# S&P Dow Jones Indices

A Division of S&P Global

#### **CONTRIBUTOR**

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# **Dow Jones Industrial Average**

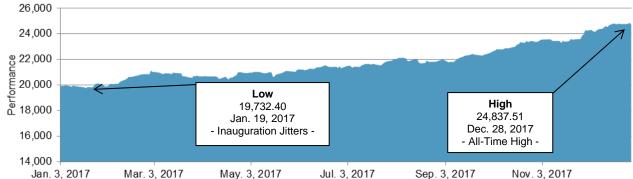
# Report Card - 2017 Year in Review

#### AT A GLANCE

Despite losing 118+ points during the final trading session, the Dow Jones Industrial Average ended the year at 24,719.22, close to its all-time high, and having advanced just shy of 5,000 points for an annual gain of 25.08%. That performance is the best since 2013, when the DJIA gained 26.50%.

- <u>Recurrent Themes</u> Trump, a continuing bull market, an improving economy, mixed results from Congress, a dearth of volatility and North Korea.
- New Highs In 2017, the DJIA reached more new highs—71 in total—than any year in history.
- Milestones With 5 new 1,000 point milestones (20k, 21k, 22k, 23k, and 24k), 2017 was the most active such period on record.
- Best Day in Point Terms Nov. 30, 2017 (up 331.67 points), when the DJIA sped through the 24k level as investors cheered progress on the GOP tax reform bill.
- <u>Large Moves</u> Or, since muted volatility was a major theme in 2017, this is more appropriately the lack of large moves. In 2017, there were only 10 trading sessions when the DJIA posted a move of 1% or greater.
- Stock Contributions Boeing (BA) was the biggest contributor to the DJIA's advance, adding over 955 points.
- <u>Sector Contributions</u> The industrials sector was the largest contributor in 2017.

#### **Exhibit 1: DJIA 1-Year Performance**



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

# PERFORMANCE STATISTICS

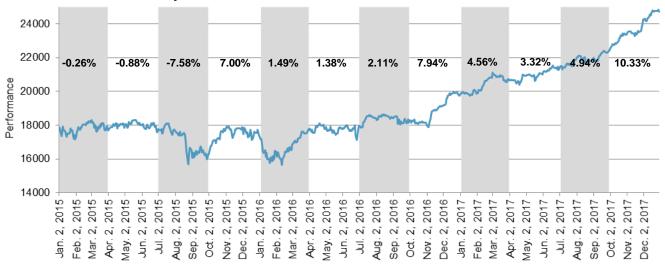
Exhibit 2: DJIA Long	Exhibit 2: DJIA Long-Term Performance (%)									
Q4 2017	1-YEAR	3-YEAR	5-YEAR	10-YEAR						
10.33	25.08	38.69	88.64	113.51	86.35					

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 3	Exhibit 3: DJIA Historical Annual Performance (%)												
2017	2016 2015 2014 2013 2012 2011 2010 2009 2008 2007 2006												
25.08	13.42	-2.23	7.52	26.50	7.26	5.53	11.02	18.82	-33.84	6.43	16.29		

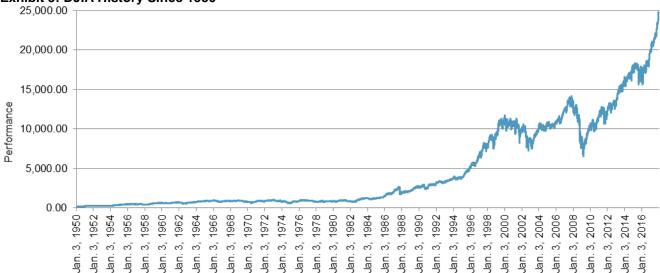
Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Exhibit 4: Recent Quarter-by-Quarter Performance** 



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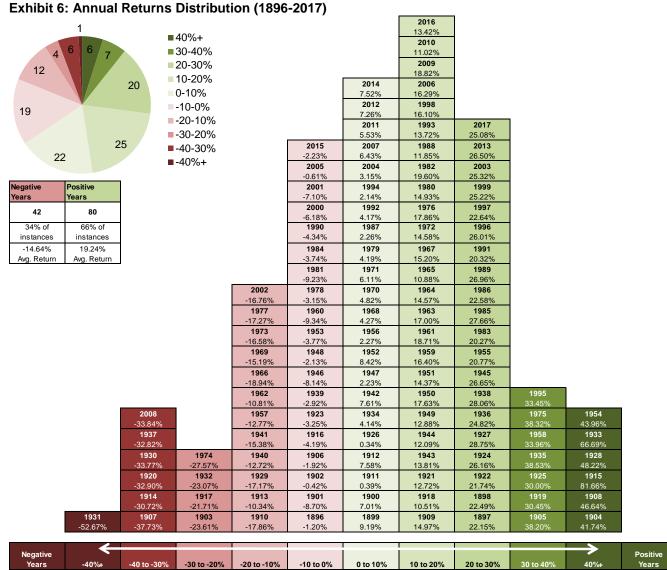
# **Exhibit 5: DJIA History Since 1950**



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

### **ANNUAL RETURNS DISTRIBUTION**

With an annual return of 25.08%, this year fell within the third most common performance range of up 20%-30%; 20 of 122 total observed years have experienced returns in this range. In 66% of total observations (i.e. since inception in 1896), the DJIA has posted a positive calendar year return.



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# 1% MOVES

Suppressed volatility was a dominant theme in 2017. There were only 10 trading sessions when the DJIA posted a move of 1% or greater (4 to the downside, 6 to the upside). This is the lowest total since 1964, when only three such moves were recorded for the entire year. Since 1940, the annual average is 49 1% moves, or an experience that typically occurs in about one of every five trading sessions. By comparison, in 2017 a 1% move occurred in only 1 of every 25 sessions.

Last year (i.e. 2016) was more in keeping with historical averages. Throughout the period, the DJIA posted 51 moves of 1% or more (nearly evenly split, at 24 to the downside and 27 to the upside). In 2008, during the height of the financial crisis, the DJIA experienced 134 daily moves of 1% or greater.

Since inception of the DJIA in 1896, 1% moves to the upside (11.8% of all trading days) are slightly more common than those to the downside (11.4% of all trading days).

Exhibit 7: Moves of 1%	% or Greater				
YEAR	Q1	Q2	Q3	Q4	ANNUAL
2017	2	3	3	2	10
2016	26	14	6	5	51
2015	20	10	23	19	72
2014	11	4	4	17	36
2013	4	10	4	6	24
2012	5	17	6	11	39
2011	11	12	34	32	89
2010	14	28	18	9	69
2009	42	30	17	19	108
2008	29	18	37	50	134
2007	4	9	24	19	56
2006	4	11	7	2	24
2005	5	13	3	6	27
2004	15	9	10	11	45
2003	29	19	13	10	71
2002	21	29	42	36	128
2001	24	21	28	24	97
2000	28	32	14	27	101
1999	24	22	18	19	83
1998	16	16	30	23	85

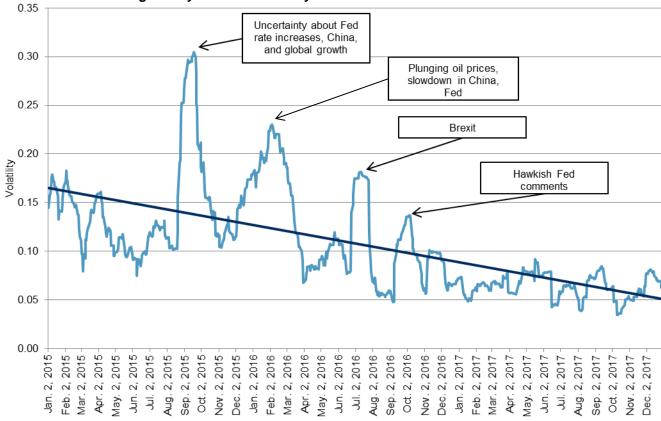
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### **VOLATILITY**

As noted above, muted volatility—despite political, economic, and international uncertainty—was the topic of much discussion in 2017. The DJIA's trailing 21-day realized volatility ended the year at 6.58, which was:

- Lower, though not dramatically different, from where it began the year at 7.25
- Slightly above the average of 6.39 for the entire 12-month period
- Well below the 11.63 average for 2016

Volatility had been elevated in the beginning of 2016 (see Exhibit 8)—driven by themes such as an oil crash and concerns about China's economy—but gradually fell into the single digits as the year continued. Brexit sent levels higher during the summer months, though that spike proved short-lived as market participants' fears of a resulting contagion went unrealized. The pop at the end of Q3 2016 was driven in part by expectations that the Fed would raise interest rates, while the uptick in November 2016 was driven by election tumult. Since then (i.e. throughout 2017), movement has been minimal and generally the range bound between 5 and 10.



**Exhibit 8: DIJA Trailing 21-Day Realized Volatility** 

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

# **BEST AND WORST DAYS IN 2017**

The catalysts for big daily moves seemed to repeat themselves throughout the year: markets grappling with the new Trump administration, Fed-watching, North Korean nuke tests, successes and failures of the GOP-led Congress, and corporate earnings and economic data were all grist for investor actions.

Exhibit 9: The 10	Best Days (P	oints)		
DATE	CLOSE	POINTS	RETURN (%)	CONTEXT
Nov. 30, 2017	24.272.35	331.67	1.39	The Dow blows through the 24k level as investors cheer progress on the GOP tax reform bill.
March 1, 2017	21,115.55	303.31	1.46	DJIA closed above 21,000 for the first time, heartened by measured remarks from Trump's address to Congress.
Sept. 11, 2017	22,057.37	259.58	1.19	Hurricane Irma's muted landfall, expectations of the new iPhone, and diminished NK conflict worries bolstered stocks.
Nov. 28, 2017	23,836.71	255.93	1.09	Senate progress on tax reform was more inspiring than a NK missile launch was worrisome.
April 25, 2017	20,996.12	232.23	1.12	Stocks were buoyed by strong quarterly results including DJIA components CAT, MCD, MMM, and DD.
April 24, 2017	20,763.89	216.13	1.05	Stocks gained in anticipation of details for Trump's tax plan as well as first round results in the French presidential election.
August 22, 2017	21,899.89	196.14	0.90	U.S. tax reform progress and expanding equity exposure by Norway's SWF powered a "buy the dip" gain.
Nov. 16, 2017	23,458.36	187.08	0.80	Strong earnings from CSCO and WMT, paired with passage of the House tax reform bill, drove strong gains.
Feb. 3, 2017	20,071.46	186.55	0.94	A better-than-expected job report—an addition of 227,000 jobs versus expected gains of 175,000—drove the increase.
April 17, 2017	20,636.92	183.67	0.90	Geopolitical concerns eased and expectations of a favorable earnings season drew market participants back into the markets.

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 10: The 1	0 Best Days (F	Percent)		
DATE	CLOSE	POINTS	RETURN (%)	CONTEXT
March 1, 2017	21,115.55	303.31	1.46	DJIA closes above 21k with investors heartened by measured remarks in Trump's 1st address to Congress.
Nov. 30, 2017	24.272.35	331.67	1.39	The Dow blows through the 24k level as investors cheer progress on the GOP tax reform bill.
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April 17, 2017	20,636.92	183.67	0.90	Geopolitical concerns eased and expectations of a favorable earnings season drew market participants back into the markets.
April 20, 2017	20,578.71	174.22	0.85	Stocks gained on news of stronger-than-expected corporate earnings and economic data plus tax reform hopes.

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Exhibit 11: The 1	0 Worst Days	(Points)		
DATE	CLOSE	POINTS	RETURN (%)	CONTEXT
May 17, 2017	20,606.93	-372.82	-1.78	Markets were hammered by concerns that Trump sought to obstruct Comey's investigation of Michael Flynn.
August 17, 2017	21,750.73	-274.14	-1.24	Worries about the viability of Trump's legislative aspirations, coupled with a terror attack in Spain, weighed on markets.
March 21, 2017	20,668.01	-237.84	-1.14	After weeks of gains, pessimism set in as concerns emerged that Trump may have trouble fulfilling promises.
Sept. 5, 2017	21,753.31	-234.24	-1.07	Anxieties about North Korea's nuke ambitions plus company-specific issues (United Technologies) led the DJIA lower.
August 10, 2017	21,844.01	-204.70	-0.93	North Korea does it again—the test of a nuclear weapon gives investors an excuse to take cash off the table.
June 29, 2017	21,287.03	-167.58	-0.78	Just one day after strong gains, which itself followed a day of losses, the DJIA again posted in the red driven by tech declines.
July 6, 2017	21,320.04	-158.13	-0.74	Blame to go around: a tech sell-off, central bank unwinding, and geopolitical concerns all weighed on markets.
April 13, 2017	20,453.25	-138.61	-0.67	DJIA loses 130+ on geopolitical concerns (e.g., "Mother of All Bombs") despite strong numbers from financial companies.
Nov. 15, 2017	23,271.28	-138.19	-0.59	Softening global demand led to a decline in oil prices and worries about the progress of tax reform affected the DJIA.
Jan. 30, 2017	19,971.13	-122.65	-0.61	The DJIA bleeds off 122+ points as market participants grapple with the Trump Administration's travel ban.

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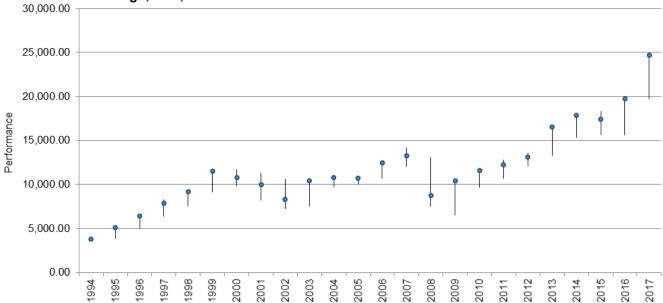
Exhibit 12: The 1	0 Worst Days	(Percent)		
DATE	CLOSE	POINTS	RETURN (%)	CONTEXT
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# HIGH, LOW, CLOSE

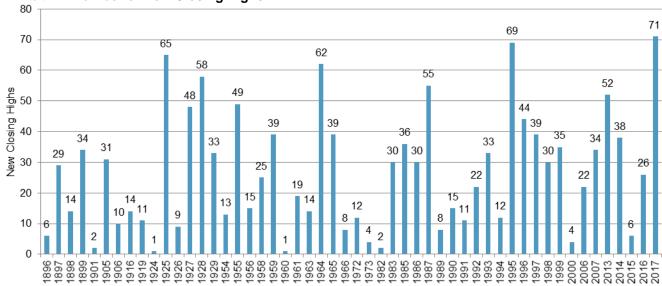
- The DJIA closed 2017 very near, though not at, the high for the year (24,719.22 versus 24,837.51).
- There were 71 new highs for The Dow in 2017, the most of any year on record. Put another way, more than one of every four trading days closed in record territory—that's a remarkable statistic. By comparison, 1995 and 1925 were in the number two and number three slots, with 69 and 65 new highs, respectively. There have been 52 calendar years when the DJIA notched at least one new high, and 70 when none were recorded.





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**Exhibit 14: Number of New Closing Highs** 



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# **QUARTERLY PERFORMANCE**

- The DJIA's Q4 2017 return of 10.33% brought the streak of positive quarters to nine in a row. That's the longest streak of positive periods since Q1 1995 to Q3 1997 (11 in a row).
- Every quarter in 2017 experienced above-average returns for their respective periods (versus an average calculated since 1985).
- Since that time, Q1, Q2, and Q4 have averaged positive returns, while Q3 has averaged a slightly negative return (one that is heavily influenced by infamous double-digit declines in 1987 and 2008).

YEAR	Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	ANNUAL (%)
2017	4.56	3.32	4.94	10.33	25.08
2016	1.49	1.38	2.11	7.94	13.42
2015	-0.26	-0.88	-7.58	7.00	-2.23
2014	-0.72	2.24	1.29	4.58	7.52
2013	11.25	2.27	1.48	9.56	26.50
2012	8.14	-2.51	4.32	-2.48	7.20
2011	6.41	0.77	-12.09	11.95	5.53
2010	4.11	-9.97	10.37	7.32	11.02
2009	-13.30	11.01	14.98	7.37	18.82
2008	-7.55	-7.44	-4.40	-19.12	-33.84
2007	-0.87	8.53	3.63	-4.54	6.43
2006	3.66	0.37	4.74	6.71	16.29
2005	-2.59	-2.18	2.86	1.41	-0.6
2004	-0.92	0.75	-3.40	6.97	3.15
2003	-4.19	12.43	3.22	12.71	25.32
2002	3.82	-11.16	-17.87	9.87	-16.76
2001	-8.42	6.31	-15.76	13.27	-7.10
2000	-5.00	-4.34	1.94	1.28	-6.18
1999	6.59	12.11	-5.78	11.22	25.22
1998	11.27	1.73	-12.39	17.07	16.10
1997	2.10	16.55	3.55	-0.47	22.64
1996	9.19	1.21	4.02	9.62	26.0
1995	8.43	9.58	5.11	6.85	33.45
1994	-3.15	-0.30	6.02	-0.23	2.14
1993	4.06	2.36	1.11	5.60	13.72
1992	2.10	2.57	-1.41	0.90	4.17
1991	10.64	-0.24	3.78	5.04	20.32
1990	-1.67	6.41	-14.86	7.39	-4.34
1989	5.77	6.38	10.36	2.24	26.96
1988	2.54	7.73	-1.34	2.63	11.8
1987	21.56	4.94	7.35	-25.32	2.20
1986	17.58	4.08	-6.61	7.26	22.58
1985	4.56	5.42	-0.51	16.41	27.66
Average	3.07	2.77	-0.21	4.80	10.62

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### **1H VERSUS 2H COMPARISONS**

- The DJIA returned 15.78% in 2H 2017, the best second half since 2010 when the Average returned 18.45% from July to December.
- In comparison, the Average returned 7.68% for the first six months of 2017—this was the best first half since 2013, when the index gained 13.78%. To see similar outperformance, we have to go back to 1999, when the DJIA advanced 19.49% from January to June.
- From 1897—the first full year following the DJIA's inception in May 1896—through 2017, the average first half return was 3.22%; the average second half return was 4.20%.
- As was the case in 2017, positive first half returns were followed by a positive second half in approximately 72% of observations (54 of 75).

Exhibit 16: 1	H Versus 2H Perfor	rmance Compa	risons				
YEAR	1H (%)	2H (%)	FULL YEAR (%)	YEAR	1H (%)	2H (%)	FULL YEAR (%)
1896	-	-	-	1957	0.76	-13.43	-12.77
1897	9.02	12.04	22.15	1958	9.75	22.06	33.96
1898	6.50	15.01	22.49	1959	10.27	5.56	16.40
1899	16.29	-6.11	9.19	1960	-5.70	-3.86	-9.34
1900	-16.87	28.73	7.01	1961	11.05	6.90	18.71
1901	10.22	-17.17	-8.70	1962	-23.23	16.18	-10.81
1902	-0.39	-0.03	-0.42	1963	8.40	7.93	17.00
1903	-8.10	-16.88	-23.61	1964	8.98	5.13	14.57
1904	0.29	41.34	41.74	1965	-0.70	11.66	10.88
1905	10.43	25.15	38.20	1966	-10.23	-9.70	-18.94
1906	-9.55	8.44	-1.92	1967	9.49	5.21	15.20
1907	-14.83	-26.89	-37.73	1968	-0.81	5.12	4.27
1908	23.56	18.68	46.64	1969	-7.48	-8.34	-15.19
1909	7.12	7.34	14.97	1970	-14.60	22.73	4.82
1910	-18.04	0.22	-17.86	1971	6.22	-0.11	6.11
1911	5.68	-5.00	0.39	1972	4.36	9.79	14.58
1912	11.31	-3.35	7.58	1973	-12.58	-4.58	-16.58
1913	-14.77	5.19	-10.34	1974	-5.69	-23.20	-27.57
1914	2.39	-32.33	-30.72	1975	42.64	-3.02	38.32
1915	28.36	40.17	79.92	1976	17.64	0.19	17.86
1916	-8.78	6.05	-3.26	1977	-8.79	-9.29	-17.27
1917	0.92	-22.42	-21.71	1978	-1.47	-1.70	-3.15
1918	11.16	-0.58	10.51	1979	4.59	-0.38	4.19
1919	30.15	0.23	30.45	1980	3.48	11.07	14.93
1920	-15.36	-20.72	-32.90	1981	1.34	-10.43	-9.23
1921	-4.86	18.48	12.72	1982	-7.21	28.90	19.60
1922	14.59	6.24	21.74	1983	16.76	3.00	20.27

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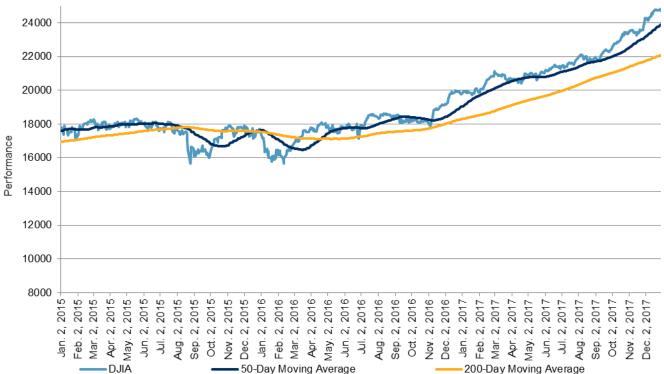
YEAR	1H (%)	2H (%)	FULL YEAR (%)	YEAR	1H (%)	2H (%)	FULL YEAR (%)
1923	-11.02	8.73	-3.25	1984	-10.03	6.99	-3.74
1924	0.89	25.05	26.16	1985	10.23	10.23 15.82	
1925	8.71	19.58	30.00	1986	22.37	0.17	22.58
1926	-2.31	2.72	0.34	1987	27.56	-19.83	2.26
1927	5.74	21.76	28.75	1988	10.46	1.25	11.85
1928	4.03	42.48	48.22	1989	12.52	12.83	26.96
1929	11.26	-25.56	-17.17	1990	4.63	-8.58	-4.34
1930	-8.91	-27.29	-33.77	1991	10.37	9.02	20.32
1931	-8.75	-48.13	-52.67	1992	4.72	-0.52	4.17
1932	-45.01	39.89	-23.07	1993	6.51	6.77	13.72
1933	63.76	1.79	66.69	1994	-3.44	5.78	2.14
1934	-4.18	8.69	4.14	1995	18.82	12.31	33.45
1935	13.62	21.93	38.53	1996	10.50	14.04	26.01
1936	9.41	14.08	24.82	1997	18.99	3.07	22.64
1937	-5.88	-28.63	-32.82	1998	13.20	2.56	16.10
1938	10.78	15.60	28.06	1999	19.49	4.80	25.22
1939	-15.59	15.01	-2.92	2000	-9.13	3.24	-6.18
1940	-18.88	7.60	-12.72	2001	-2.64	-4.58	-7.10
1941	-6.09	-9.89	-15.38	2002	-7.77	-9.75	-16.76
1942	-6.87	15.54	7.61	2003	7.72	16.34	25.32
1943	20.08	-5.22	13.81	2004	-0.18	3.33	3.15
1944	9.19	2.66	12.09	2005	-4.71	4.31	-0.61
1945	8.51	16.71	26.65	2006	4.04	11.77	16.29
1946	6.59	-13.82	-8.14	2007	7.59	-1.07	6.43
1947	0.06	2.18	2.23	2008	-14.44	-22.68	-33.84
1948	4.58	-6.42	-2.13	2009	-3.75	23.45	18.82
1949	-5.57	19.54	12.88	2010	-6.27	18.45	11.02
1950	4.49	12.58	17.63	2011	7.23	-1.59	5.53
1951	3.07	10.96	14.37	2012	5.42	1.74	7.26
1952	1.87	6.43	8.42	2013	13.78	11.18	26.50
1953	-8.10	4.71	-3.77	2014	1.51	5.92	7.52
1954	18.74	21.25	43.96	2015	-1.14	-1.10	-2.23
1955	11.62	8.20	20.77	2016	2.90	10.22	13.42
1956	0.90	1.36	2.27	2017	7.68	15.78	25.08

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# **MOVING AVERAGES**

- The DJIA ended 2017 above both the 50-day and 200-day moving averages (MAs). At no point during the second half did the Dow fall below either moving average.
- Further, the index posted closing values below its 50-day MA at only two points during 1H 2017:
  - April 12-21, 2017: Geopolitical concerns weighed on market participants' sentiment; and
  - May 17-18, 2017: Concerns mounted that Trump may have obstructed an FBI investigation.
- These events did not appear to have a lasting impact, however, since at no point during 2017 did the DJIA fall below its 200-day MA.
- The DJIA last fell below both moving averages:
  - Briefly in June 2016 after the Brexit vote; and
  - From December 2015 to February 2016, following a crash in oil prices and global economic concerns (e.g., China).

# **Exhibit 17: DJIA Moving Averages**



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

# 1,000 POINT MILESTONES

- With five new 1,000 point milestones (20k, 21k, 22k, 23k, and 24k), 2017 was the most active such period on record. Similarly, the speed with which the DJIA crossed these thresholds was notable: it took only 257 trading days to run through those five marks. By comparison, it took 483 days for the DJIA to move from 18k to 19k.
- Related: 2014, 2013, 2007, 1999, 1997, and 1995 each posted two 1,000 point milestones.
- The climb from inception to the first 1,000 points—clocking in at 21,653 trading days—took nearly twice as long to reach as all of the subsequent milestones.
- Of course, there are a few caveats to remember with these milestones: first, round numbers
  are an interesting curiosity but are otherwise arbitrary accomplishments; and second, it's
  important to note that as the DJIA gains in value each successive 1,000 point milestone
  represents a smaller percentage gain.
- Exhibit 18 shows each milestone and date on which it was crossed.

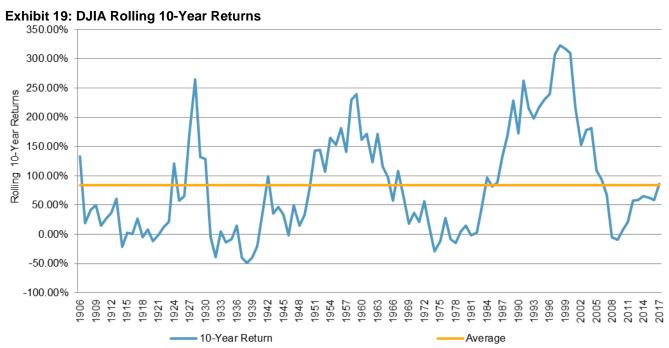
Exhibit 18: DJIA 1,000	Point Milestones		
MILESTONE	DATE	DJIA LEVEL	TRADING DAYS FROM PRIOR MILESTONE
Inception	May 26, 1896	40.04	NA
1,000	Nov. 14, 1972	1,003.16	21,653
2,000	Jan. 8, 1987	2,002.25	3,573
3,000	April 17, 1991	3,004.46	1,077
4,000	Feb. 23, 1995	4,003.33	971
5,000	Nov. 21, 1995	5,023.55	187
6,000	Oct. 14, 1996	6,010.00	226
7,000	Feb. 13, 1997	7,022.43	84
8,000	July 16, 1997	8,038.99	105
9,000	April 6, 1998	9,033.22	182
10,000	March 29, 1999	10,006.78	245
11,000	May 3, 1999	11,014.69	24
12,000	Oct. 19, 2006	12,011.73	1,879
13,000	April 25, 2007	13,089.89	127
14,000	July 19, 2007	14,000.41	59
15,000	May 7, 2013	15,056.20	1,460
16,000	Nov. 21, 2013	16,009.99	139
17,000	July 3, 2014	17,068.26	153
18,000	Dec. 23, 2014	18,024.17	120
19,000	Nov. 22, 2016	19,023.87	483
20,000	Jan. 25, 2017	20,068.51	42
21,000	March 1, 2017	21,115.55	24
22,000	Aug. 2, 2017	22,016.24	107
23,000	Oct. 18, 2017	23,157.60	54
24,000	Nov. 30, 2017	24,272.35	30
25,000	???	???	???

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

#### **ROLLING 10-YEAR RETURNS**

With the close on Friday, Dec. 29, 2017, the DJIA logged a 10-year (price) return of 86.35%. How does this compare with past performance? Referencing Exhibit 19, which shows the rolling 10-year returns in the Average, we can divine the following:

- The most recent 10-year return (2008-2017) barely edges the mean, which, since the DJIA's inception, has been 83.41%. This, of course, includes the terrible, horrible, no good, very bad year of 2008, when the market fell over 33% from the effects of the financial crisis.
- Thus far, there have been 112 total decade-long observations. Of these, 92 have shown positive returns, while 20 have experienced declines. In other words, the DJIA has experienced a positive 10-year return in 82% of observed instances.
- The best-performing 10-year period was from 1989-1998 when the DJIA returned 323.39%, with the final years of the tech boom driving the markets higher.
- The worst-performing period was from 1929-1938, as the U.S. suffered the effects of the 1929 market crash and The Great Depression. During this time, the DJIA fell 48.41%.



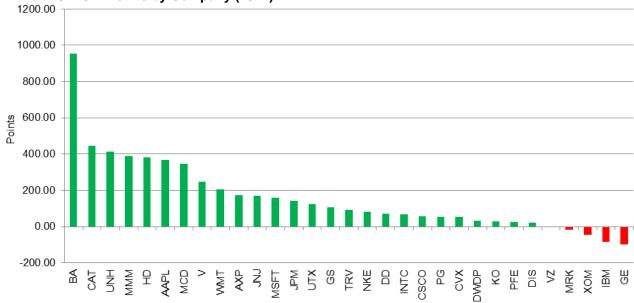
Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

### **POINT CONTRIBUTION**

# By Stock

- In 2017, 26 stocks made positive contributions, while five drew points away. Astute observers will note that 26+5=31 stocks, even though the DJIA only captures the performance of 30 "industrial" companies. The discrepancy arises from the newly combined DowDuPont shares, added in August 2017 (thus both DD and DWDP are counted in the year-end totals).
- Boeing contributed the most to the DJIA's advance during 2017, adding more than two times as many points as the next best stock, Caterpillar (CAT), with UnitedHealth Group (UNH) holding the number three spot.
- General Electric (GE) was the biggest detractor during 2017, followed by IBM (IBM) and Exxon Mobile (XOM). Those first two are notable—in my mind, at least—given the old truism that "you never got fired for buying GE," and that as of the DJIA's 120<sup>th</sup> Anniversary in 2016, IBM was the stock that had contributed the most points of any in the Average's lifetime.
- Goldman had a binary experience during the first half of the year, swinging from bad to good and back again—during two months, February and June 2017, it made the largest contributions; during three months, it was the largest detractor (January, March, and May 2017), and it ended the period taking the most away from the DJIA of any component.

#### Exhibit 20: DJIA Points by Company (2017)



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

DJIA Report Card June 2017

Exhibit 2	Exhibit 21: Points by Company by Month																	
SYMBO	NAME	SECTOR	2016 CLOSE (\$)	2017 CLOSE (\$)	CHANGE (%)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	TOTAL
AAPL	Apple Inc.	Information Technology	115.82	169.23	46.11	37.87	107.11	45.68	-0.07	62.39	-59.85	32.26	104.57	-68.03	102.73	19.35	-18.04	365.96
AXP	American Express Co	Financials	74.08	99.31	34.06	15.75	25.20	-6.51	0.96	-15.82	49.99	6.78	5.96	30.02	34.84	15.08	11.02	173.27
ВА	Boeing Co	Industrials	155.68	294.91	89.43	53.01	115.12	-23.08	54.58	19.18	69.30	306.19	-19.18	100.18	25.96	129.58	124.70	955.54
CAT	Caterpillar Inc	Industrials	92.74	157.58	69.92	20.00	6.85	-26.71	65.06	21.71	13.90	44.45	24.24	49.71	76.36	36.84	113.13	445.53
csco	Cisco Systems Inc	Information Technology	30.22	38.30	26.74	3.42	23.70	-2.60	1.85	-17.39	-1.58	1.03	5.20	9.78	3.58	21.69	6.89	55.56
CVX	Chevron Corp	Energy	117.70	125.19	6.36	-43.49	7.88	-35.13	-4.59	-22.05	5.82	33.28	-10.75	68.03	-11.09	21.34	42.69	51.95
DD	E. I. du Pont de Nemours and Company	Materials	73.40	NA	NA	14.38	20.82	12.26	-3.97	-5.68	12.26	10.27	11.78	NA	NA	NA	NA	72.11
DIS	Walt Disney Co	Consumer Discretionary	104.22	107.51	3.16	44.03	-3.84	22.60	15.13	-52.46	-11.57	25.20	-59.79	-18.11	-5.23	48.27	18.52	22.77
DWDP	DowDupont Inc.	Materials	NA	71.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.76	21.21	-2.41	-5.10	31.47
GE	General Electric Co	Industrials	31.60	17.45	-44.78	-13.01	0.75	-0.07	-5.55	-11.03	-2.53	-9.59	-7.26	-2.55	-27.68	-12.88	-5.78	-97.17
GS	Goldman Sachs Group Inc	Financials	239.45	254.76	6.39	-69.37	128.34	-125.60	-40.54	-85.88	72.87	23.49	-10.89	92.61	36.42	35.53	49.02	106.00
HD	Home Depot Inc	Consumer Discretionary	134.08	189.53	41.36	23.97	50.20	13.15	63.48	-17.74	-0.75	-26.02	1.85	94.26	15.29	96.67	66.86	381.21
IBM	Intl Business Machines Corp	Information Technology	165.99	153.42	-7.57	58.42	36.30	-38.90	-94.85	-52.46	8.22	-62.73	-11.23	14.12	61.83	-0.62	-3.79	-85.70
INTC	Intel Corp	Information Technology	36.27	46.16	27.27	3.77	-4.25	-0.89	0.55	-0.27	-16.23	11.85	-2.74	20.73	51.02	-4.48	9.09	68.14
JNJ	Johnson & Johnson	Health Care	115.21	139.72	21.27	-13.42	61.36	16.03	-7.40	32.73	27.67	2.94	-2.40	-16.25	64.72	-0.55	2.69	168.13
JPM	JP Morgan Chase & Co	Financials	86.29	106.94	23.93	-11.37	41.02	-19.04	-5.75	-33.21	63.35	2.74	-6.23	31.81	35.12	26.92	16.66	142.01
KO	Coca-Cola Co	Consumer Staples	41.46	45.88	10.66	0.75	2.67	3.29	4.86	15.89	-4.25	6.78	-1.99	-3.72	6.68	-1.45	0.76	30.28
MCD	McDonald's Corp	Consumer Discretionary	121.72	172.12	41.41	5.82	34.79	13.42	70.67	75.06	15.55	13.56	33.08	-22.65	70.44	34.84	1.03	345.61
MMM	3M Co	Industrials	178.57	235.37	31.81	-25.68	78.96	34.10	30.82	59.17	25.48	-48.08	21.57	38.42	139.71	89.17	-53.50	390.14
MRK	Merck & Co Inc	Health Care	58.87	56.27	-4.42	21.37	26.57	-15.96	-8.29	19.04	-6.99	-1.44	-0.14	1.17	-61.56	1.24	6.89	-18.09
MSFT	Microsoft Corp	Information Technology	62.14	85.54	37.66	17.19	-4.59	12.87	17.81	9.45	-6.23	25.82	14.18	-1.93	59.83	6.82	9.43	160.65
NKE	NIKE Inc B	Consumer Discretionary	50.83	62.55	23.06	14.18	29.17	-9.79	-2.19	-16.57	41.16	0.34	-42.73	-6.61	21.62	37.39	14.67	80.62
PFE	Pfizer Inc	Health Care	32.48	36.22	11.51	-5.14	16.37	0.62	-1.99	-8.70	6.44	-2.94	5.20	12.26	-4.41	8.26	-0.28	25.70
PG	Procter & Gamble	Consumer Staples	84.08	91.88	9.28	24.11	23.76	-8.35	-17.26	5.20	-6.44	25.13	9.93	-8.88	-31.95	25.13	13.01	53.40
TRV	Travelers Cos Inc	Financials	122.42	135.64	10.80	-31.78	30.54	-11.64	7.67	21.85	11.51	10.68	-47.32	9.23	68.37	21.48	0.48	91.07
UNH	Unitedhealth Group Inc	Health Care	160.04	220.46	37.75	14.11	22.46	-9.38	74.44	2.05	70.13	43.76	48.55	-21.00	98.94	123.59	-53.09	414.58
UTX	United Technologies Corp	Industrials	109.62	127.57	16.37	0.34	19.72	-2.33	46.43	15.68	5.68	-24.24	7.88	-25.06	25.34	11.64	42.14	123.22
V	Visa Inc	Information Technology	78.02	114.02	46.14	32.12	35.82	6.37	16.09	27.46	-9.93	39.58	27.12	11.84	32.64	17.97	9.85	246.93
VZ	Verizon Communications Inc	Telecommunication Services	53.38	52.93	-0.84	-29.93	4.25	-6.03	-19.45	5.00	-13.56	25.61	-2.94	10.47	-11.15	20.79	14.05	-2.90
WMT	Wal-Mart Stores	Consumer Staples	69.12	98.75	42.87	-16.30	28.69	7.88	21.23	23.42	-20.00	29.52	-13.15	0.48	63.14	68.30	10.47	203.68
XOM	Exxon Mobil Corp	Energy	90.26	83.64	-7.33	-43.62	-17.60	4.73	-2.47	-7.88	1.58	-4.73	-25.41	38.90	9.43	-0.41	2.41	-45.06
TOTAL	0000		20.004			101.49	948.15	-149.02	277.29	68.14	340.98	541.50	56.98	456.99	972.16	895.11	446.87	4956.62

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

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# By Sector

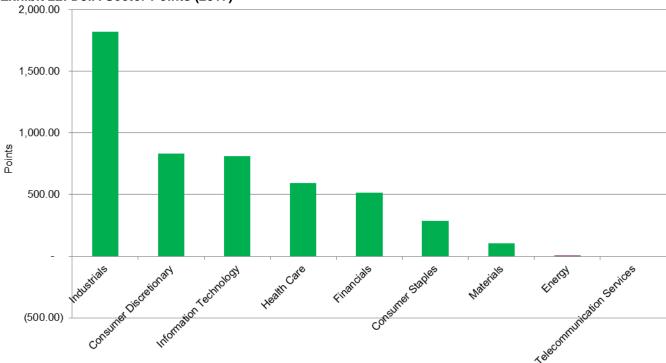
The industrials sector was the largest contributor in 2017, followed by consumer discretionary
and information technology. All sectors, save telecommunication services (which itself lost only
~3 points), made positive contributions in 2017, though energy was barely positive.

On a quarterly basis, industrials led the way from Q2-Q4 (driven in large measure by Boeing),
 while the worst-performing sector varied from quarter to quarter.

Exhibit 21: DJIA Sector Points by Quarter (2017)											
SECTOR	Q1	Q2	Q3	Q4	TOTAL						
Industrials	237.98	407.89	456.69	714.71	1,817.26						
Consumer Discretionary	237.71	179.77	-7.62	420.36	830.21						
Information Technology	369.40	-115.05	171.41	385.79	811.55						
HealthCare	134.98	199.15	69.72	186.46	590.31						
Financials	-34.45	46.98	148.87	350.95	512.36						
Consumer Staples	66.50	22.67	44.11	154.10	287.37						
Materials	47.46	2.60	39.82	13.70	103.58						
Energy	-127.24	-29.58	99.33	64.38	6.88						
Telecommunication Services	-31.71	-28.01	33.13	23.69	-2.90						
Total	900.62	686.41	1,055.46	2,314.13	4,956.62						

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 22: DJIA Sector Points (2017)



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 23: By Sector, by Year Points Contribution												
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017			
Consumer Discretionary -254.95	Information Technology 637.36	Industrials 483.61	Consumer Discretionary 231.14	Financials 303.63	Industrials 1072.69	Financials 499.69	Consumer Discretionary 615.06	Financials 640.80	Industrials 1817.26			
Telecom Services -184.29	Industrials 484.01	Consumer Discretionary 194.55	Energy 202.76	Industrials 183.42	Financials 704.10	Consumer Discretionary 350.64	Health Care 73.74	Industrials 532.80	Consumer Discretionary 830.21			
Energy -188.74	Financials 273.30	Energy 145.47	Information Technology 150.53	Consumer Discretionary 153.16	Consumer Discretionary 467.77	Health Care 295.60	Telecom Services -4.55	Health Care 418.71	Information Technology 811.55			
Consumer Staples -241.98	Consumer Discretionary 100.65	Consumer Staples 130.91	Consumer Staples 138.20	Consumer Staples 147.96	Health Care 426.34	Consumer Staples 114.19	Materials -28.00	Information Technology 348.89	Health Care 590.31			
Health Care -320.02	Materials 100.55	Materials 117.21	Health Care 72.05	Health Care 69.84	Energy 225.53	Industrials 107.38	Financials -70.12	Energy 274.28	Financials 512.36			
Materials -352.13	Health Care 79.99	Financials 55.19	Telecom Services 39.36	Telecom Services 49.64	Consumer Staples 214.47	Materials 57.60	Consumer Staples -234.14	Consumer Staples 75.26	Consumer Staples 287.37			
Information Technology -529.36	Consumer Staples 58.48	Telecom Services 44.34	Industrials -42.00	Energy 26.40	Information Technology 164.55	Information Technology -15.51	Energy -243.17	Telecom Services 49.03	Materials 103.58			
Industrials -1197.91	Telecom Services -12.87	Information Technology 6.36	Financials -69.93	Materials -6.56	Materials 143.62	Telecom Services -25.24	Industrials -244.55	Materials 46.57	Energy 6.88			
Financials -1219.06	Energy -69.81	Health Care -28.18	Materials -82.04	Information Technology -40.90	Telecom Services 53.45	Energy -137.94	Information Technology -262.31	Consumer Discretionary -48.76	Telecom Services -2.90			

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2018. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

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