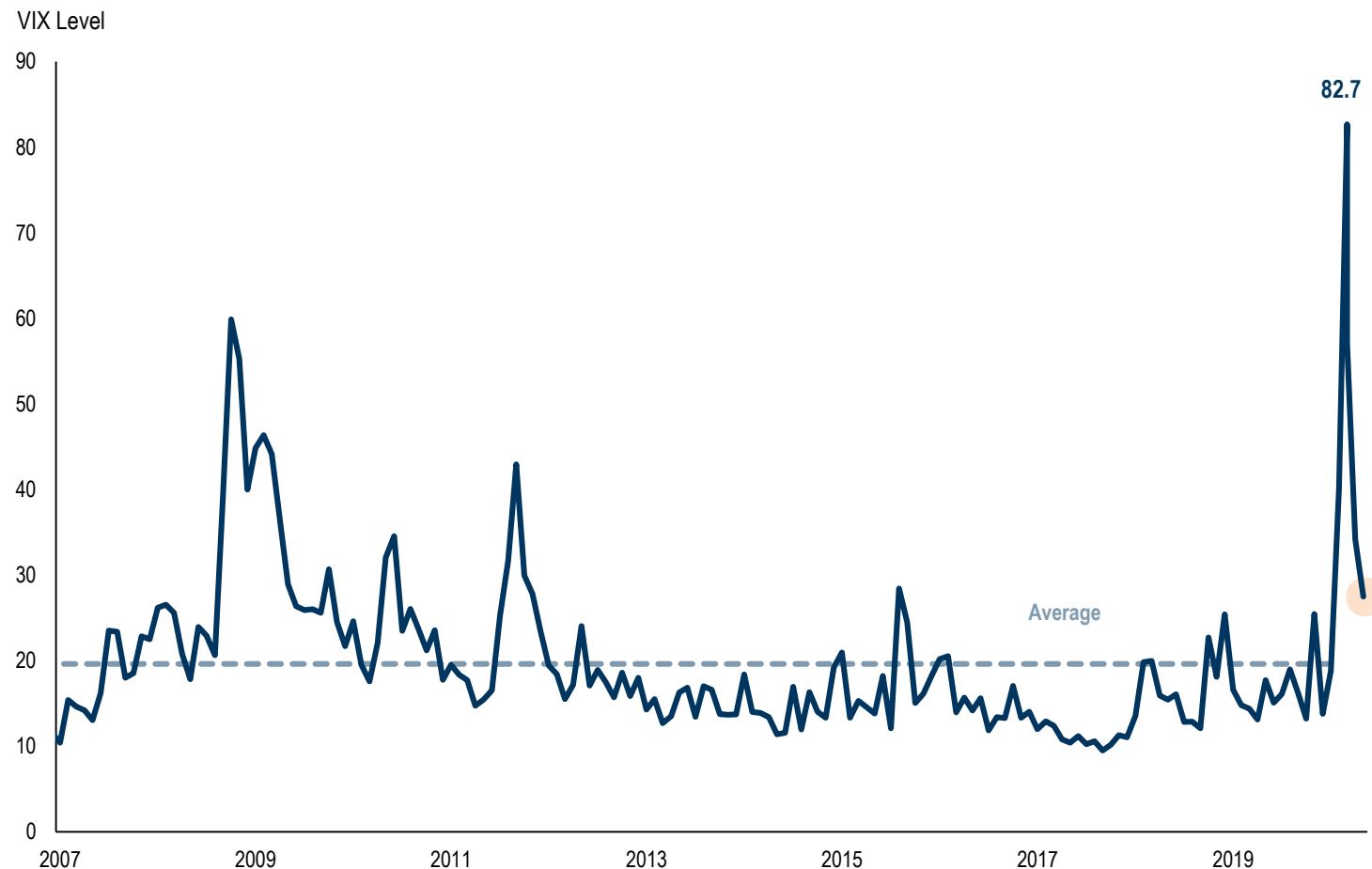
Municipal Bonds

Municipals pressured by liquidity, not credit fundamentals



Source: MMD and GSAM. As of May 31, 2020. 'MMD/Treasury Ratios' refers to the yield of AAA-rated municipal bonds versus US Treasury bonds of the same maturity.

The shift to higher volatility has been both fast and large

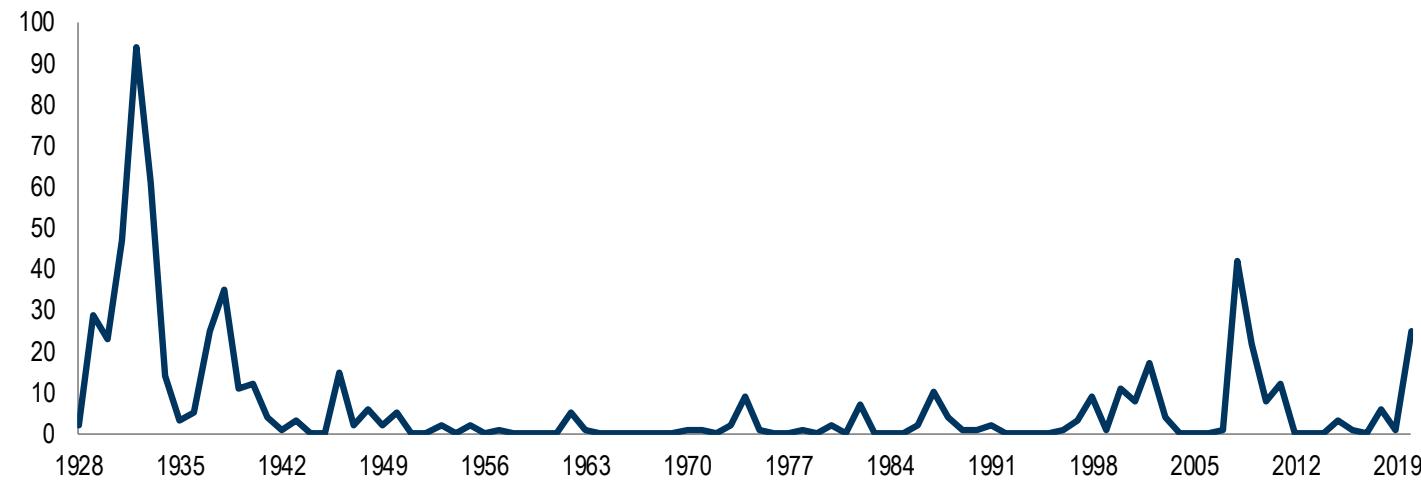


Source: Bloomberg and GSAM. From January 31, 2007 to May 31, 2020. Chart shows the CBOE Volatility (VIX) Index, a common measure of implied S&P 500 Index volatility, and the average during this period. **Past performance does not guarantee future results, which may vary.**

Bear Market Volatility

S&P 500 Daily Price Δ (days)	$\pm 1\%$	$\pm 2\%$	$\pm 3\%$	$\pm 4\%$	$\pm 5\%$
1987	97	40	10	6	5
1990	78	14	1	0	0
2002	126	52	17	6	2
2008	135	72	42	29	17
2020	57	34	25	16	9
Average	61	17	7	3	2

Number of S&P 500 Daily Price Changes $\pm/3\%$



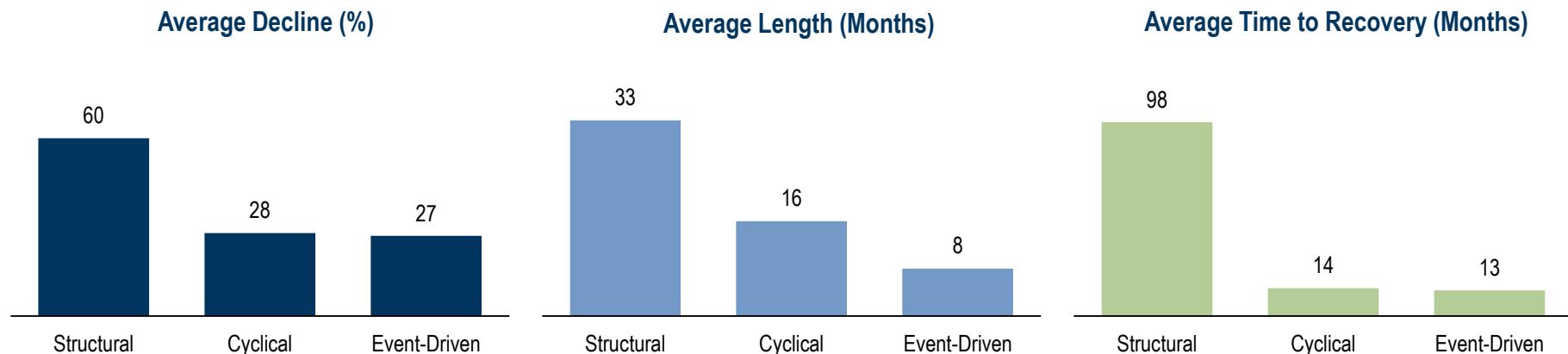
Source: Bloomberg as of May 31, 2020. Chart reflects the number of incremental daily price changes in the S&P 500 during the last 5 bear markets, in 2020, 2008, 2002, 1990, 1987, and across a long-term average using data since 1928, the index inception. Numbers are calculated on a cumulative basis (e.g., number of 1% S&P 500 daily changes will include counts of daily changes exceeding 1%). Past performance does not guarantee future results, which may vary.

Bear Market Review

Characteristics of a Bear Market

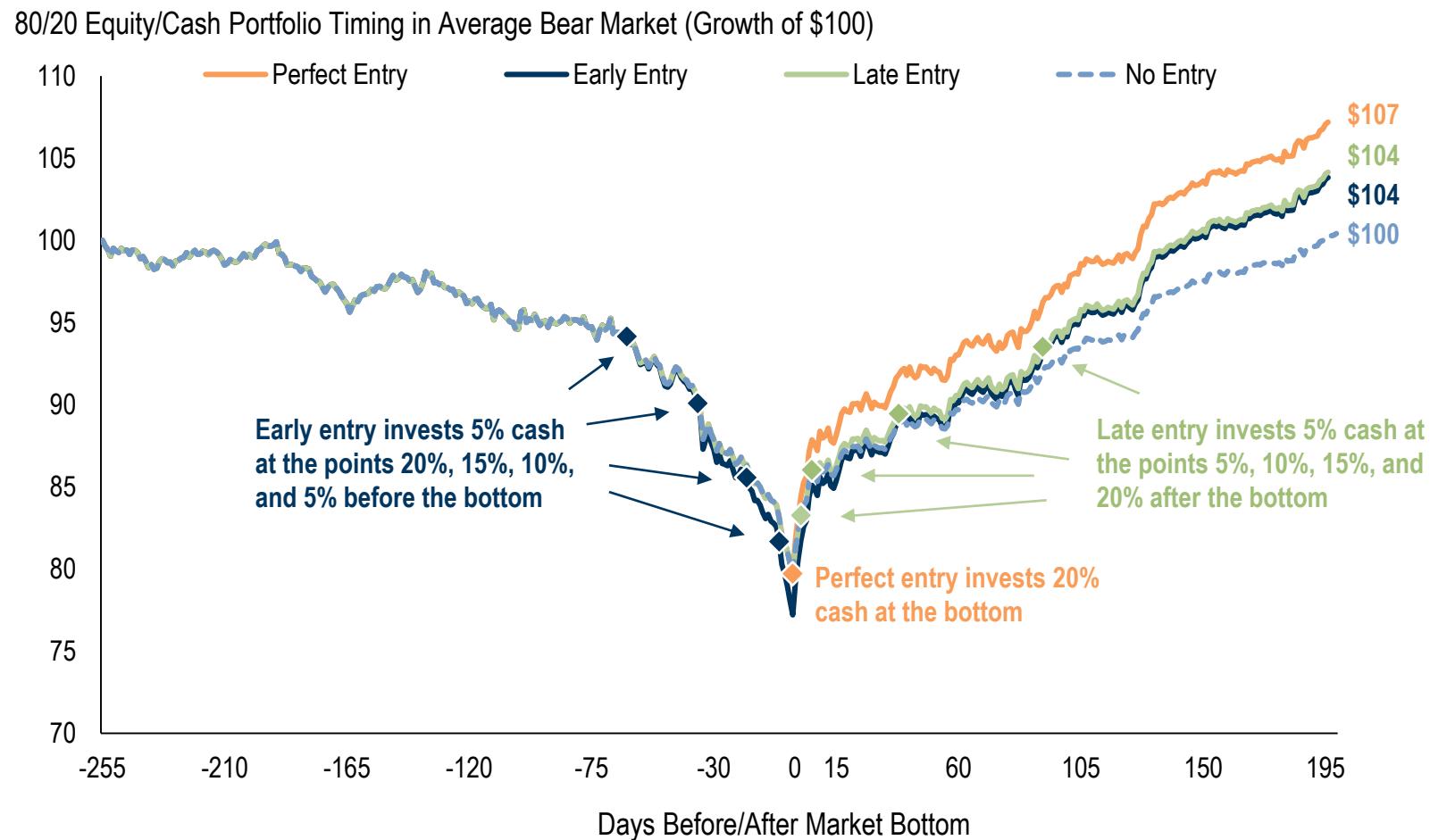
Pre-Bear	Structural	Cyclical	Event-Driven
Rising Rates	✓	✓	Maybe
Exogenous Shock	Maybe	Maybe	✓
Speculative Rise in Equity Prices	✓	✗	✗
Economic Imbalances	✓	✗	✗
Rising Productivity	✓	Maybe	-
Unusual Strength in the Economy	✓	✗	✗
New Era Belief	✓	✗	✗
Post-Peak	Structural	Cyclical	Event-Driven
Economic Recession / Downturn	Usually	Usually	Maybe
Profit Collapse	✓	✓	Maybe
Interest Rates Fall & Trigger Rise in Equity Prices / Fall in Bonds	✗	✓	Usually
Price Shock	✓	✗	✗

US Bear Markets and Recoveries



Source: Goldman Sachs Global Investment Research and GSAM. As of May 31, 2020. Analysis from 1928 to present. Bear market refers to a drawdown from peak-to-trough of 20% or greater.

Cash invested after the bear bottom has still enjoyed favorable results

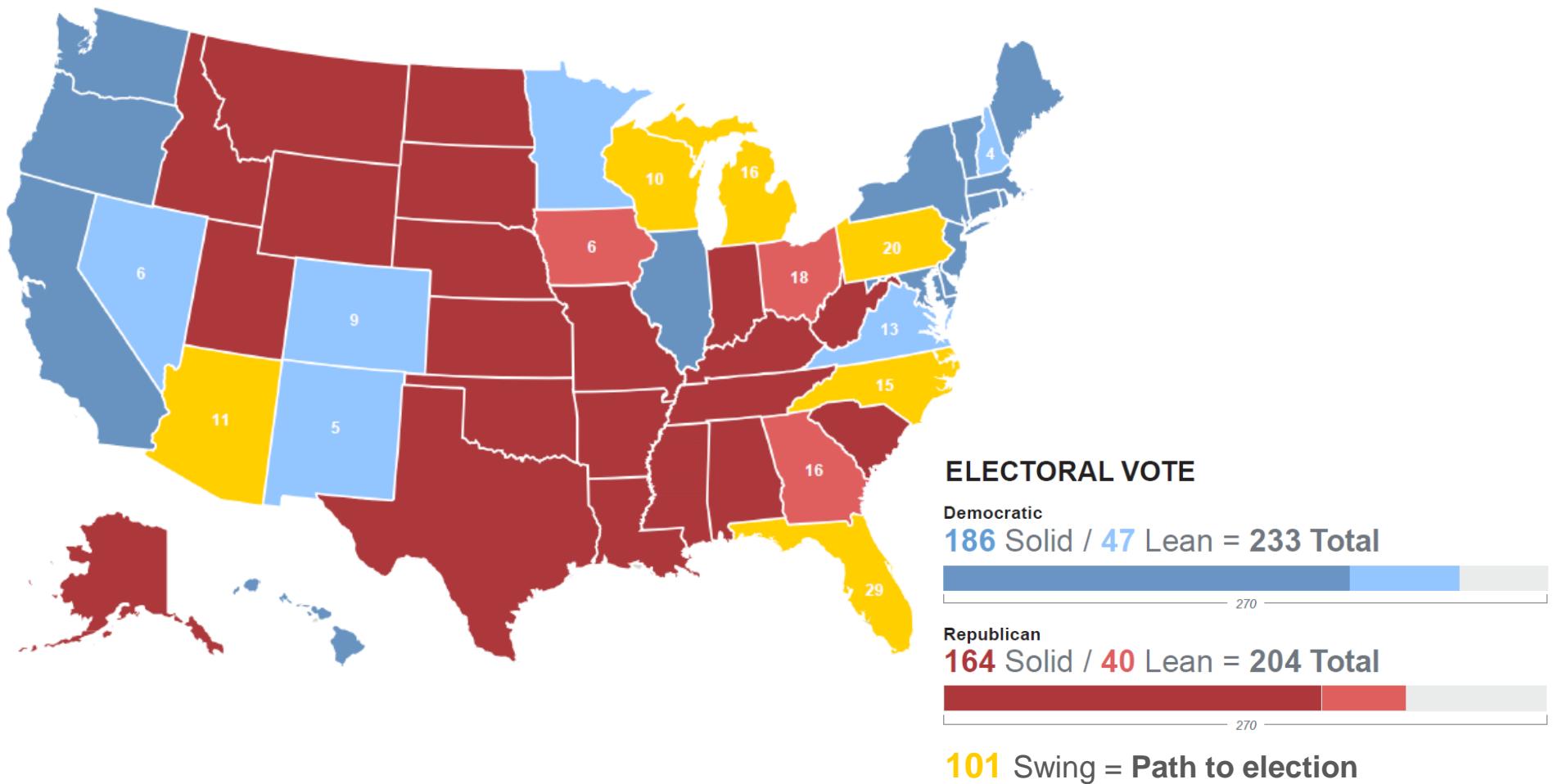


Source: Bloomberg and GSAM. As of May 31, 2020. 'Bear market' refers to a peak-to-trough decline of 20% or greater. 'Average Bear Market Decline (Growth of \$100)' refers to the average equity drawdown and recovery for bear markets in the post-war era. **Past performance does not guarantee future results, which may vary.**

Politics

2020 Presidential Snapshot

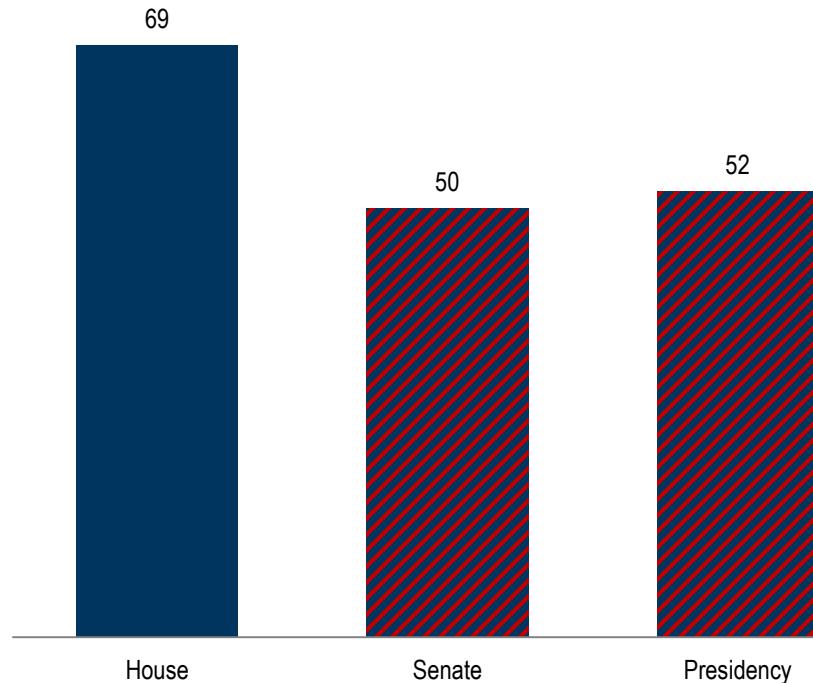
The path to 270 electoral college votes may run through six toss-up states



Political rhetoric may be larger than policy impact

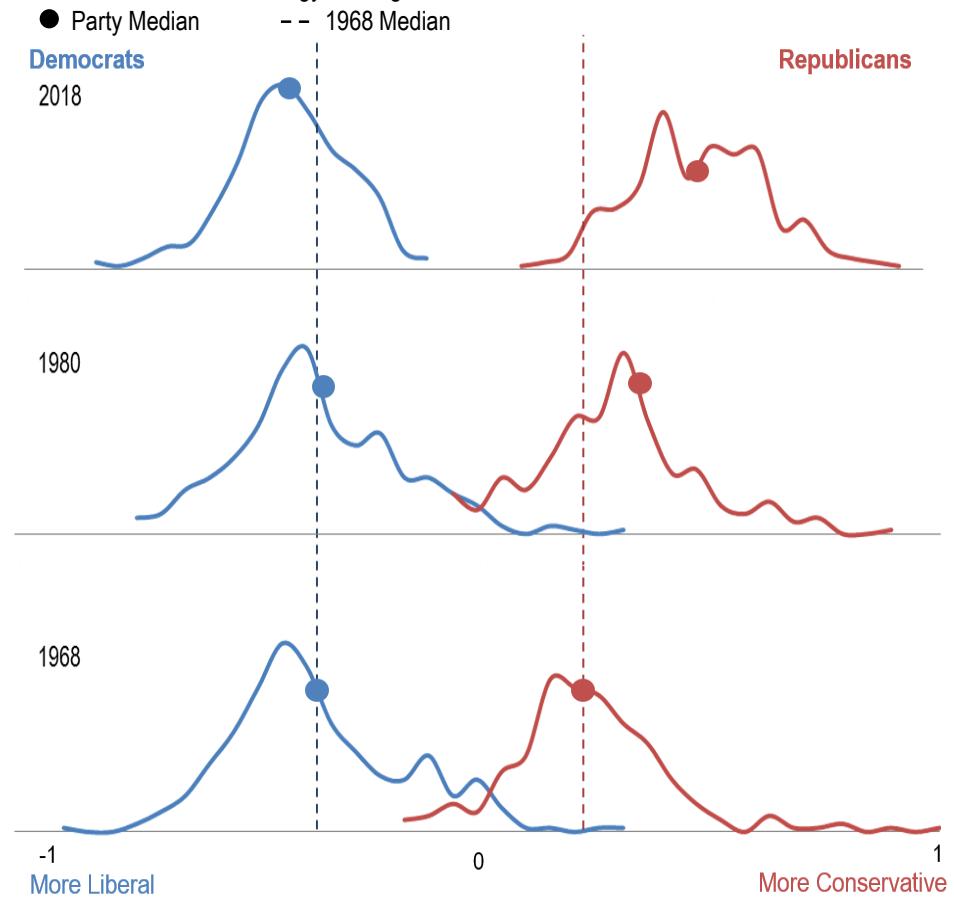
Prediction markets suggest a divided government

Odds that Democrats will win in 2020 (%)



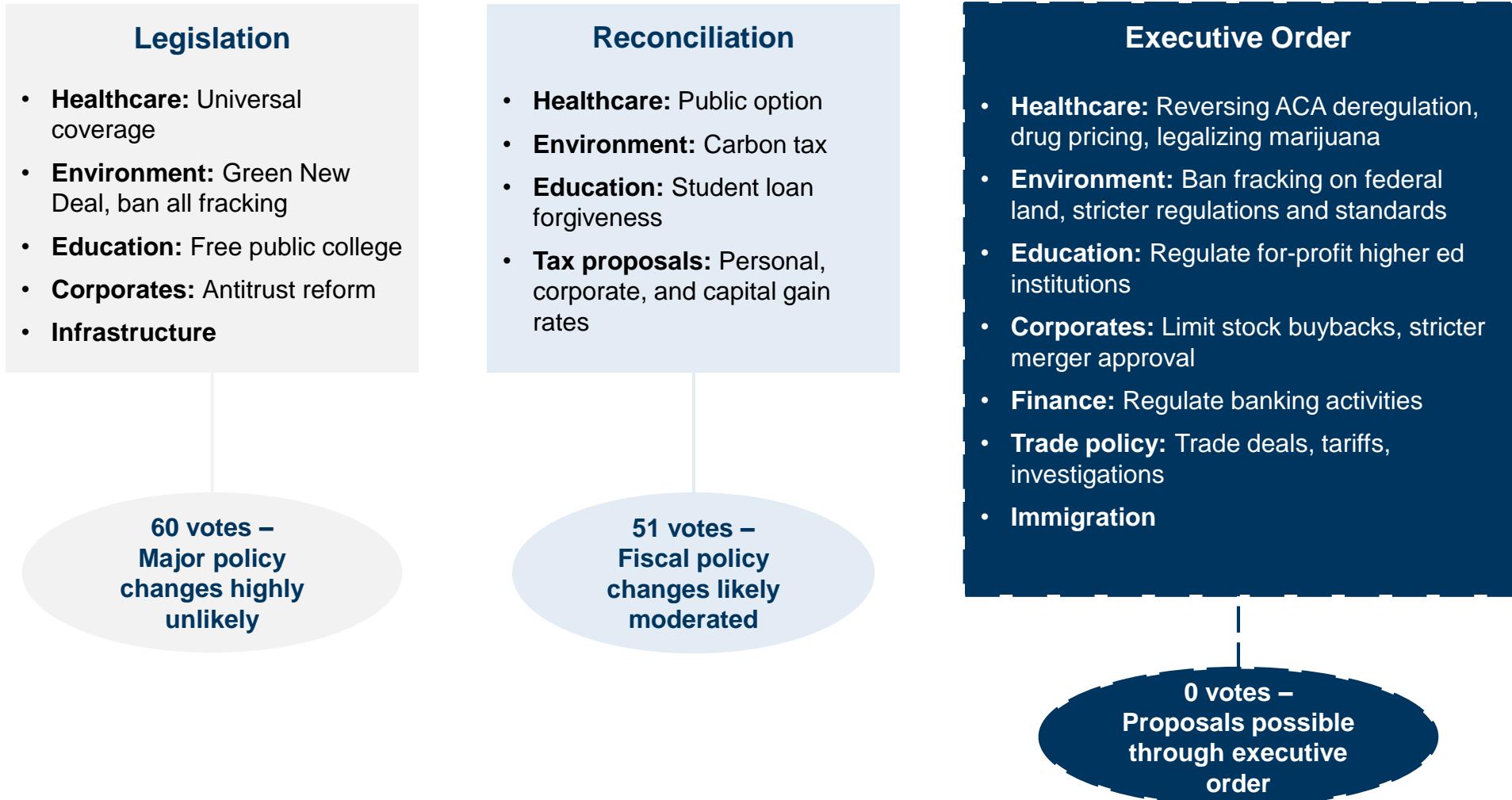
Divided government suggests limited policy changes

Distribution of Political Ideology in Congress



Source: Bloomberg, PredictIt, VoteView, and GSAM. As of May 31, 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation. For illustrative purposes only.

Progressive policy implementation may be limited to executive orders



Acute period of uncertainty and global recession

- Unprecedented nature of coronavirus and medically-targeted policy
- Near-term growth drag followed by sequential acceleration

Markets and economy recover in 2H 2020

- Substantial fiscal and monetary policy support
- Episodic volatility continues

Pre-emptive risk management

- Tail risk from coronavirus, liquidity, and elections
- Diversification is strategic, not tactical

Appendix

Risk Considerations

Equity securities are more volatile than fixed income securities and subject to greater risks. Small and mid-sized company stocks involve greater risks than those customarily associated with larger companies.

Investments in foreign securities entail special risks such as currency, political, economic, and market risks. These risks are heightened in emerging markets.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

An investment in real estate securities is subject to greater price volatility and the special risks associated with direct ownership of real estate.

Investments in fixed-income securities are subject to credit and interest rate risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Although Treasuries are considered free from credit risk, they are subject to interest rate risk, which may cause the underlying value of the security to fluctuate. Income from municipal securities is generally free from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-free, capital gains, if any, will be subject to taxes. Income for some investors may be subject to the federal Alternative Minimum Tax (AMT).

Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity.

The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Such transactions are considered suitable only for investors who are experienced in transactions of that kind. Currency fluctuations will also affect the value of an investment.

The above are not an exhaustive list of potential risks. There may be additional risks that are not currently foreseen or considered.

Disclosures



Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein.

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Glossary

Equities

The S&P 500 Index is the Standard & Poor's 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The index figures do not reflect any deduction for fees, expenses or taxes. It is not possible to invest directly in an unmanaged index.

The Chicago Board Options Exchange Volatility Index (VIX) reflects a market estimate of future volatility, based on the weighted average of the implied volatilities for a wide range of strikes.

The Chicago Board Options Exchange SKEW Index ("SKEW") is an index derived from the price of S&P 500 tail risk. Similar to VIX®, the price of S&P 500 tail risk is calculated from the prices of S&P 500 out-of-the-money options.

Fixed Income

The 10-Year Treasury is a US Treasury debt obligation that has a maturity of 10 years.

Other

CAPE Ratio is the cyclically adjusted price-to-earnings ratio and is defined as price divided by the average of ten years of earnings, adjusted for inflation.

Cash flow yield (CFO) refers to the cash flow from operations as a percentage of market capitalization, representing the income created by an investment.

EBITDA refers to earnings before interest, taxes, depreciation, and amortization, and is a measure of a company's overall financial performance.

EPS refers to earnings per share.

Euro area refers to the Eurozone. The Eurozone is comprised of Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

EV refers to enterprise value, the total value of a firm as calculated by the total market capitalization, plus total debt, less cash.

P/E refers to the price to earnings ratio.

Volatility is a measure of variation of a financial instrument's price.

Yield gap is the ratio of the dividend yield of the S&P 500 to a denominator of the yield of the 10-Year US Treasury.