

Guide to the Markets[®]

U.S. | 1Q 2020 | As of December 31, 2019

J.P. Morgan

4Q 2019

	Value	Blend	Growth
Large	7.4%	9.1%	10.6%
Mid	6.4%	7.1%	8.2%
Small	8.5%	9.9%	11.4%

2019

	Value	Blend	Growth
Large	26.5%	31.5%	36.4%
Mid	27.1%	30.5%	35.5%
Small	22.4%	25.5%	28.5%

Since market peak (October 2007)

	Value	Blend	Growth
Large	111.6%	167.8%	236.6%
Mid	143.1%	165.6%	193.6%
Small	107.6%	134.0%	160.5%

Since market low (March 2009)

	Value	Blend	Growth
Large	427.7%	498.5%	586.5%
Mid	520.8%	541.0%	578.7%
Small	413.4%	464.2%	514.6%

Current P/E vs. 20-year avg. P/E

	Value	Blend	Growth
Large	15.2 / 13.6	18.2 / 15.5	23.1 / 19.1
Mid	15.3 / 14.1	18.2 / 16.1	25.2 / 20.8
Small	15.6 / 16.2	23.4 / 20.4	44.4 / 29.7

Current P/E as % of 20-year avg. P/E

	Value	Blend	Growth
Large	111.9%	117.1%	120.8%
Mid	108.5%	112.6%	120.9%
Small	96.7%	114.8%	149.5%

Source: FactSet, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management.

All calculations are cumulative total return, including dividends reinvested for the stated period. Since Market Peak represents period 10/9/07 – 12/31/19, illustrating market returns since the S&P 500 Index high on 10/9/07. Since Market Low represents period 3/9/09 – 12/31/19, illustrating market returns since the S&P 500 Index low on 3/9/09. Returns are cumulative returns, not annualized. For all time periods, total return is based on Russell style indices with the exception of the large blend category, which is based on the S&P 500 Index. Past performance is not indicative of future returns. The price to earnings is a bottom-up calculation based on the most recent index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates.

Guide to the Markets – U.S. Data are as of December 31, 2019.

Returns and valuations by sector

GTM – U.S. | 11

Equities

	Materials	Energy	Financials	Industrials	Technology	Cons. Discr.	Comm. Services*	Health Care	Real Estate	Cons. Staples	Utilities	S&P 500 Index	
S&P weight	2.7%	4.3%	13.0%	9.1%	23.2%	9.8%	10.4%	14.2%	2.9%	7.2%	3.3%	100.0%	Weight
Russell Growth weight	1.3%	0.3%	3.1%	9.3%	38.9%	13.8%	11.6%	14.7%	2.4%	4.6%	0.0%	100.0%	
Russell Value weight	4.3%	8.2%	23.9%	9.7%	6.3%	5.9%	8.2%	13.0%	5.2%	8.9%	6.6%	100.0%	
4Q 2019	6.4	5.5	10.5	5.5	14.4	4.5	9.0	14.4	-0.5	3.5	0.8	9.1	Return (%)
2019	24.6	11.8	32.1	29.4	50.3	27.9	32.7	20.8	29.0	27.6	26.3	31.5	
Since market peak (October 2007)	87.8	6.5	36.4	139.7	348.1	299.6	79.2	257.2	111.2	216.4	151.2	167.8	
Since market low (March 2009)	347.3	95.0	644.8	558.8	838.9	825.1	242.3	475.9	683.0	343.7	339.7	498.5	
Beta to S&P 500	1.24	1.22	1.19	1.18	1.12	1.10	0.96*	0.78	0.76	0.59	0.28	1.00	β
Correl. to Treas. yields	0.26	0.41	0.51	0.33	0.33	0.26	0.30	0.25	-0.32	0.13	-0.15	0.35	ρ
Foreign % of sales	56.8	51.3	30.1	43.8	58.2	34.0	44.7	38.5	-	32.7	-	42.9	%
NTM Earnings Growth	13.4%	19.9%	4.9%	14.8%	9.5%	12.3%	12.0%*	8.5%	5.8%	6.4%	4.7%	9.5%	EPS
20-yr avg.	19.6%	12.7%	22.2%	11.0%	14.2%	15.3%	10.4%*	9.5%	7.7%**	8.5%	4.8%	11.5%	
Forward P/E ratio	18.4x	17.7x	13.4x	16.9x	21.8x	22.2x	18.8x	16.2x	19.9x	20.2x	19.9x	18.2x	P/E
20-yr avg.	14.0x	17.1x	12.5x	15.9x	19.7x	17.8x	18.2x*	16.2x	15.6x	16.8x	14.4x	15.5x	
Buyback yield	2.7%	0.7%	4.5%	2.7%	3.3%	2.4%	1.2%	2.3%	-0.8%	1.2%	-2.1%	2.3%	Bbk
20-yr avg.	0.7%	1.5%	-0.1%	2.0%	2.7%	2.3%	1.2%	1.9%	-0.8%	1.8%	-0.9%	1.5%	
Dividend yield	2.2%	4.1%	2.2%	2.0%	1.4%	1.4%	1.3%	1.8%	3.2%	2.8%	3.2%	1.9%	Div
20-yr avg.	2.6%	2.4%	2.3%	2.2%	1.0%	1.4%	1.6%*	1.8%	4.3%	2.7%	3.9%	2.1%	

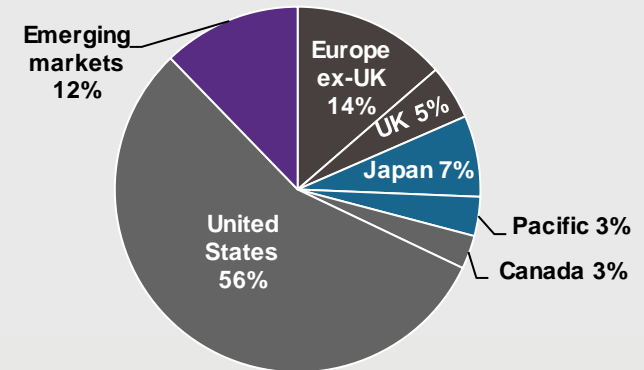
Source: FactSet, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management. All calculations are cumulative total return, not annualized, including dividends for the stated period. Since market peak represents period 10/9/07 – 12/31/19. Since market low represents period 3/9/09 – 12/31/19. Correlation to Treasury yields are trailing 2-year monthly correlations between S&P 500 sector price returns and 10-year Treasury yield movements. Foreign percent of sales is from Standard & Poor's, S&P 500 2018: Global Sales report as of August 2019. Real Estate and Comm. Services foreign sales are not included due to lack of availability. NTM earnings growth is the percent change in next 12 months earnings estimates compared to last 12 months earnings provided by brokers. Forward P/E ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Buyback yield is net of share issuance and is calculated as last 12-months net buybacks divided by market cap. Dividend yield is calculated as the next 12-month consensus dividend divided by most recent price. Beta calculations are based on 10-years of monthly price returns for the S&P 500 and its sub-indices. *Communication Services (formerly Telecom) averages and beta are based on 5-years of backtested data by JPMAM. **Real estate NTM earnings growth is a 15-year average due to data availability. Past performance is not indicative of future returns.

Guide to the Markets – U.S. Data are as of December 31, 2019.

Returns	2019		2018		15-years	
	Local	USD	Local	USD	Ann.	Beta
Regions						
U.S. (S&P 500)	-	31.5	-	-4.4	9.0	0.87
AC World ex-U.S.	21.4	22.1	-10.2	-13.8	5.7	1.10
EAFE	22.3	22.7	-10.5	-13.4	5.3	1.06
Europe ex-UK	27.5	25.9	-10.6	-14.4	5.9	1.20
Emerging markets	18.5	18.9	-9.7	-14.2	7.8	1.26
Selected Countries						
United Kingdom	16.5	21.1	-8.8	-14.1	4.2	1.01
France	29.3	27.0	-7.5	-11.9	5.9	1.22
Germany	23.9	21.7	-17.7	-21.6	6.4	1.32
Japan	18.9	20.1	-14.9	-12.6	4.3	0.75
China	23.3	23.7	-18.6	-18.7	11.3	1.26
India	10.0	7.6	1.4	-7.3	9.2	1.31
Brazil	31.5	26.7	16.7	-0.1	9.5	1.49
Russia	38.8	52.7	18.1	0.5	7.4	1.53

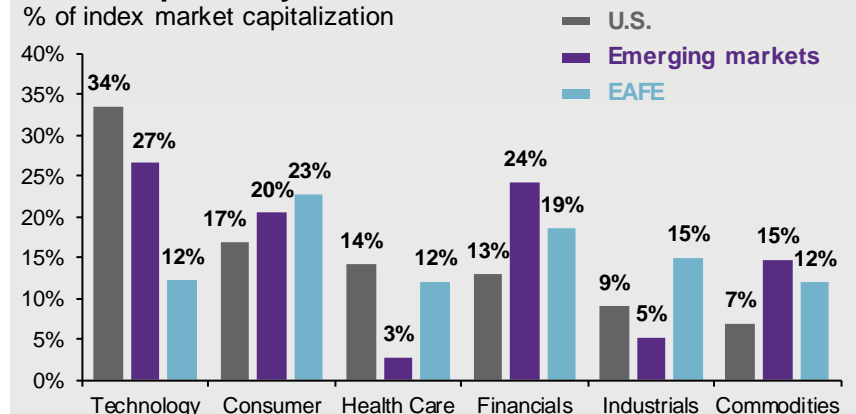
Weights in MSCI All Country World Index

% global market capitalization, float adjusted



Global equities by sector

% of index market capitalization



Source: FactSet, Federal Reserve, MSCI, Standard & Poor's, J.P. Morgan Asset Management. All return values are MSCI Gross Index (official) data. 15-year history based on U.S. dollar returns. 15-year return and beta figures are calculated for the time period 12/31/04-12/31/19. Beta is for monthly returns relative to the MSCI AC World Index. Annualized volatility is calculated as the standard deviation of quarterly returns multiplied by the square root of 4. Chart is for illustrative purposes only. Please see disclosure page for index definitions. Past performance is not a reliable indicator of current and future results. Sector breakdown includes the following aggregates: Technology (communication services and technology), consumer (consumer discretionary and staples) and commodities (energy and materials). The graph excludes the utilities and real estate sectors for illustrative purposes. Guide to the Markets – U.S. Data are as of December 31, 2019.

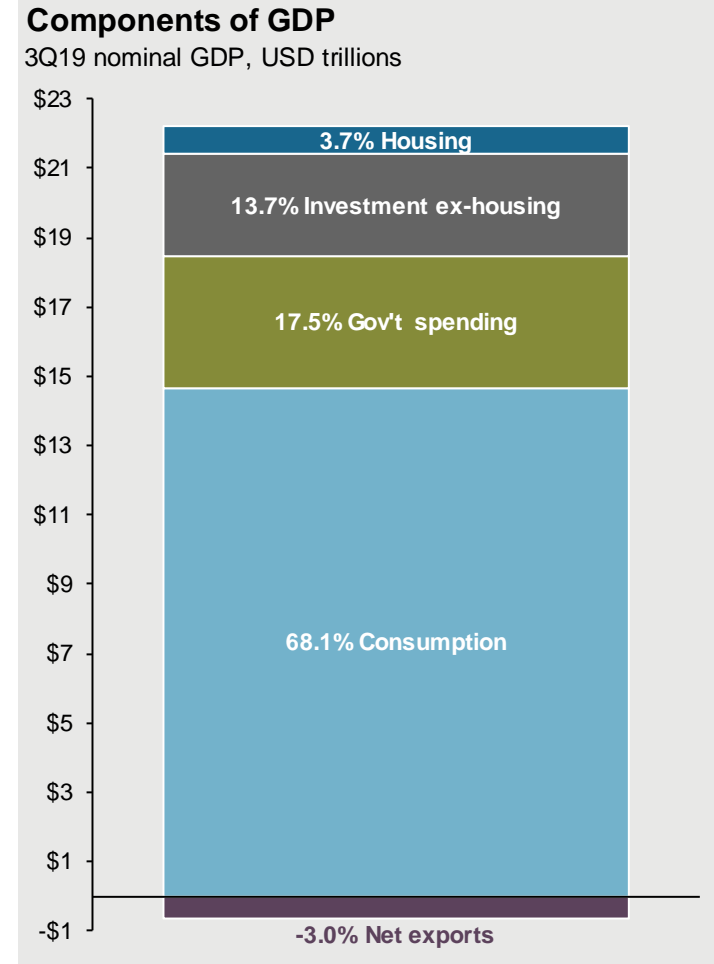
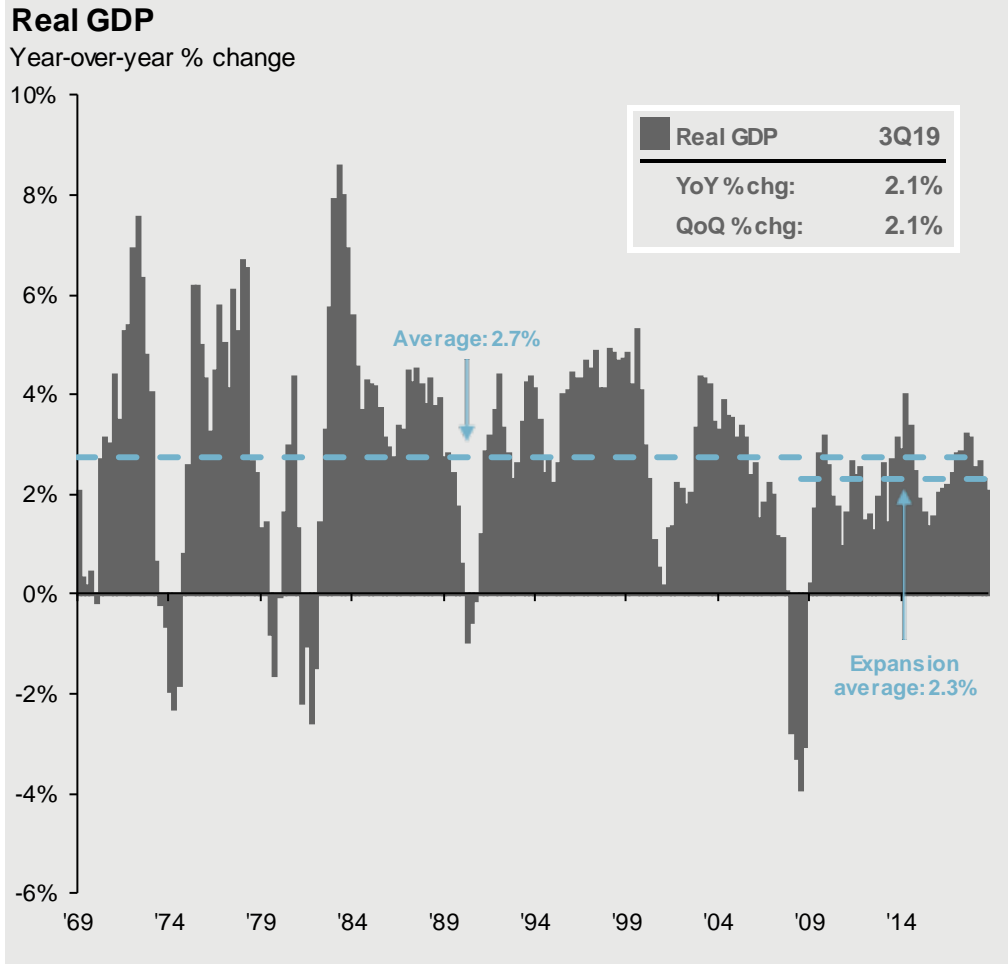
Fixed income sector returns

GTM – U.S. | 41

Fixed income

															2005-2019	
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Ann.	Vol.
EMD USD 10.2%	EMD LCL. 15.2%	EMD LCL. 18.1%	Treas. 13.7%	High Yield 58.2%	EMD LCL. 15.7%	TIPS 13.6%	EMD USD 17.4%	High Yield 7.4%	Muni 8.7%	Muni 3.8%	High Yield 17.1%	EMD LCL. 15.2%	ABS 2.7%	EMD USD 15.0%	EMD USD 7.3%	EMD LCL. 10.6%
EMD LCL. 6.3%	High Yield 11.8%	TIPS 11.6%	MBS 8.3%	EMD USD 29.8%	High Yield 15.1%	Muni 12.3%	EMD LCL. 16.8%	ABS 1.3%	Corp. 7.5%	MBS 1.5%	EMD USD 10.2%	EMD USD 10.3%	Muni 1.4%	Corp. 14.5%	High Yield 7.2%	High Yield 10.3%
Asset Alloc. 3.0%	EMD USD 9.9%	Treas. 9.0%	Barclays Agg 5.2%	ABS 24.7%	EMD USD 12.2%	Treas. 9.8%	High Yield 15.8%	MBS -1.4%	EMD USD 7.4%	EMD USD 1.2%	EMD LCL. 9.9%	High Yield 7.5%	MBS 1.0%	High Yield 14.3%	EMD LCL. 5.3%	EMD USD 7.2%
TIPS 2.8%	Asset Alloc. 5.8%	Barclays Agg 7.0%	Muni 1.5%	EMD LCL. 22.0%	Corp. 9.0%	Corp. 8.1%	Corp. 9.8%	Corp. -1.5%	MBS 6.1%	Treas. 0.8%	Corp. 6.1%	Corp. 6.4%	Treas. 0.9%	EMD LCL. 13.5%	Corp. 5.2%	Corp. 5.5%
Treas. 2.8%	MBS 5.2%	MBS 6.9%	Asset Alloc. -1.3%	Corp. 18.7%	Asset Alloc. 7.9%	Asset Alloc. 7.9%	Asset Alloc. 7.5%	Asset Alloc. -1.7%	Barclays Agg 6.0%	Barclays Agg 0.5%	Asset Alloc. 4.7%	Muni 5.8%	Barclays Agg 0.0%	Asset Alloc. 9.8%	Asset Alloc. 5.0%	TIPS 4.8%
Muni 2.7%	Muni 4.7%	Asset Alloc. 6.4%	TIPS -2.4%	Asset Alloc. 16.1%	Barclays Agg 6.5%	Barclays Agg 7.8%	TIPS 7.0%	Barclays Agg -2.0%	Asset Alloc. 5.4%	ABS 0.2%	TIPS 4.7%	Asset Alloc. 5.3%	Asset Alloc. -0.6%	Barclays Agg 8.7%	Muni 4.6%	Treas. 4.6%
High Yield 2.7%	ABS 4.7%	EMD USD 6.2%	Corp. -4.9%	TIPS 11.4%	TIPS 6.3%	EMD USD 7.3%	Muni 5.7%	Muni -2.2%	Treas. 5.1%	Asset Alloc. -0.3%	Barclays Agg 2.6%	Barclays Agg 3.5%	TIPS -1.3%	TIPS 8.4%	Barclays Agg 4.1%	ABS 4.1%
MBS 2.6%	Barclays Agg 4.3%	Corp. 4.6%	EMD LCL. -5.2%	Muni 9.9%	Treas. 5.9%	MBS 6.2%	Barclays Agg 4.2%	Treas. -2.7%	TIPS 3.6%	Corp. -0.7%	ABS 2.0%	TIPS 3.0%	High Yield -2.1%	Muni 7.7%	MBS 4.0%	Muni 3.8%
Barclays Agg 2.4%	Corp. 4.3%	Muni 4.3%	EMD USD -12.0%	Barclays Agg 5.9%	ABS 5.9%	ABS 5.1%	ABS 3.7%	EMD USD -5.3%	High Yield 2.5%	TIPS -1.4%	MBS 1.7%	ABS 3.0%	Corp. -2.5%	Treas. 6.9%	TIPS 3.8%	Asset Alloc. 3.6%
ABS 2.1%	Treas. 3.1%	ABS 2.2%	ABS -12.7%	MBS 5.9%	MBS 5.4%	High Yield 5.0%	MBS 2.6%	TIPS -8.6%	ABS 1.7%	High Yield -4.5%	Treas. 1.0%	MBS 2.5%	EMD USD -4.3%	MBS 6.4%	Treas. 3.7%	Barclays Agg 3.3%
Corp. 1.7%	TIPS 0.4%	High Yield 1.9%	High Yield -26.2%	Treas. -3.6%	Muni 4.0%	EMD LCL. -1.8%	Treas. 2.0%	EMD LCL. -9.0%	EMD LCL. -5.7%	EMD LCL. -14.9%	Muni -0.1%	Treas. 2.3%	EMD LCL. -6.2%	ABS 3.8%	ABS 3.1%	MBS 2.5%

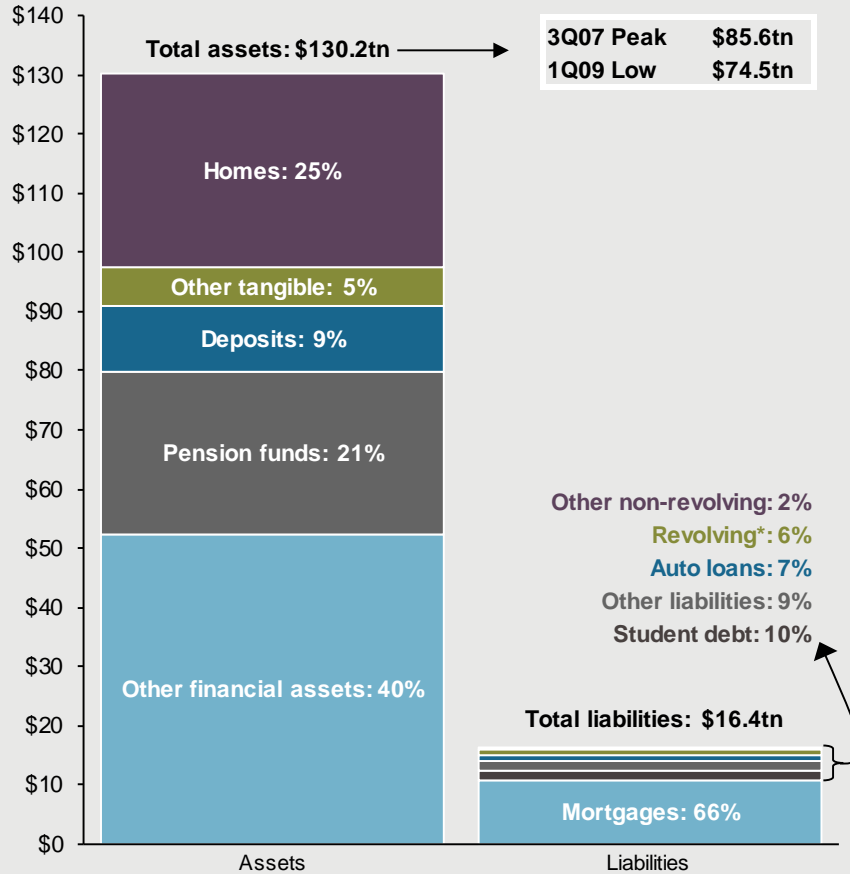
Source: Barclays, Bloomberg, FactSet, J.P. Morgan Global Economic Research, J.P. Morgan Asset Management.
 Past performance is not indicative of future returns. Fixed income sectors shown above are provided by Bloomberg unless otherwise noted and are represented by Broad Market: U.S. Aggregate Index; MBS: US Aggregate Securitized - MBS Index; ABS: J.P. Morgan ABS Index; Corporate: U.S. Aggregate Credit - Corporates - Investment Grade; Municipals: Municipal Bond 10-Year Index; High Yield: U.S. Aggregate Credit - Corporate - High Yield Index; Treasuries: Global U.S. Treasury; TIPS: U.S. Treasury Inflation Protected Notes Index; Emerging Debt USD: J.P. Morgan EMBIG Diversified Index; Emerging Debt LCL: J.P. Morgan EM Global Index. The "Asset Allocation" portfolio assumes the following weights: 20% in MBS, 5% in ABS, 20% in Corporate, 15% in Municipals, 5% in Emerging Debt USD, 5% in Emerging Debt LCL, 10% in High Yield, 15% in Treasuries, 5% in TIPS. Asset allocation portfolio assumes annual rebalancing.
 Guide to the Markets – U.S. Data are as of December 31, 2019.



Source: BEA, FactSet, J.P. Morgan Asset Management.
 Values may not sum to 100% due to rounding. Quarter-over-quarter percent changes are at an annualized rate. Average represents the annualized growth rate for the full period. Expansion average refers to the period starting in the third quarter of 2009.
 Guide to the Markets – U.S. Data are as of December 31, 2019.

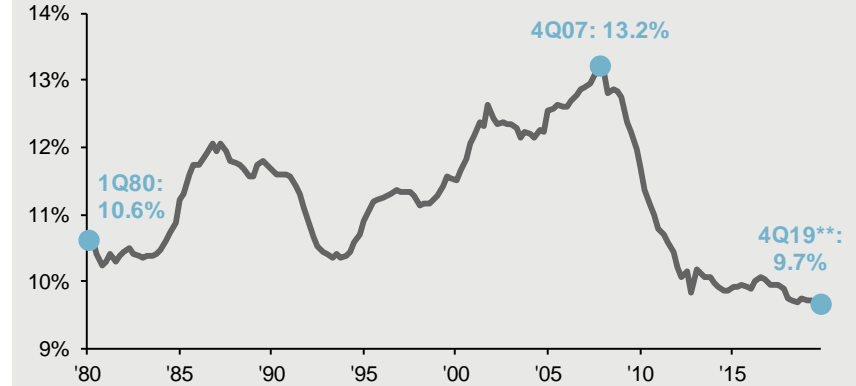
Consumer balance sheet

3Q19, trillions of dollars outstanding, not seasonally adjusted



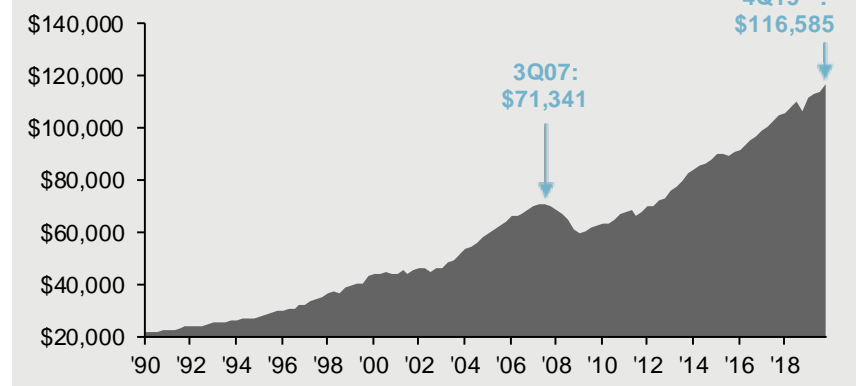
Household debt service ratio

Debt payments as % of disposable personal income, SA



Household net worth

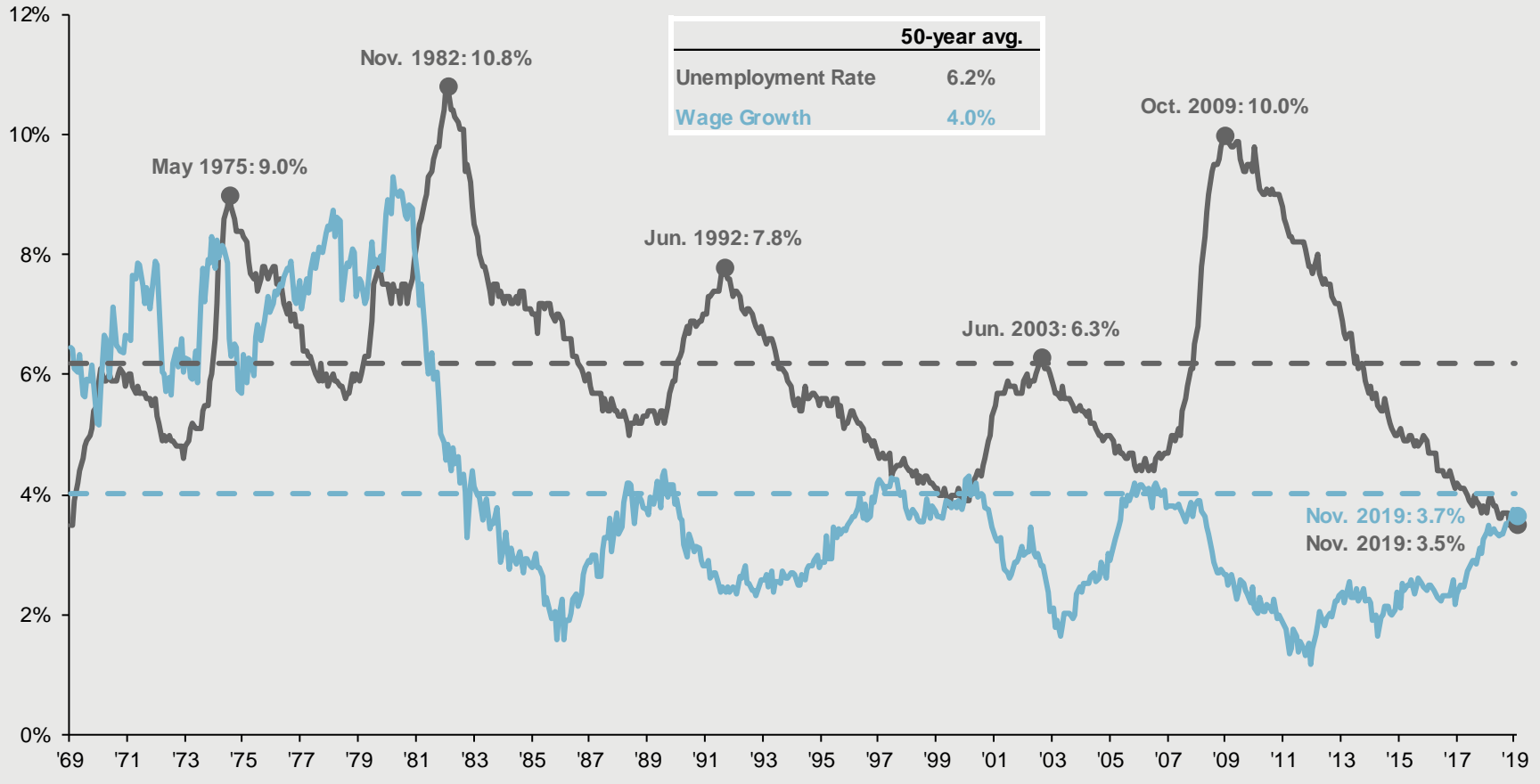
Not seasonally adjusted, USD billions



Source: FactSet, FRB, J.P. Morgan Asset Management; (Top and bottom right) BEA. Data include households and nonprofit organizations. SA – seasonally adjusted. *Revolving includes credit cards. Values may not sum to 100% due to rounding. **4Q19 figures for debt service ratio and household net worth are J.P. Morgan Asset Management estimates. *Guide to the Markets – U.S.* Data are as of December 31, 2019.

Civilian unemployment rate and year-over-year wage growth for private production and non-supervisory workers

Seasonally adjusted, percent

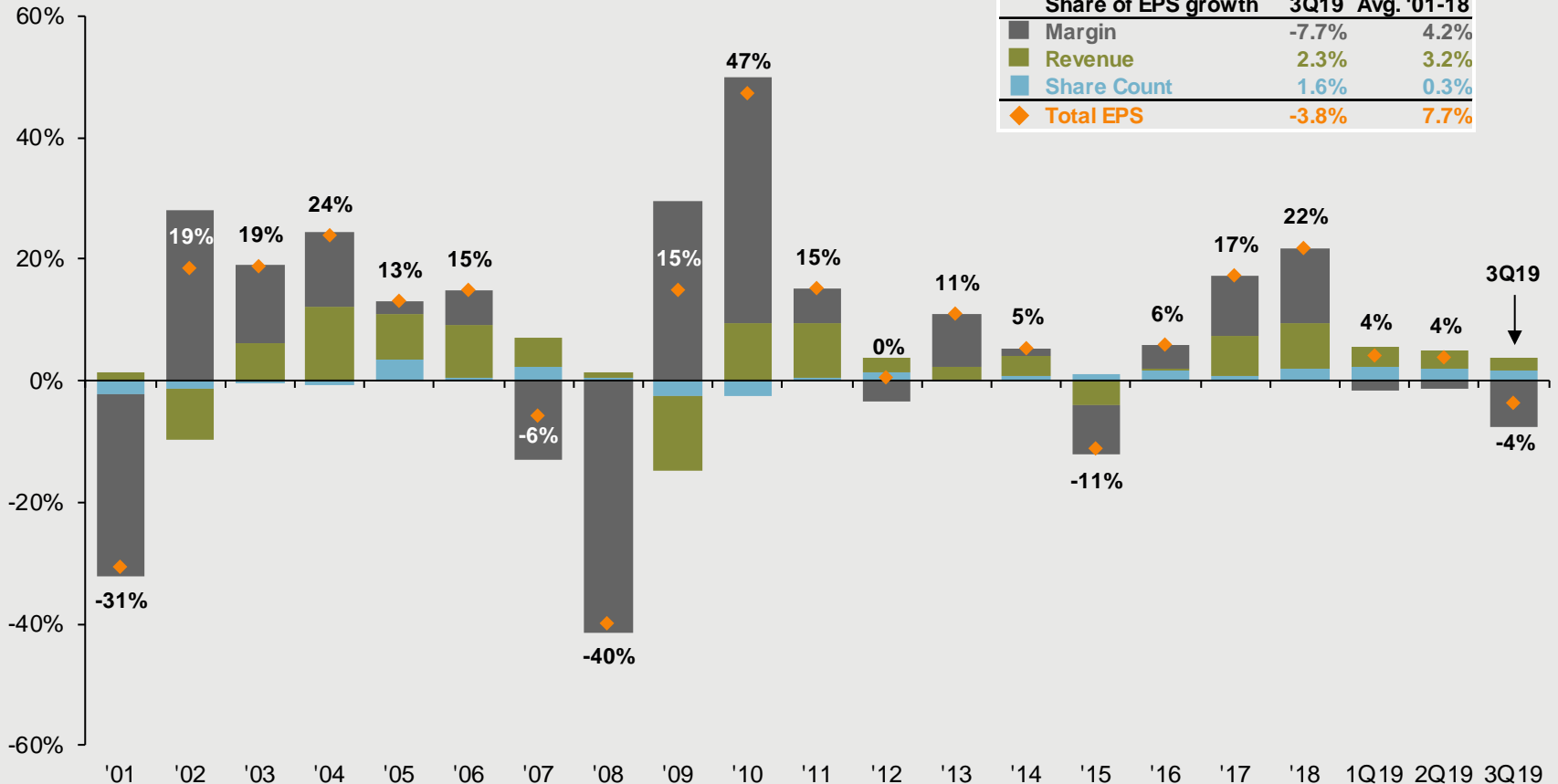


Source: BLS, FactSet, J.P. Morgan Asset Management.
 Guide to the Markets – U.S. Data are as of December 31, 2019.

S&P 500 year-over-year operating EPS growth

Annual growth broken into revenue, changes in profit margin & changes in share count

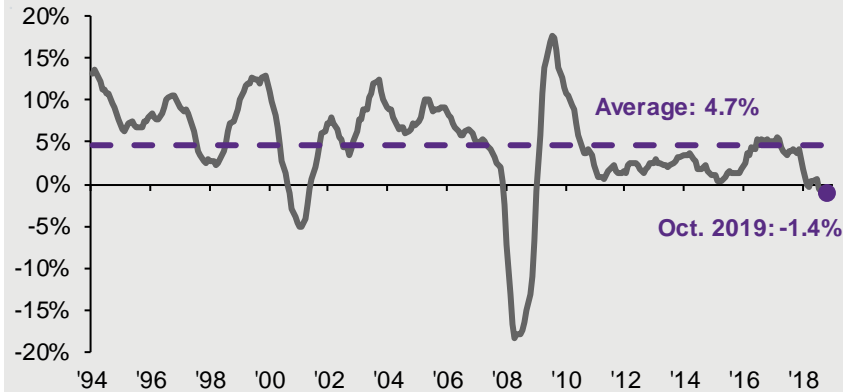
Share of EPS growth	3Q19	Avg. '01-18
Margin	-7.7%	4.2%
Revenue	2.3%	3.2%
Share Count	1.6%	0.3%
Total EPS	-3.8%	7.7%



Source: Compustat, FactSet, Standard & Poor's, J.P. Morgan Asset Management.
 EPS levels are based on annual operating earnings per share except for 2019, which is quarterly. Percentages may not sum due to rounding. Past performance is not indicative of future returns.
 Guide to the Markets – U.S. Data are as of December 31, 2019.

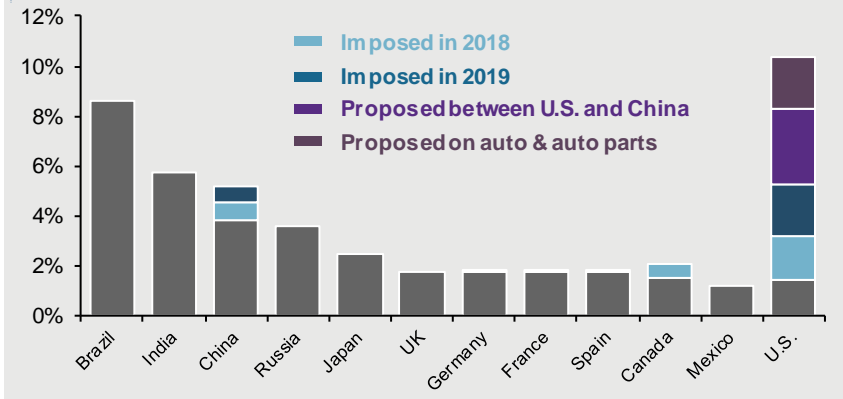
World trade volume

Year-over-year, % change, 3-month moving average, monthly



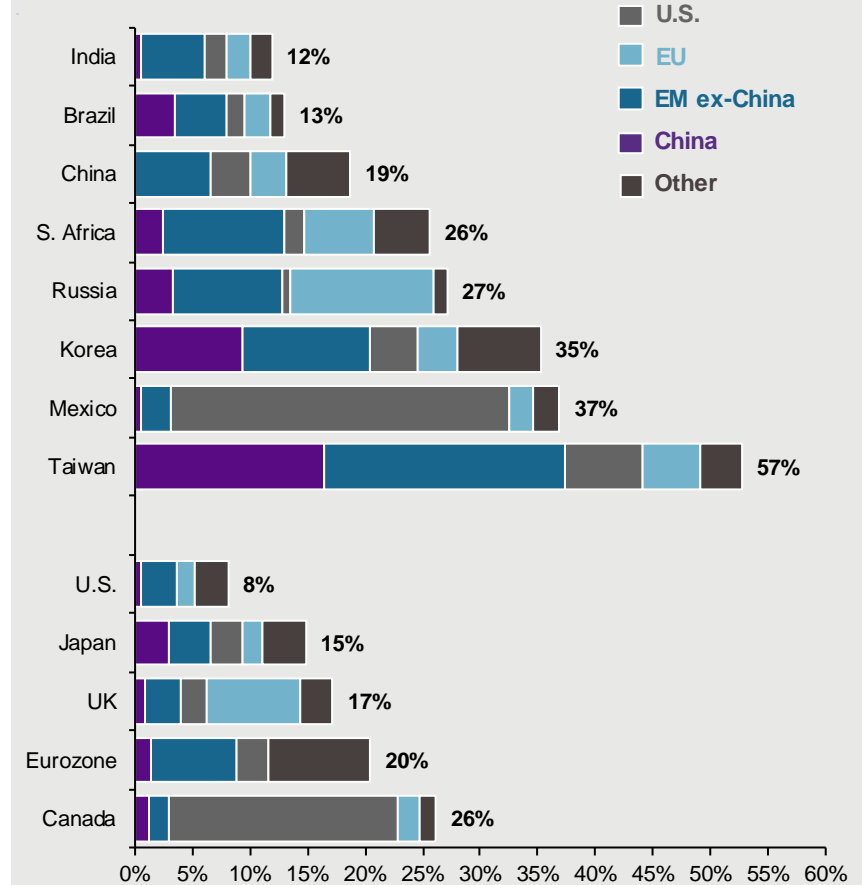
Global tariffs

Tariff rate, applied, weighted mean, all products



Exports as a share of GDP

Goods exports, 2018

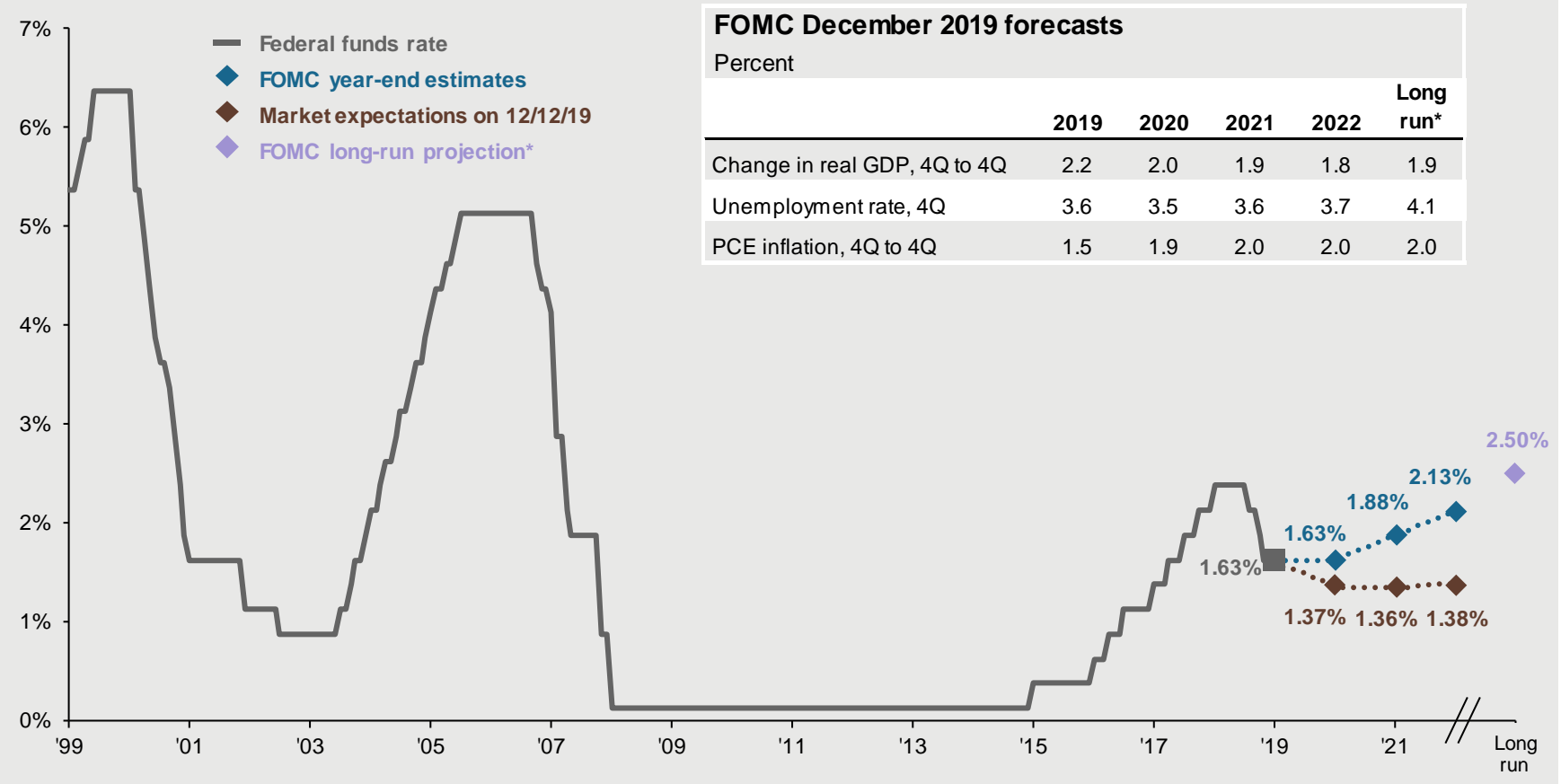


Source: FactSet, J.P. Morgan Asset Management; (Top left) CPB Netherlands Bureau for Economic Policy Analysis; (Bottom left) IMF, USITC, World Bank; (Right) IMF.

Guide to the Markets – U.S. Data are as of December 31, 2019.

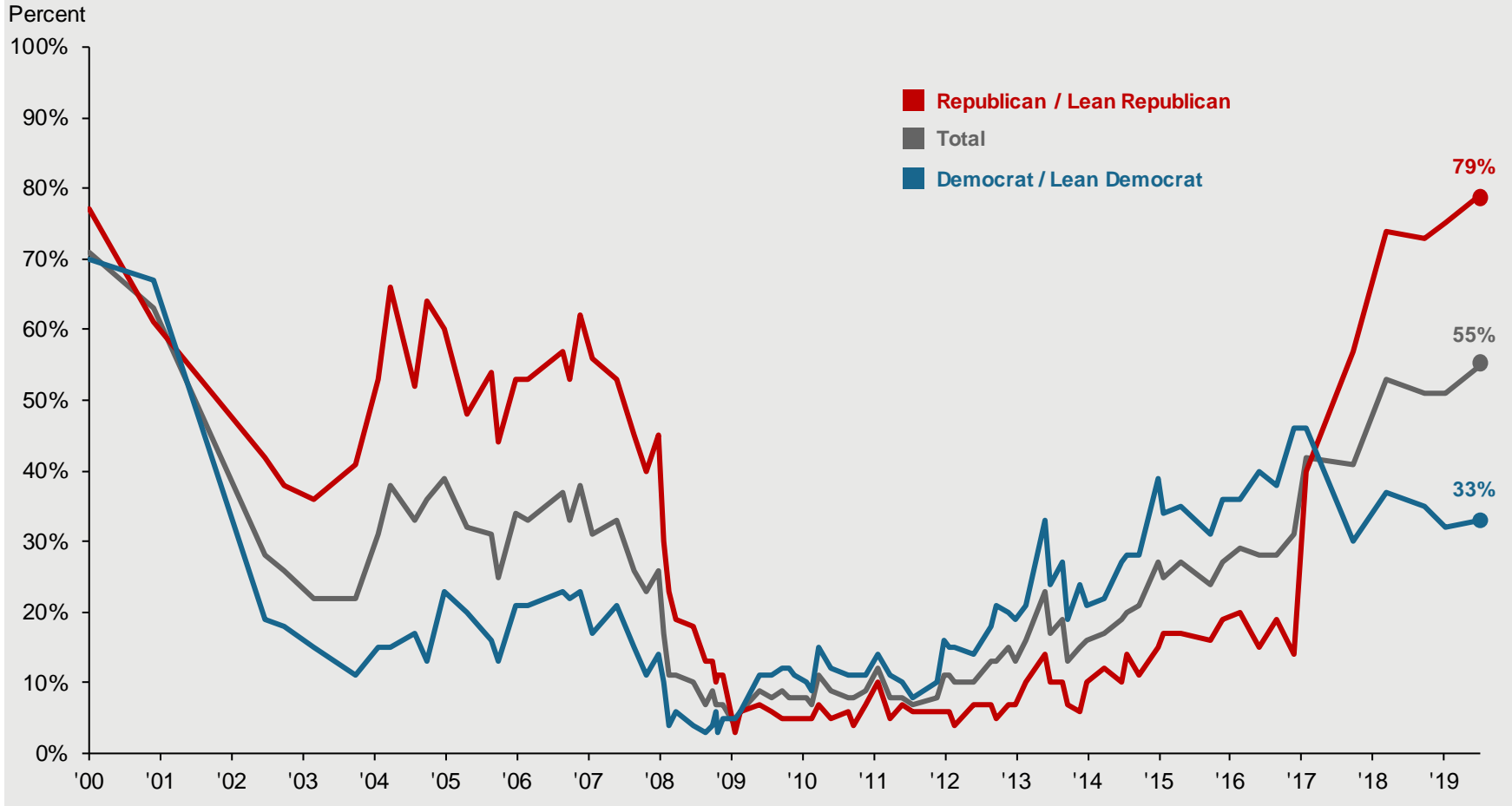
Federal funds rate expectations

FOMC and market expectations for the federal funds rate



Source: Bloomberg, FactSet, Federal Reserve, J.P. Morgan Asset Management. Market expectations are the federal funds rates priced into the fed futures market as of the following date of the December 2019 FOMC meeting and are through December 2022. *Long-run projections are the rates of growth, unemployment and inflation to which a policymaker expects the economy to converge over the next five to six years in absence of further shocks and under appropriate monetary policy. *Guide to the Markets – U.S.* Data are as of December 31, 2019.

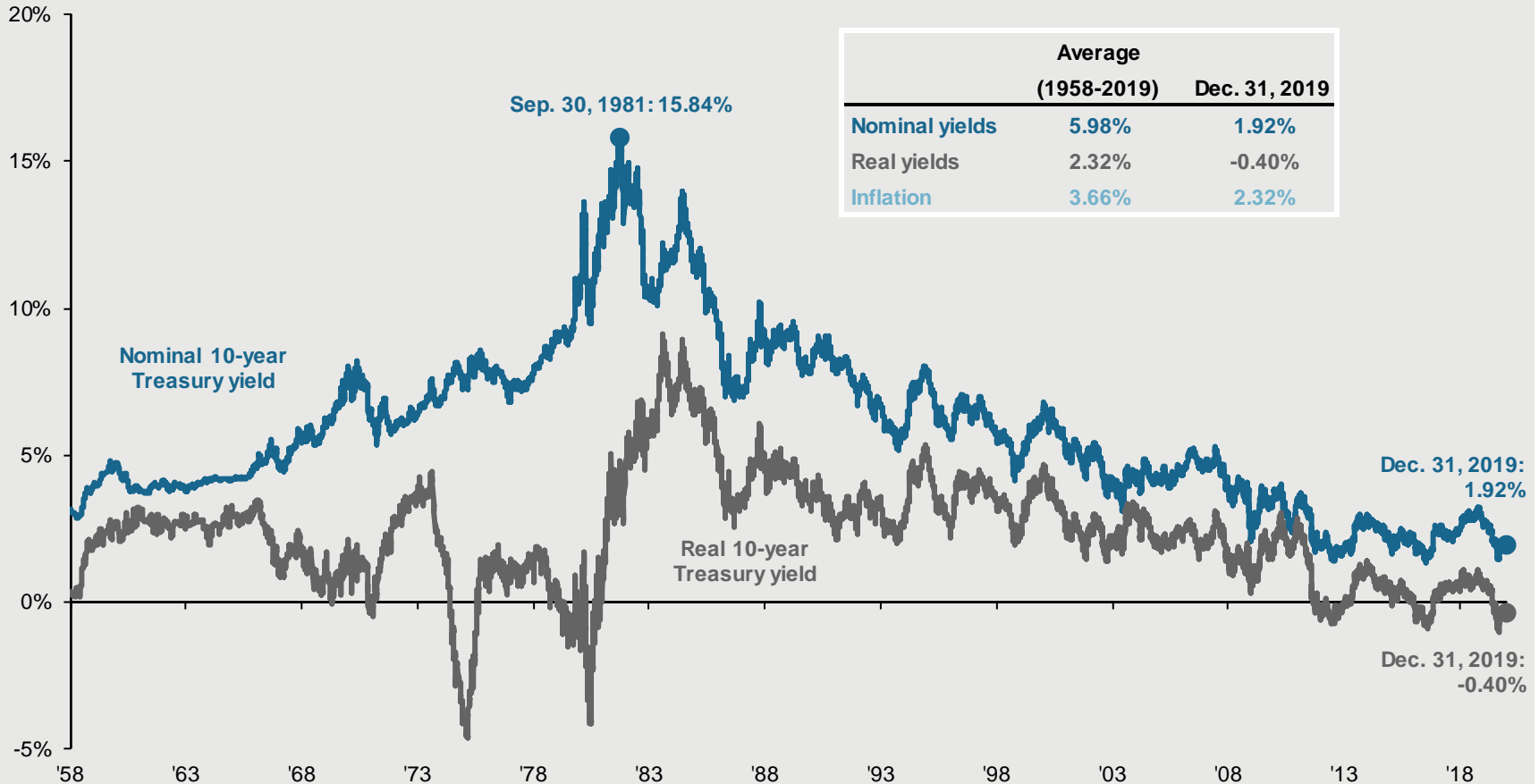
Percentage of Republicans and Democrats who rate national economic conditions as excellent or good



Source: Pew Research Center, J.P. Morgan Asset Management. Pew Research Center, July 2019, "Public's Views of Nation's Economy Remain Positive and Deeply Partisan." Question: Thinking about the nation's economy, How would you rate economic conditions in this country today... as excellent, good, only fair, or poor?

Guide to the Markets – U.S. Data are as of December 31, 2019.

Nominal and real 10-year Treasury yields



Source: BLS, FactSet, Federal Reserve, J.P. Morgan Asset Management.
 Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month except for December 2019, where real yields are calculated by subtracting out November 2019 year-over-year core inflation.
 Guide to the Markets – U.S. Data are as of December 31, 2019.

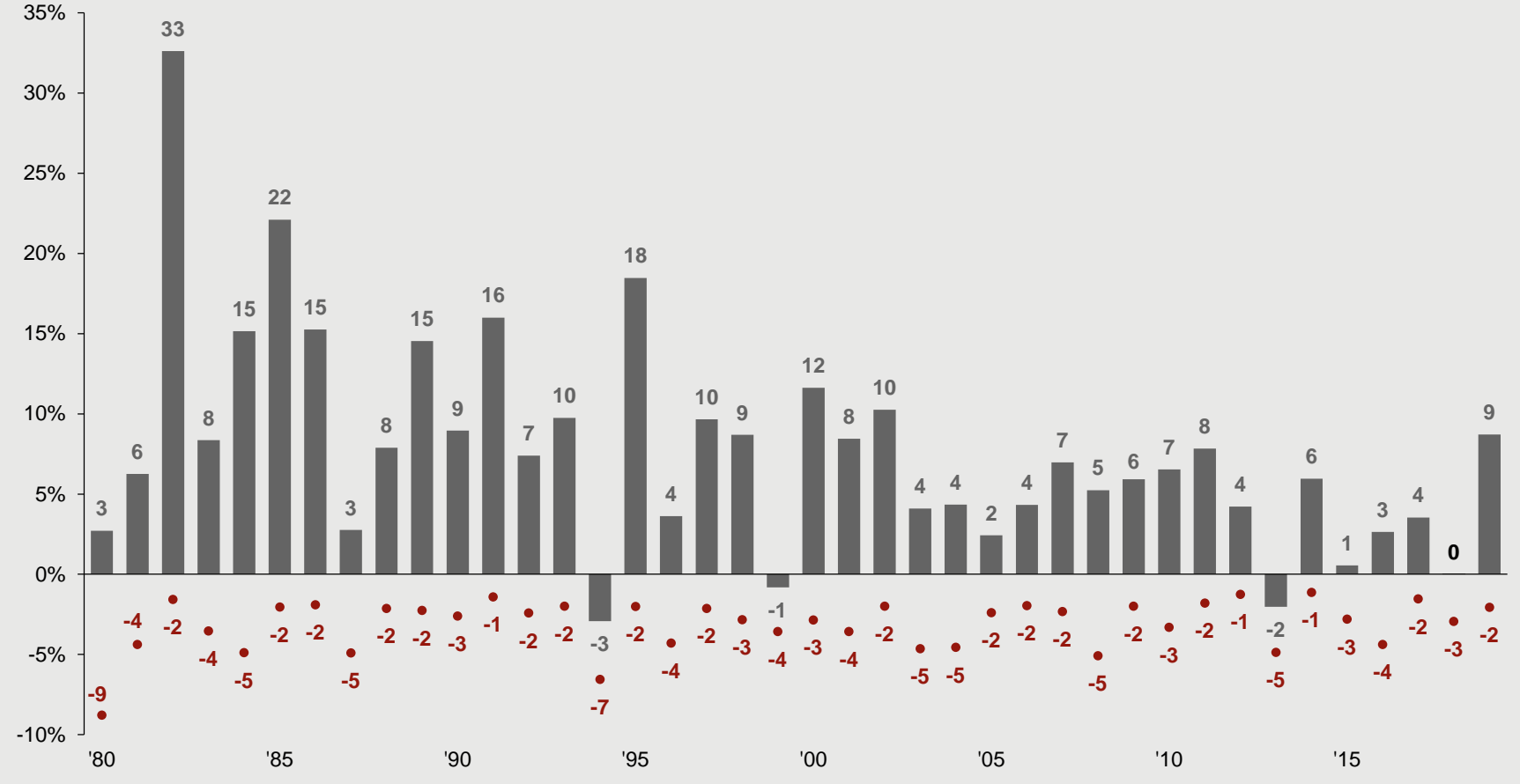
Barclays U.S. Agg. annual returns and intra-year declines

GTM – U.S. |

Fixed income

Bloomberg Barclays U.S. Aggregate intra-year declines vs. calendar year returns

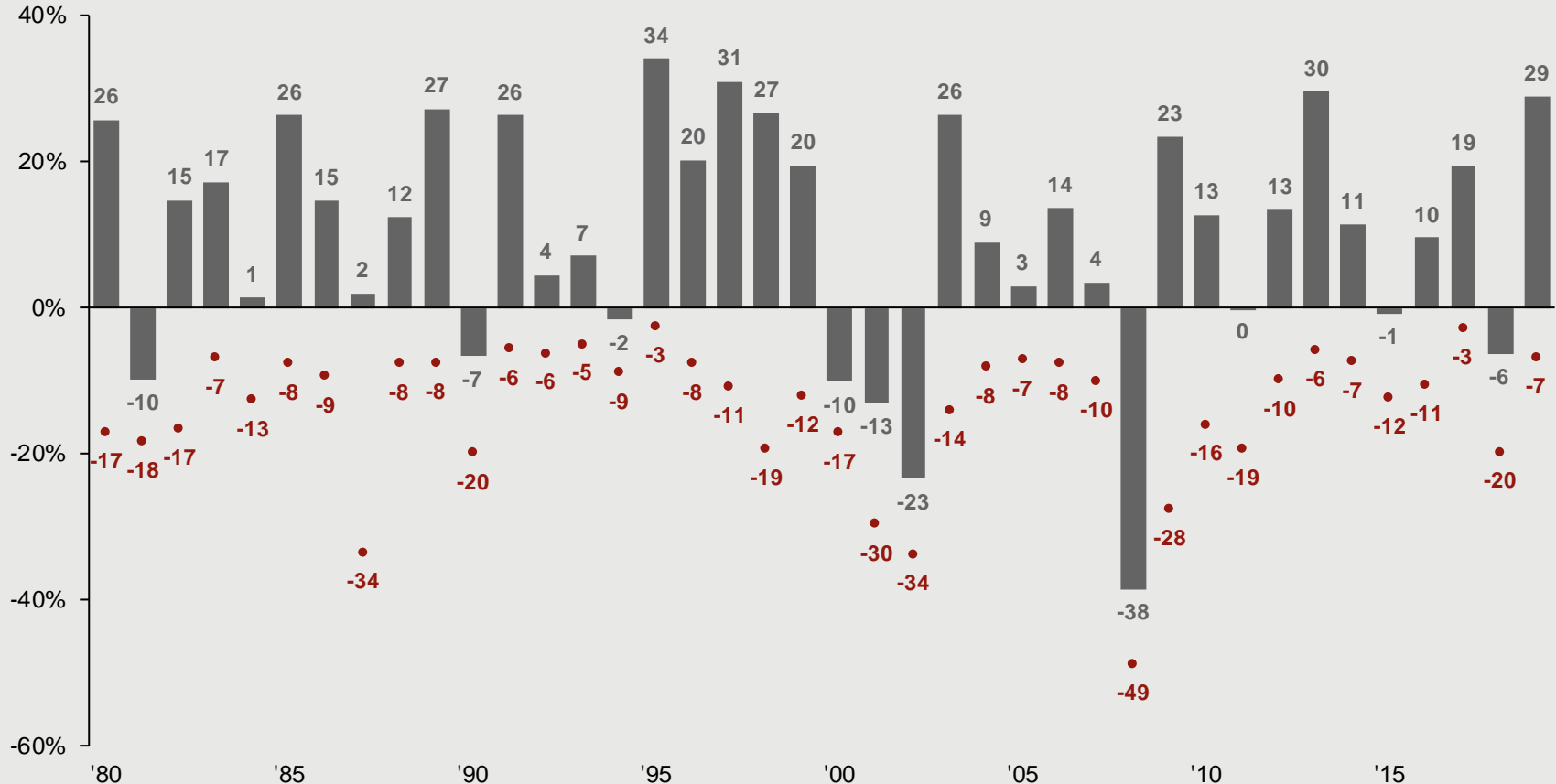
Despite average intra-year drops of 3.1%, annual returns positive in 37 of 40 years



Source: Barclays, Bloomberg, FactSet, J.P. Morgan Asset Management. Returns are based on total return. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2019, over which time period the average annual return was 7.5%. Returns from 1980 to 1989 are calculated on a monthly basis; daily data are used thereafter. *Guide to the Markets – U.S.* Data are as of December 31, 2019.

S&P 500 intra-year declines vs. calendar year returns

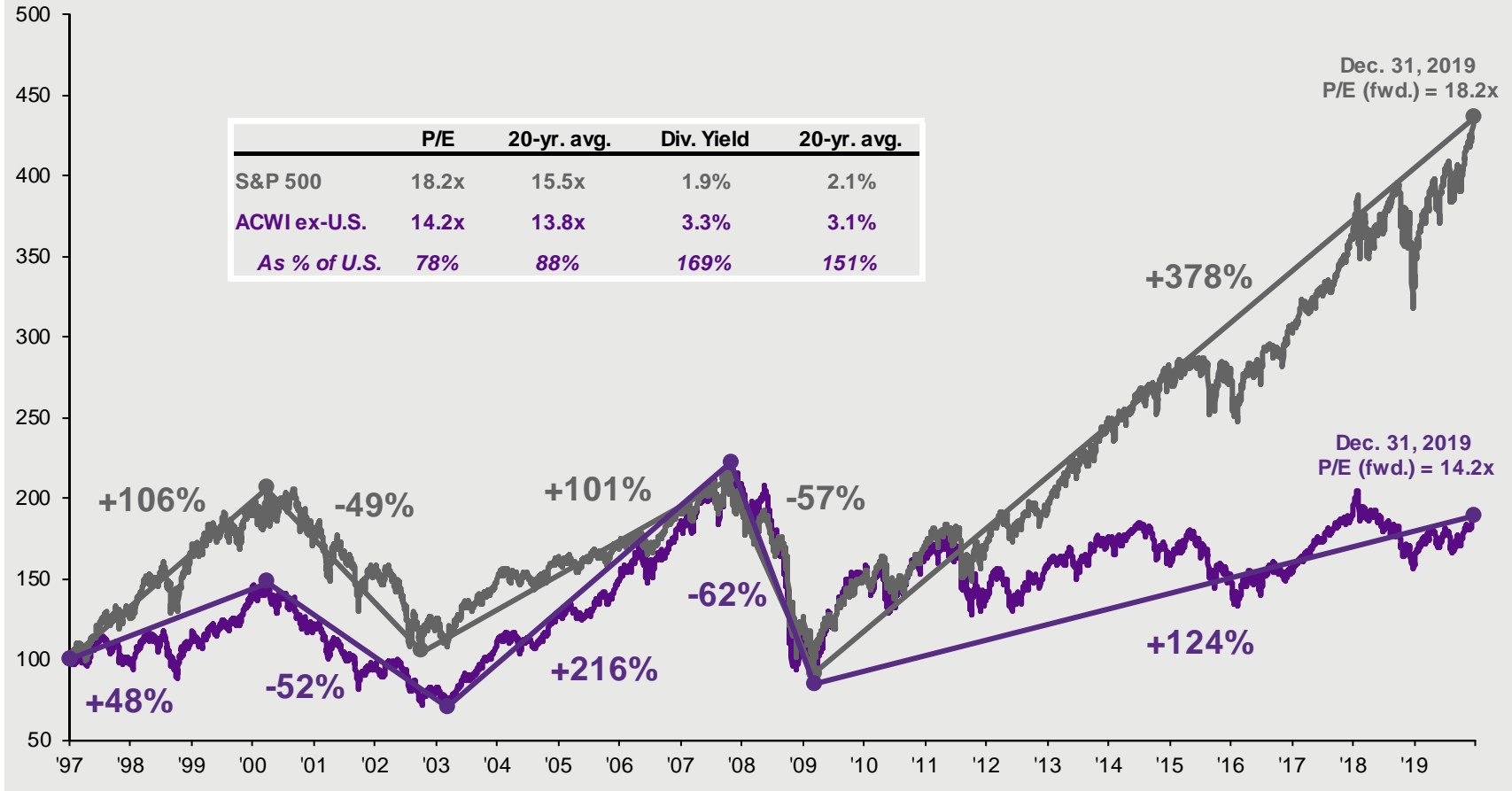
Despite average intra-year drops of 13.8%, annual returns positive in 30 of 40 years



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management. Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2019, over which time period the average annual return was 8.9%.
 Guide to the Markets – U.S. Data are as of December 31, 2019.

MSCI All Country World ex-U.S. and S&P 500 Indices

Dec. 1996 = 100, U.S. dollar, price return



Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management.

Forward price to earnings ratio is a bottom-up calculation based on the most recent index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Returns are cumulative and based on price movement only, and do not include the reinvestment of dividends. Dividend yield is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by FactSet Market Aggregates. Past performance is not a reliable indicator of current and future results.

Guide to the Markets – U.S. Data are as of December 31, 2019.

Asset class returns

															2005 - 2019	
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Ann.	Vol.
EM Equity 34.5%	REITs 35.1%	EM Equity 39.8%	Fixed Income 5.2%	EM Equity 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	EM Equity 37.8%	Cash 1.8%	Large Cap 31.5%	Large Cap 9.0%	REITs 22.2%
Comdty. 21.4%	EM Equity 32.6%	Comdty. 16.2%	Cash 1.8%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	DM Equity 25.6%	Fixed Income 0.0%	REITs 28.7%	REITs 8.3%	EM Equity 22.1%
DM Equity 14.0%	DM Equity 26.9%	DM Equity 11.6%	Asset Alloc. 25.4%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 21.8%	REITs -4.0%	Small Cap 25.5%	Small Cap 7.9%	Comdty. 18.6%
REITs 12.2%	Small Cap 18.4%	Asset Alloc. 7.1%	High Yield -26.9%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	Small Cap 14.6%	High Yield -4.1%	DM Equity 22.7%	EM Equity 7.8%	Small Cap 17.7%
Asset Alloc. 8.1%	Large Cap 15.8%	Fixed Income 7.0%	Small Cap -33.8%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 14.6%	Large Cap -4.4%	Asset Alloc. 19.5%	High Yield 7.2%	DM Equity 17.3%
Large Cap 4.9%	Asset Alloc. 15.3%	Large Cap 5.5%	Comdty. -35.6%	Large Cap 23.5%	High Yield 14.8%	Asset Alloc. -0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	High Yield 10.4%	Asset Alloc. -5.8%	EM Equity 18.9%	Asset Alloc. 6.6%	Large Cap 14.0%
Small Cap 4.6%	High Yield 13.7%	Cash 4.8%	Large Cap -37.0%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	REITs 8.7%	Small Cap -11.0%	High Yield 12.6%	DM Equity 5.3%	High Yield 10.9%
High Yield 3.6%	Cash 4.8%	High Yield 3.2%	REITs -37.7%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	Fixed Income 3.5%	Comdty. -11.2%	Fixed Income 8.7%	Fixed Income 4.1%	Asset Alloc. 10.0%
Cash 3.0%	Fixed Income 4.3%	Small Cap -1.6%	DM Equity -43.1%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Comdty. 1.7%	DM Equity -13.4%	Comdty. 7.7%	Cash 1.3%	Fixed Income 3.4%
Fixed Income 2.4%	Comdty. 2.1%	REITs -15.7%	EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Cash 0.8%	EM Equity -14.2%	Cash 2.2%	Comdty. -2.6%	Cash 1.0%

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.

Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Barclays Global HY Index, Fixed Income: Bloomberg Barclays US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg Barclays 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg Barclays US Aggregate, 5% in the Bloomberg Barclays 1-3m Treasury, 5% in the Bloomberg Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/04 – 12/31/19. Please see disclosure page at end for index definitions. All data represents total return for stated period. The "Asset Allocation" portfolio is for illustrative purposes only. Past performance is not indicative of future returns.

Guide to the Markets – U.S. Data are as of December 31, 2019.

All indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

Equities:

The **Dow Jones Industrial Average** is a price-weighted average of 30 actively traded blue-chip U.S. stocks.

The **MSCI ACWI (All Country World Index)** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.

The **MSCI EAFE Index (Europe, Australasia, Far East)** is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada.

The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

The **MSCI Europe Index** is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe.

The **MSCI Pacific Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the Pacific region.

The **Russell 1000 Index**® measures the performance of the 1,000 largest companies in the Russell 3000.

The **Russell 1000 Growth Index**® measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 1000 Value Index**® measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The **Russell 2000 Index**® measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The **Russell 2000 Growth Index**® measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 2000 Value Index**® measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

The **Russell 3000 Index**® measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

The **Russell Midcap Index**® measures the performance of the 800 smallest companies in the Russell 1000 Index.

The **Russell Midcap Growth Index**® measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index.

The **Russell Midcap Value Index**® measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value index.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. The index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. The **S&P 500 Index** focuses on the large-cap segment of the market; however, since it includes a significant portion of the total value of the market, it also represents the market.

Fixed income:

The **Bloomberg Barclays 1-3 Month U.S. Treasury Bill Index** includes all publicly issued zero-coupon US Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non convertible.

The **Bloomberg Barclays Global High Yield Index** is a multi-currency flagship measure of the global high yield debt market. The index represents the union of the US High Yield, the Pan-European High Yield, and Emerging Markets (EM) Hard Currency High Yield Indices. The high yield and emerging markets sub-components are mutually exclusive. Until January 1, 2011, the index also included CMBS high yield securities.

The **Bloomberg Barclays Municipal Index** consists of a broad selection of investment-grade general obligation and revenue bonds of maturities ranging from one year to 30 years. It is an unmanaged index representative of the tax-exempt bond market.

The **Bloomberg Barclays US Dollar Floating Rate Note (FRN) Index** provides a measure of the U.S. dollar denominated floating rate note market.

The **Bloomberg Barclays US Corporate Investment Grade Index** is an unmanaged index consisting of publicly issued US Corporate and specified foreign debentures and secured notes that are rated investment grade (Baa3/BBB or higher) by at least two ratings agencies, have at least one year to final maturity and have at least \$250 million par amount outstanding. To qualify, bonds must be SEC-registered.

The **Bloomberg Barclays US High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

The **Bloomberg Barclays US Mortgage Backed Securities Index** is an unmanaged index that measures the performance of investment grade fixed-rate mortgage backed pass-through securities of GNMA, FNMA and FHLMC.

The **Bloomberg Barclays US TIPS Index** consists of Inflation-Protection securities issued by the U.S. Treasury.

The **J.P. Morgan Emerging Market Bond Global Index (EMBI)** includes U.S. dollar denominated Brady bonds, Eurobonds, traded loans and local market debt instruments issued by sovereign and quasi-sovereign entities.

The **J.P. Morgan Domestic High Yield Index** is designed to mirror the investable universe of the U.S. dollar domestic high yield corporate debt market.

The **J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI Broad Diversified)** is an expansion of the **J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI)**. The CEMBI is a market capitalization weighted index consisting of U.S. dollar denominated emerging market corporate bonds.

The **J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI Global Diversified)** tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, Eurobonds. The index limits the exposure of some of the larger countries.

The **J.P. Morgan GBI EM Global Diversified** tracks the performance of local currency debt issued by emerging market governments, whose debt is accessible by most of the international investor base.

The **U.S. Treasury Index** is a component of the U.S. Government index.

Other asset classes:

The **Alerian MLP Index** is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for the asset class.

The **Bloomberg Commodity Index** and related sub-indices are composed of futures contracts on physical commodities and represents twenty two separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc

The **Cambridge Associates U.S. Global Buyout and Growth Index®** is based on data compiled from 1,768 global (U.S. & ex – U.S.) buyout and growth equity funds, including fully liquidated partnerships, formed between 1986 and 2013.

The **CS/Tremont Hedge Fund Index** is compiled by Credit Suisse Tremont Index, LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The Index uses the Credit Suisse/Tremont database, which tracks over 4500 funds, and consists only of funds with a minimum of US\$50 million under management, a 12-month track record, and audited financial statements. It is calculated and rebalanced on a monthly basis, and shown net of all performance fees and expenses. It is the exclusive property of Credit Suisse Tremont Index, LLC.

The **HFRI Monthly Indices (HFRI)** are equally weighted performance indexes, utilized by numerous hedge fund managers as a benchmark for their own hedge funds. The HFRI are broken down into 4 main strategies, each with multiple sub strategies. All single-manager HFRI Index constituents are included in the HFRI Fund Weighted Composite, which accounts for over 2200 funds listed on the internal HFR Database.

The **NAREIT EQUITY REIT Index** is designed to provide the most comprehensive assessment of overall industry performance, and includes all tax-qualified real estate investment trusts (REITs) that are listed on the NYSE, the American Stock Exchange or the NASDAQ National Market List.

The **NFI-ODCE**, short for NCREIF Fund Index - Open End Diversified Core Equity, is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted.

Definitions:

Investing in **alternative assets** involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise.

Investments in **commodities** may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

Derivatives may be riskier than other types of investments because they may be more sensitive to changes in economic or market conditions than other types of investments and could result in losses that significantly exceed the original investment. The use of derivatives may not be successful, resulting in investment losses, and the cost of such strategies may reduce investment returns.

Distressed Restructuring Strategies employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

Investments in **emerging markets** can be more volatile. The normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

The price of **equity securities** may rise, or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices in general may decline over short or extended periods of time.

Equity market neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Global macro strategies trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Some overseas markets may not be as politically and economically stable as the United States and other nations.

There is no guarantee that the use of **long and short positions** will succeed in limiting an investor's exposure to domestic stock market movements, capitalization, sector swings or other risk factors. Using long and short selling strategies may have higher portfolio turnover rates. Short selling involves certain risks, including additional costs associated with covering short positions and a possibility of unlimited loss on certain short sale positions.

Merger arbitrage strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction.

Mid-capitalization investing typically carries more risk than investing in well-established "blue-chip" companies. Historically, mid-cap companies' stock has experienced a greater degree of market volatility than the average stock.

Price to forward earnings is a measure of the price-to-earnings ratio (P/E) using forecasted earnings. **Price to book value** compares a stock's market value to its book value. **Price to cash flow** is a measure of the market's expectations of a firm's future financial health. **Price to dividends** is the ratio of the price of a share on a stock exchange to the dividends per share paid in the previous year, used as a measure of a company's potential as an investment.

Real estate investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower.

Relative Value Strategies maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

Small-capitalization investing typically carries more risk than investing in well-established "blue-chip" companies since smaller companies generally have a higher risk of failure. Historically, smaller companies' stock has experienced a greater degree of market volatility than the average stock.

The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not reliable indicators of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide.

To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our [Company's Privacy Policy](#). For further information regarding our regional privacy policies please refer to the [EMEA Privacy Policy](#); for locational Asia Pacific privacy policies, please click on the respective links: [Hong Kong Privacy Policy](#), [Australia Privacy Policy](#), [Taiwan Privacy Policy](#), [Japan Privacy Policy](#) and [Singapore Privacy Policy](#).

This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JF Asset Management Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E); in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., and in the United States by JPMorgan Distribution Services Inc. and J.P. Morgan Institutional Investments, Inc., both members of FINRA; and J.P. Morgan Investment Management Inc.

In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other countries in APAC, to intended recipients only.

Copyright 2019 JPMorgan Chase & Co. All rights reserved

Google assistant is a trademark of Google Inc.

Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

Prepared by: Samantha M. Azzarello, Alexander W. Dryden, Jordan K. Jackson, David M. Lebovitz, Jennie Li, John C. Manley, Meera Pandit, Gabriela D. Santos, Tyler J. Voigt and David P. Kelly.

Unless otherwise stated, all data are as of December 31, 2019 or most recently available.

Guide to the Markets – U.S.

JPM-LITTLEBOOK | 0903c02a82565a44