

The Dow[®] Turns 120: Commentary, Facts and Figures

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In the book of Deuteronomy, the death of Moses is noted with this remarkable observation:

“And Moses was an hundred and twenty years old when he died: his eye was not dim, nor his natural force abated.” (King James Version, Deuteronomy 34:7)

Moses’s long life and the vigor he displayed even in his advanced years gave rise to the Hebrew blessing “May you live to 120!”

On May 26th of this year, we celebrate the 120th anniversary of the Dow Jones Industrial Average[®]. Similarly long-lived as Moses, the DJIA’s vitality and renown have not dimmed nor its natural forces abated. On the contrary, the DJIA remains perhaps the world’s most visible and oft-cited stock market gauge.

In recognition of this major milestone, we revisit what makes The Dow such a financial and cultural touchstone and recap its performance over that century plus.

HISTORY OF THE DOW

As is de rigueur with any good superhero—those other icons of popular culture—we should begin by reviewing the Dow Jones Industrial Average’s origin story.

Charles Dow and Edward Jones formed Dow Jones & Co. in 1882 and launched their enterprise with the 1883 publication of the “Customer’s Afternoon Letter” the precursor to *The Wall Street Journal*. To augment their editorial content and to draw greater attention to the investment potential of publicly-traded shares, Dow began calculating gauges of stock market performance.

As told in *The Market’s Measure* (edited by John Prestbo, erstwhile and long time “keeper of the Dow”)—and contrary to popular understanding—the DJIA was not their first attempt to capture the performance of the US equity marketplace. Rather, that distinction falls to the Dow Jones Railroad Average. Comprised of 11 stocks, the Railroad Average was the first such measure published by Dow Jones and was reflective of the importance of railroads in the U.S. economy. Railroads did not reflect the whole of the stock market, however. Industrial stocks were considered highly speculative at the time, so went Mr. Dow’s reasoning, and thus a crucial driver of America’s economic growth. Thus resolved, he began publishing the Dow Jones Industrial Average in 1896.

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In 1929, the Dow Jones Utility Average was introduced. In 1970, the Dow Jones Railroad Average, in light of the diversification of the sector brought by airlines and trucking, was renamed the Dow Jones Transportation Average. And though this extended family of Dow Jones Averages remains prominent, there is no ambiguity when one hears a reference to “The Dow”.

Initially, the DJIA only included 12 companies. Many have been consigned to the history books or been merged into or otherwise assumed by other companies. Of those 12, only one—General Electric, remains in the index under its original name. GE, however, was removed for a period and thus no stock has been a DJIA component throughout the Average’s entire history. In 1916, the Average expanded to 20 stocks and in 1928, a year before the historic crash of ‘29, the DJIA was expanded to 30 stocks where the count remains to this day.

Following are the original 12 Dow Jones Industrial Average components:

Company	Where Are They Now?
American Cotton Oil	Distant ancestor of Best Foods
American Sugar	Evolved into Amstar Holdings
American Tobacco	Broken up in 1911 antitrust action
Chicago Gas	Absorbed by Peoples Gas in 1897
Distilling and Cattle Feeding	Whiskey trust evolved into Millenium Chemicals
General Electric	Still in the DJIA (though has not been a continuous component)
Laclede Gas	Still active though removed from DJIA in 1899
National Lead	NL removed from DJIA in 1914
North American	Utility combine broken up in 1940s
Tennessee Coal & Iron	Absorbed by U.S. Steel in 1907
U.S. Leather (preferred)	Liquidated in 1952
U.S. Rubber	Became Uniroyal & now part of Michelin

Prestbo relates how one man, Arthur “Pop” Harris, calculated the Average for the Dow Jones news service every hour on the hour. For 40 years—from 1923 when he was first tasked with the computation to his eventual retirement in 1963—Harris would pull ticker tape from the machine, bloodying his hands while furiously calculating the gauge on which the markets hung. By contrast, S&P Dow Jones Indices—the owner and publisher of the DJIA—now calculates over 1 million indices using an advanced calculation platform with operation centers around the globe.

CONSTRUCTION & CALCULATION

What is an index? A benchmark? An “Average”? However so named, these functions are simply a means of distilling the performance or movement of a broader set of variables into a single value. That single value thus represents, as a whole, the disparate performance of the individual components.

There are a number of general applications for indices (though there are nuances between the terms index and benchmark they are often used interchangeably). As enumerated by Steven Schoenfeld in *Active Index Investing*, those uses are to serve as:

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1. A gauge of market performance & sentiment through all market cycles
2. The foundation of asset allocation & research
3. A measure of relative investment performance & manager evaluation
4. The basis for investment products

It is this first use for which the Dow Jones Industrial Average is perhaps best known. The world over, the DJIA is synonymous with “the market” and is arguably the most-widely cited, published and referenced of all financial market indices.

Thirty Stocks

Though the DJIA is comprised of only 30 stocks, those constituents are selected to represent the broader U.S. equity marketplace. Components are selected by the Averages Committee and while not governed strictly by quantitative rules, the components generally:

- Are large to mega cap stocks. For example, as of the close on March 31, 2016 the average market capitalization for DJIA components was \$86.08 billion vs. \$37.37 billion for the S&P 500 Index.
- Possess an excellent corporate reputation
- Are of interest to a large number of investors
- Have demonstrated sustained growth
- Are incorporated and headquartered in the U.S.
- Generate a plurality of their revenues from U.S. operations
- Are listed on the New York Stock Exchange and NASDAQ

Maintenance of adequate sector representation within the index is also a consideration in the selection process for the Dow Jones Industrial Average. A notable exception to this rule is that, again, transports and utilities are not represented in the DJIA as they each boast their own Average. Changes to the indices are made on an as-needed basis; there is no annual or semi-annual reconstitution. Rather, changes can be made at any time in response to corporate actions and market developments.

Thus, these 30 stocks are intended to reflect the complexion of the U.S. publicly-traded equity marketplace. It is also important to understand that the DJIA components are not selected because they are thought to have investment merit, per se—the DJIA’s *primary purpose is to measure the market*.

“Average”?

Why are the “Dow Industrials” called an *average* versus, say, an *index* like the S&P 500 Index? Well, this is exactly how the DJIA was initially calculated: Charles Dow would add the prices of the 12 stocks and simply divide by twelve. That simple average, however, is no longer employed. When the DJIA was expanded to 30 stocks in 1928 it was necessary to implement the use of a flexible divisor rather than rely on component count. The divisor allows S&P Dow Jones Indices to maintain continuity in the value. Consider that the expansion to 30 names, coupled with the eventual splits, spinoffs, mergers and substitutions enacted on the DJIA stocks

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would affect the aggregate value of prices. Without the use of a flexible divisor, those actions would result in artificial and confusing day-to-day movements in the Average. The Average is calculated every second using the most recent prices of the component stocks as traded on the US equity markets during regular trading hours:

$$\text{Dow Jones Industrial Average Value} = \frac{\text{Aggregate Price of 30 Stocks}}{\text{Current DJIA Divisor}}$$

Price-Weighted

Distinct from today's more common market capitalization-weighted or smart beta methodologies, the DJIA is a price-weighted calculation. In price weighting, stocks with higher prices tend to exert more influence over the movement of the index. For example, consider the table below:

Ticker	Company	Close Price - 3/31/16	Constituent Weight	Points per 1% Move	Points per \$1 Move
MMM	3M Company	\$166.63	6.45%	11.41	6.85
GS	Goldman Sachs Group Inc.	\$156.98	6.08%	10.75	6.85
IBM	Intl Business Machines Corp.	\$151.45	5.86%	10.37	6.85
HD	Home Depot Inc.	\$133.43	5.17%	9.14	6.85
UNH	Unitedhealth Group Inc.	\$128.90	4.99%	8.83	6.85
BA	Boeing Company	\$126.94	4.92%	8.69	6.85
MCD	McDonald's Corp.	\$125.68	4.87%	8.61	6.85
TRV	Travelers Companies Inc.	\$116.71	4.52%	7.99	6.85
AAPL	Apple Inc.	\$108.99	4.22%	7.46	6.85
JNJ	Johnson & Johnson	\$108.20	4.19%	7.41	6.85
UTX	United Technologies Corp.	\$100.10	3.88%	6.86	6.85
DIS	Walt Disney Company	\$99.31	3.85%	6.80	6.85
CVX	Chevron Corp.	\$95.40	3.69%	6.53	6.85
XOM	Exxon Mobil Corp.	\$83.59	3.24%	5.72	6.85
PG	Procter & Gamble	\$82.31	3.19%	5.64	6.85
CAT	Caterpillar Inc.	\$76.54	2.96%	5.24	6.85
V	Visa Inc.	\$76.48	2.96%	5.24	6.85
WMT	Wal-Mart Stores	\$68.49	2.65%	4.69	6.85
DD	E. I. du Pont de Nemours and Company	\$63.32	2.45%	4.34	6.85
NKE	NIKE Inc.	\$61.47	2.38%	4.21	6.85
AXP	American Express Company.	\$61.40	2.38%	4.20	6.85
JPM	JP Morgan Chase & Company.	\$59.22	2.29%	4.06	6.85
MSFT	Microsoft Corp.	\$55.23	2.14%	3.78	6.85
VZ	Verizon Communications Inc.	\$54.08	2.09%	3.70	6.85
MRK	Merck & Company Inc.	\$52.91	2.05%	3.62	6.85
KO	Coca-Cola Company	\$46.39	1.80%	3.18	6.85
INTC	Intel Corp.	\$32.35	1.25%	2.22	6.85
GE	General Electric Company	\$31.79	1.23%	2.18	6.85
PFE	Pfizer Inc.	\$29.64	1.15%	2.03	6.85
CSCO	Cisco Systems Inc.	\$28.47	1.10%	1.95	6.85
	Aggregate Price	\$2,582.40			
	DJIA Divisor as of 3/31/16	0.1460213			
	DJIA Value as of 3/31/16	17,685.09			

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As noted above, the DJIA is calculated by adding the current prices of the component stocks and dividing that total by the current divisor. Thus:

$$\text{Aggregate Price on March 31, 2016} / \text{Divisor} = \text{Dow Jones Industrial Average Value} \\ \text{or} \\ \$2,582.40 / 0.1460213 = 17,685.09$$

If we were to focus on a single stock – all other things being equal - we can see how the performance of that one company would impact the movement of the DJIA.

For example, as of March 31, 2016 3M Companies (MMM) was the highest-priced stock in the Average. A theoretical 1% move in MMM would result in move of \$1.66 per share, which (when divided by the current divisor of .1460213) would result in a movement of 11.41 points in the Average. In contrast, a 1% move in Cisco Systems—at \$28.47 per share the lowest price stock in the Average—would only result in a DJIA movement of 1.95 points. Hence, we see how higher priced stocks may exert a greater influence over the movement of the Average.

It should be noted that move of \$1—regardless of the stock in question—will affect the same change (6.85 DJIA points given the current divisor).

NOTABLE EVENTS & PERFORMANCE

- After its launch in May 1896, the DJIA lost over 30% of its value by August of that year. The 1896 US Presidential election—waged between William McKinley (R) and William Jennings Bryan (D)—was a heated contest focused on economic issues (such as dropping the gold standard), the debate surrounding which led to general market anxiety and decline.
- During the depths of the Great Depression in 1932 the DJIA hit a low of 41.22, nearly the level at which it was launched 36 years earlier. Not until the mid-50s would the DJIA attain its pre-Depression levels.
- July 3, 1956: International Paper joins the Dow, ending a period of 17 years and 3 months during which no changes were made to the Average. That remains the longest such streak.
- The DJIA first passed 1,000 on November 14, 1972. Just one week prior, President Richard M. Nixon won reelection in a landslide, beating South Dakota George McGovern in 49 states (McGovern won the electoral votes of only Massachusetts and the District of Columbia).
- November 1, 1999: Microsoft (MSFT) and Intel (INTC) become the first NASDAQ stocks to join the DJIA, a reflection of the growing importance of technology within industry and culture.
- March 9, 2009: The DJIA falls to the lowest point of the Financial Crisis when it closes the session at 6,547.05, a level not seen since 1997 and a fall of nearly 54% from its prior all time high of 14,165.53 achieved on October 9, 2007. Not until March 5, 2013—1,004 trading days after touching that March 2009 low – did the DJIA finally scale again to those prior heights and reach a new high, closing at 14,253.77.
- May 6, 2010: During “The Flash Crash”, computer-driven trading caused the DJIA to fall over 1,000 points in minutes. Though the Average recovered much of that ground during

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the day's session, it still ended down 347.80 points. The tumultuous trading inflamed a debate—one that continues to this day—regarding the nature of US equity market structure.

- May 19, 2015: The DJIA hits its all-time high of 18,312.39, barely breaking the prior record set just one day earlier. Close to the publication of this note—nearly 1 year after hitting that all-time high—the DJIA is trading over 4% lower.
- Financial products based on the Dow Jones Industrial Average are—relatively speaking—a more recent phenomenon. The first futures contract and first index option contract were first opened for trading on October 6, 1997 and the first exchange-traded fund (ETF) began trading on January 14, 1998.
- Throughout its history, there have been a number of interruptions and suspensions in the calculation of the Dow Jones Industrial Average. It is important to remember that the DJIA measures the performance of the blue chip segment of the U.S. equity markets; it cannot be calculated if those markets are not open for trading. Therefore, such DJIA interruptions are typically the result of a similar interruption in underlying share trading:
 - “The War to End All Wars”: The outbreak of World War I in Europe led the NYSE to shut its doors on July 31, 1914 after large numbers of foreign investors began selling their holdings to raise money for the war effort. Trading in U.S.-listed stocks did not resume until December 12, 1914.
 - March 4–14, 1933: The NYSE shuttered as FDR temporarily closed banks long enough to pass an act guaranteeing that the Federal Reserve would insure bank deposits.
 - May 25, 1946: A railroad strike, part of a wave of union strikes across the nation, shut the NYSE for a day.
 - February 10, 1969: A crippling snow storm led the NYSE to shut down for a day and half.
 - July 21, 1969: The NYSE was closed for an inspiring event: the celebration of the Apollo 11 moon landing.
 - July 14, 1977: In contrast, 8 years later the markets were closed in the wake of a major blackout and resulting civil unrest that gripped New York City and surrounding areas.
 - September 11, 2001: The NY and DC terror attacks led to the longest suspension of trading since 1933. When trading resumed on September 17, the DJIA lost over 7% of its value. Police and firefighters rang the NYSE's opening bell and the industry observed 2 minutes of silence. By the end of that week, the DJIA has lost 14%.
 - October 29–30, 2012: U.S. equity markets were buttoned down while Hurricane (“Super Storm”) Sandy battered the Eastern Seaboard.

1,000 POINT MILESTONES

- The DJIA has passed a 1,000 point milestone 18 times since its inception 120 years ago.
- The first was in 1972—over 76 years after the initial launch of the Average. That climb—clocking in at 21,653 trading days—took more than twice as long to reach as all of the subsequent milestones.
- The most recent was in the waning days of 2014 when the DJIA closed at 18,024.17.

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- A full half of these milestones occurred in the 1990s, the best performing decade in the life of the DJIA.
- The move from 10,000 to 11,000 took the least time: 24 days during the early days of Spring 1999.

Following are the dates when the DJIA first passed through 1,000 point levels:

Milestone	Date	DJIA Level	Trading Days from Prior Record
Inception	5/26/1896	40.94	
1,000	11/14/1972	1,003.16	21,653
2,000	1/8/1987	2,002.25	3,573
3,000	4/17/1991	3,004.46	1,077
4,000	2/23/1995	4,003.33	971
5,000	11/21/1995	5,023.55	187
6,000	10/14/1996	6,010.00	226
7,000	2/13/1997	7,022.43	84
8,000	7/16/1997	8,038.99	105
9,000	4/6/1998	9,033.22	182
10,000	3/29/1999	10,006.78	245
11,000	5/3/1999	11,014.69	24
12,000	10/19/2006	12,011.73	1,879
13,000	4/25/2007	13,089.89	127
14,000	7/19/2007	14,000.41	59
15,000	5/7/2013	15,056.20	1,460
16,000	11/21/2013	16,009.99	139
17,000	7/3/2014	17,068.26	153
18,000	12/23/2014	18024.17	120
19,000	???	???	???

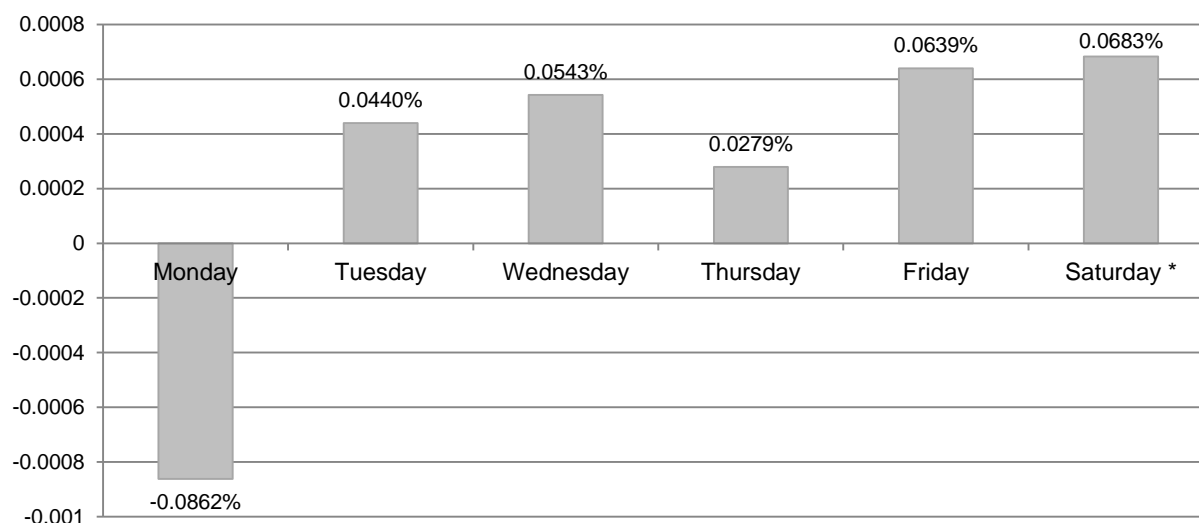
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DAILY PERFORMANCE

- There were 32,582 trading days from the DJIA's inception to March 31, 2016.
- The average daily return is +0.02537%.
- There have been 17,209 up days and 15,371 down days (returns were not calculated for May 26, 1896 and December 12, 1914). In other words, the DJIA is up 52.82% of the time vs. down 47.18%.
- The average return for an "up day" is up +0.71%
- The average return for a "down day" is -0.74%
- Mondays are traditionally the worst performing day of the week and the only day with a negative average return. The Saturday session, which ceased in 1952, posted the highest returns. In the contemporary period—i.e. since the suspension of Saturday trading—Fridays post the best returns on average.

Average Return by Day of Week

May 26, 1896 - March 31, 2016



* From 1887 to 1952, stocks on the New York Stock Exchange traded from 10 AM to noon on Saturdays. After 1952, however, stocks traded only over weekdays.

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Following are the top best and worst performing days over the life of the DJIA. Note the worst days in terms of percent are clustered in the early days of the life of the Average, while the worst in point terms are more recent occurrences. Of course, this is to be expected: as the DJIA increases in value, a smaller percent move will naturally result in a larger absolute point move.

10 Best Days in History by Points

Date	DJIA Close	Points	Context
October 13, 2008	9,387.61	936.42	Central bank actions led to optimism that worst of credit crisis was over; TARP plan outlined.
October 28, 2008	9,065.12	889.35	Investors expected Fed to lower rates to further combat credit crisis
August 26, 2015	16,285.51	619.07	Stocks rebounded after recent selling driven by a slowing Chinese economy
November 13, 2008	8,835.25	552.60	Investors returned after selloff left indices close to 2003 levels.
March 16, 2000	10,630.61	499.19	Blue chips rallied as low inflation numbers eased concerns about rising rates
March 23, 2009	7,775.86	497.48	Markets surged, supported by the US Treasury's plans to buy bad bank assets
November 21, 2008	8,046.42	494.14	Pres. Obama's plan to nominate Tim Geithner as Treasury Sec. buoyed markets
November 30, 2011	12,045.68	490.05	Investors were encouraged by central bank collaboration to stem Euro sovereign debt crisis
July 24, 2002	8,191.29	488.95	Buyers returned after weeks of fallout from corporate scandals (e.g. Enron, Adelphia)
September 30, 2008	10,850.66	485.21	Markets jumped as investors were encouraged Congress would approve \$700b bailout package

10 Best Days in History by Percent

Date	DJIA Close	Return	Context
March 15, 1933	62.10	15.34%	The largest ever percent gain in DJIA history was posted in the depths of The Great Depression
October 6, 1931	99.34	14.87%	Pres. Hoover offered plans to revive the business climate
October 30, 1929	258.47	12.34%	Stocks recovered after the market crash days earlier, buoyed by Rockefeller's buying activity
September 21, 1932	75.16	11.36%	Indications of an economic recovery were helped by railroad freight activity
October 13, 2008	9,387.61	11.08%	Central bank actions led to optimism that worst of credit crisis was over; TARP plan outlined
October 28, 2008	9,065.12	10.88%	Investors expected Fed to lower rates to further combat credit crisis
October 21, 1987	2,027.85	10.15%	Markets recovered lost ground after the '87 crash
August 3, 1932	58.22	9.52%	Hopes of a GM dividend and rumors that the Federal Farm Board has eased wheat surpluses pushed the market higher.
February 11, 1932	78.60	9.47%	Traders rejoiced over a Congressional bill that would ease financing through the Fed's discount window.
November 14, 1929	217.28	9.36%	The '29 market experienced a classic "dead cat bounce" following the drop in share prices over the preceding weeks.

10 Worst Days in History by Points

Date	DJIA Close	Points	Context
September 29, 2008	10,365.45	-777.68	The political process drove the markets to lose over \$1 TR as Congress failed to pass a \$700b bailout.
October 15, 2008	8,577.91	-733.08	Recession fears, a gloomy Fed and weak retail sales drove stocks deeply lower.
September 17, 2001	8,920.70	-684.81	A general lack of market confidence prevailed on this first day of trading after the 9/11 terror attacks.
December 1, 2008	8,149.09	-679.95	Investors were discouraged by weak sales, manufacturing and confirmation that the US was in recession.
October 9, 2008	8,579.19	-678.92	Driven by the credit crisis the DJIA sinks on the 1 year anniversary of its all time high; VIX all-time high of 64
August 8, 2011	10,809.85	-634.76	The Euro debt crisis, rising US recession fears and a downgrade of US sovereign debt drove markets lower
April 14, 2000	10,305.78	-617.78	Stocks fell on fears that the technology bull market was unraveling and consumer price increases fueled rate rise fears.
August 24, 2015	15,871.35	-588.40	The DJIA dove 1000 points at the open then recovered some lost ground as China's economic slowdown shook markets
October 27, 1997	7,161.14	-554.26	A selloff in Asia continued into US markets as the triggering of market circuit breakers led to a shortened trading session.
August 21, 2015	16,459.75	-530.94	Global economic weakness prevailed: China's slowdown, sub \$40 oil, Fed movements on rates and shaky Euro markets.

10 Worst Days in History by Percent

Date	DJIA Close	Return	Context
October 19, 1987	1,738.74	-22.61%	Black Monday 1987. Stocks around the world crashed driven by economic and geopolitical concerns.
October 28, 1929	260.64	-12.82%	Black Monday 1929. Speculation that had driven the market in preceding years evaporated.
October 29, 1929	230.07	-11.73%	Black Tuesday 1929. Selling from the previous day continued to drive the market lower.
November 6, 1929	232.13	-9.92%	Share prices continued to suffer the effects of the historic crash days earlier.
12/18/1899	58.27	-8.72%	Shares were greatly depressed by the closing of the Produce Exchange Trust Company
August 12, 1932	63.11	-8.40%	Sellers driven by margin calls - who sold into a lack of liquidity - helped drive shares lower.
March 14, 1907	76.23	-8.29%	The Knickerbocker Crisis - panic selling, economic recession and bank runs hammered markets in 1907.
October 26, 1987	1,793.93	-8.04%	Investors remained anxious following the Black Monday crash one week earlier.
October 15, 2008	8,577.91	-7.87%	Recession fears, a gloomy Fed and weak retail sales drove stocks deeply lower.
July 21, 1933	88.71	-7.84%	Markets reacted to negative news regarding grain futures.

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Setting the Record Straight

December 12, 1914 is occasionally cited as the worst percentage drop in the DJIA's history and a casual glance at the index levels would seem to support that conclusion. That day saw the resumption in share trading following a nearly 5 month suspension during the opening days of World War I; the DJIA recorded a level of 54.62, an apparent 24% drop from the most recent prior level of 71.42 posted on July 30, 1914.

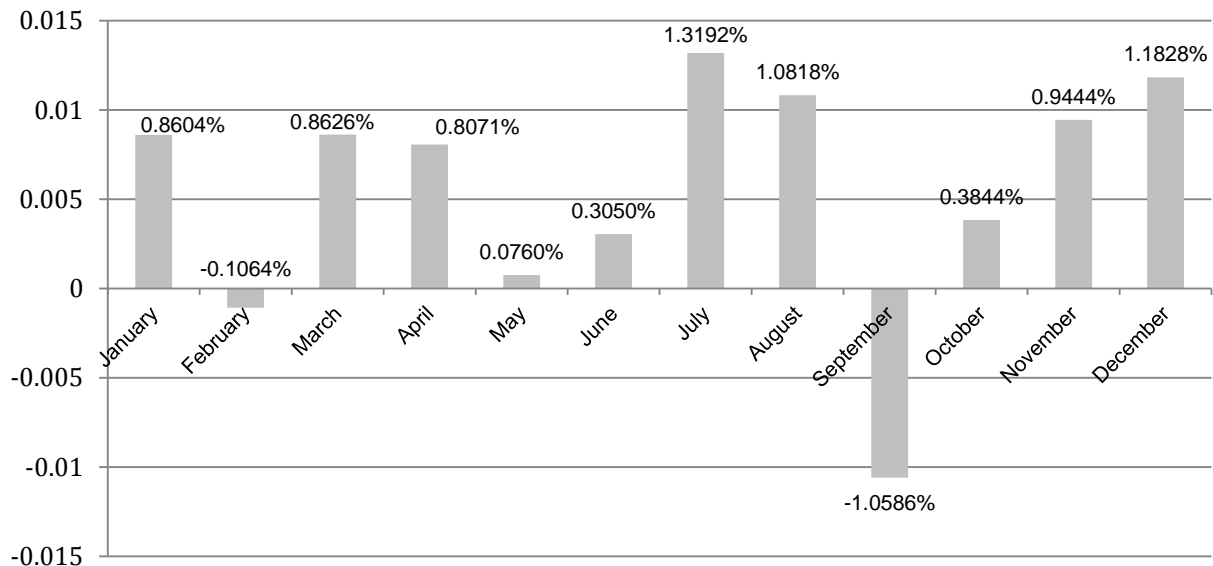
In fact, according to the headline of a market recap in the *Wall Street Journal*, "Stock Market Resumes and Prices Advance Sharply". So what gives? How can the DJIA decline if stocks gained?

This apparent drop actually had nothing to do with falling prices but was rather a function of a change in the Average's composition. When the Dow was expanded from 12 to 20 companies in October of 1916, the Average was retroactively calculated to show how the expanded universe would have performed during recent history. The WSJ's editors cast that history back to a logical stopping point: the end of the suspension of trading caused by WWI. The last DJIA value to be recorded prior to the shutdown (July 30) was allowed to stand, however, and thus the appearance of a precipitous drop.

As noted earlier, the use of a flexible divisor—implemented when the DJIA expanded to 30 names in 1928 – now protects against any disruption or confusion that could be caused by changes to the Average's composition.

MONTHLY PERFORMANCE

Average Return by Month



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Best Monthly Performance by Percent

Month	Return
April 1933	40.18%
August 1932	34.83%
July 1932	26.66%
June 1938	24.26%
April 1915	18.00%

Worst Monthly Performance by Percent

Month	Return
September 1931	-30.70%
March 1938	-23.67%
April 1932	-23.43%
October 1987	-23.22%
May 1940	-21.70%

PERFORMANCE BY YEAR AND BY DECADE

Yearly Performance

- There have been 78 up calendar years averaging +19.24%.
- There have been 43 down calendar years averaging -14.43%.
- The average annual return is +7.27%.
- 1915 was the best performing year (up 81.66%).
- 1931 was the worst performing year (down 52.67%).
- Out of the top 20 best performing years, only a single one—2013, when the market was up 26.50%—took place after the turn of the century.

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Performance by Decade

- Best performing decade was 1990s (up a total of 317.59%).
- Worst performing decade was 1930s (down a total of 39.54%).
- Not surprisingly, the 1930s were a lost decade. The 1990s were the only other decade to post a period over period decline.
- The average decade's performance was a gain of 84.72%.
- The closing value indicated for the 2010 decade is final value on March 31, 2016.

Decade	Closing Value	Decade Return
1890s	66.08	61.41%
1900s	99.05	49.89%
1910s	107.23	8.26%
1920s	248.48	131.73%
1930s	150.24	-39.54%
1940s	200.13	33.21%
1950s	679.36	239.46%
1960s	800.36	17.81%
1970s	838.74	4.80%
1980s	2,753.20	228.25%
1990s	11,497.12	319.59%
2000s	10,428.05	-9.30%
2010s	16,457.66	57.82%

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Annual Returns By Year—Chronologically

Year	Closing Value	Annual Return	Year	Closing Value	Annual Return
Initial Value	40.94		1956	499.47	2.27%
1896	40.45	-1.20%	1957	435.69	-12.77%
1897	49.41	22.15%	1958	583.65	33.96%
1898	60.52	22.49%	1959	679.36	16.40%
1899	66.08	9.19%	1960	615.89	-9.34%
1900	70.71	7.01%	1961	731.14	18.71%
1901	64.56	-8.70%	1962	652.10	-10.81%
1902	64.29	-0.42%	1963	762.95	17.00%
1903	49.11	-23.61%	1964	874.13	14.57%
1904	69.61	41.74%	1965	969.26	10.88%
1905	96.20	38.20%	1966	785.69	-18.94%
1906	94.35	-1.92%	1967	905.11	15.20%
1907	58.75	-37.73%	1968	943.75	4.27%
1908	86.15	46.64%	1969	800.36	-15.19%
1909	99.05	14.97%	1970	838.92	4.82%
1910	81.36	-17.86%	1971	890.20	6.11%
1911	81.68	0.39%	1972	1,020.02	14.58%
1912	87.87	7.58%	1973	850.86	-16.58%
1913	78.78	-10.34%	1974	616.24	-27.57%
1914	54.58	-30.72%	1975	852.41	38.32%
1915	93.15	81.66%	1976	1,004.65	17.86%
1916	95.00	-4.19%	1977	831.17	-17.27%
1917	74.38	-21.71%	1978	805.01	-3.15%
1918	82.20	10.51%	1979	838.74	4.19%
1919	107.23	30.45%	1980	963.99	14.93%
1920	71.95	-32.90%	1981	875.00	-9.23%
1921	81.10	12.72%	1982	1,046.54	19.60%
1922	98.73	21.74%	1983	1,258.64	20.27%
1923	95.52	-3.25%	1984	1,211.57	-3.74%
1924	120.51	26.16%	1985	1,546.67	27.66%
1925	156.66	30.00%	1986	1,895.95	22.58%
1926	157.20	0.34%	1987	1,938.83	2.26%
1927	202.40	28.75%	1988	2,168.57	11.85%
1928	300.00	48.22%	1989	2,753.20	26.96%
1929	248.48	-17.17%	1990	2,633.66	-4.34%
1930	164.58	-33.77%	1991	3,168.83	20.32%
1931	77.90	-52.67%	1992	3,301.11	4.17%
1932	59.93	-23.07%	1993	3,754.09	13.72%
1933	99.90	66.69%	1994	3,834.44	2.14%
1934	104.04	4.14%	1995	5,117.12	33.45%
1935	144.13	38.53%	1996	6,448.26	26.01%
1936	179.90	24.82%	1997	7,908.24	22.64%
1937	120.85	-32.82%	1998	9,181.43	16.10%
1938	154.76	28.06%	1999	11,497.12	25.22%
1939	150.24	-2.92%	2000	10,786.85	-6.18%
1940	131.13	-12.72%	2001	10,021.50	-7.10%
1941	110.96	-15.38%	2002	8,341.63	-16.76%
1942	119.40	7.61%	2003	10,453.92	25.32%
1943	135.89	13.81%	2004	10,783.01	3.15%
1944	152.32	12.09%	2005	10,717.50	-0.61%
1945	192.91	26.65%	2006	12,463.15	16.29%
1946	177.20	-8.14%	2007	13,264.82	6.43%
1947	181.16	2.23%	2008	8,776.39	-33.84%
1948	177.30	-2.13%	2009	10,428.05	18.82%
1949	200.13	12.88%	2010	11,577.51	11.02%
1950	235.41	17.63%	2011	12,217.56	5.53%
1951	269.23	14.37%	2012	13,104.14	7.26%
1952	291.90	8.42%	2013	16,576.66	26.50%
1953	280.90	-3.77%	2014	17,823.07	7.52%
1954	404.39	43.96%	2015	17,425.03	-2.23%
1955	488.40	20.77%	2016 thru Q1	16,457.66	-5.55%

The Dow Turns 120: Commentary, Facts and Figures

Annual Returns By Year—Best to Worst

Year	Closing Value	Annual Return	Year	Closing Value	Annual Return
1915	99.15	81.66%	2012	13,104.14	7.26%
1933	99.90	66.69%	1900	70.71	7.01%
1928	300.00	48.22%	2007	13,264.82	6.43%
1908	86.15	46.64%	1971	890.20	6.11%
1954	404.39	43.96%	2011	12,217.56	5.53%
1904	69.61	41.74%	1970	838.92	4.82%
1935	144.13	38.53%	1968	943.75	4.27%
1975	852.41	38.32%	1979	838.74	4.19%
1905	96.20	38.20%	1992	3,301.11	4.17%
1958	583.65	33.96%	1934	104.04	4.14%
1995	5,117.12	33.45%	2004	10,783.01	3.15%
1919	107.23	30.45%	1956	499.47	2.27%
1925	156.66	30.00%	1987	1,938.83	2.26%
1927	202.40	28.75%	1947	181.16	2.23%
1938	154.76	28.06%	1994	3,834.44	2.14%
1985	1,546.67	27.66%	1911	81.68	0.39%
1989	2,753.20	26.96%	1926	157.20	0.34%
1945	192.91	26.65%	1902	64.29	-0.42%
2013	16,576.66	26.50%	2005	10,717.50	-0.61%
1924	120.51	26.16%	1896	40.45	-1.20%
1996	6,448.26	26.01%	1906	94.35	-1.92%
2003	10,453.92	25.32%	1948	177.30	-2.13%
1999	11,497.12	25.22%	2015	17,425.03	-2.23%
1936	179.90	24.82%	1939	150.24	-2.92%
1997	7,908.24	22.64%	1978	805.01	-3.15%
1986	1,895.95	22.58%	1923	95.52	-3.25%
1898	60.52	22.49%	1984	1,211.57	-3.74%
1897	49.41	22.15%	1953	280.90	-3.77%
1922	98.73	21.74%	1916	95.00	-4.19%
1955	488.40	20.77%	1990	2,633.66	-4.34%
1991	3,168.83	20.32%	2016 thru Q1	16,457.66	-5.55%
1983	1,258.64	20.27%	2000	10,786.85	-6.18%
1982	1,046.54	19.60%	2001	10,021.50	-7.10%
2009	10,428.05	18.82%	1946	177.20	-8.14%
1961	731.14	18.71%	1901	64.56	-8.70%
1976	1,004.65	17.86%	1981	875.00	-9.23%
1950	235.41	17.63%	1960	615.89	-9.34%
1963	762.95	17.00%	1913	78.78	-10.34%
1959	679.36	16.40%	1962	652.10	-10.81%
2006	12,463.15	16.29%	1940	131.13	-12.72%
1998	9,181.43	16.10%	1957	435.69	-12.77%
1967	905.11	15.20%	1969	800.36	-15.19%
1909	99.05	14.97%	1941	110.96	-15.38%
1980	963.99	14.93%	1973	850.86	-16.58%
1972	1,020.02	14.58%	2002	8,341.63	-16.76%
1964	874.13	14.57%	1929	248.48	-17.17%
1951	269.23	14.37%	1977	831.17	-17.27%
1943	135.89	13.81%	1910	81.36	-17.86%
1993	3,754.09	13.72%	1966	785.69	-18.94%
1949	200.13	12.88%	1917	74.38	-21.71%
1921	81.10	12.72%	1932	59.93	-23.07%
1944	152.32	12.09%	1903	49.11	-23.61%
1988	2,168.57	11.85%	1974	616.24	-27.57%
2010	11,577.51	11.02%	1914	54.58	-30.72%
1965	969.26	10.88%	1937	120.85	-32.82%
1918	82.20	10.51%	1920	71.95	-32.90%
1899	66.08	9.19%	1930	164.58	-33.77%
1952	291.90	8.42%	2008	8,776.39	-33.84%
1942	119.40	7.61%	1907	58.75	-37.73%
1912	87.87	7.58%	1931	77.90	-52.67%
2014	17,823.07	7.52%			

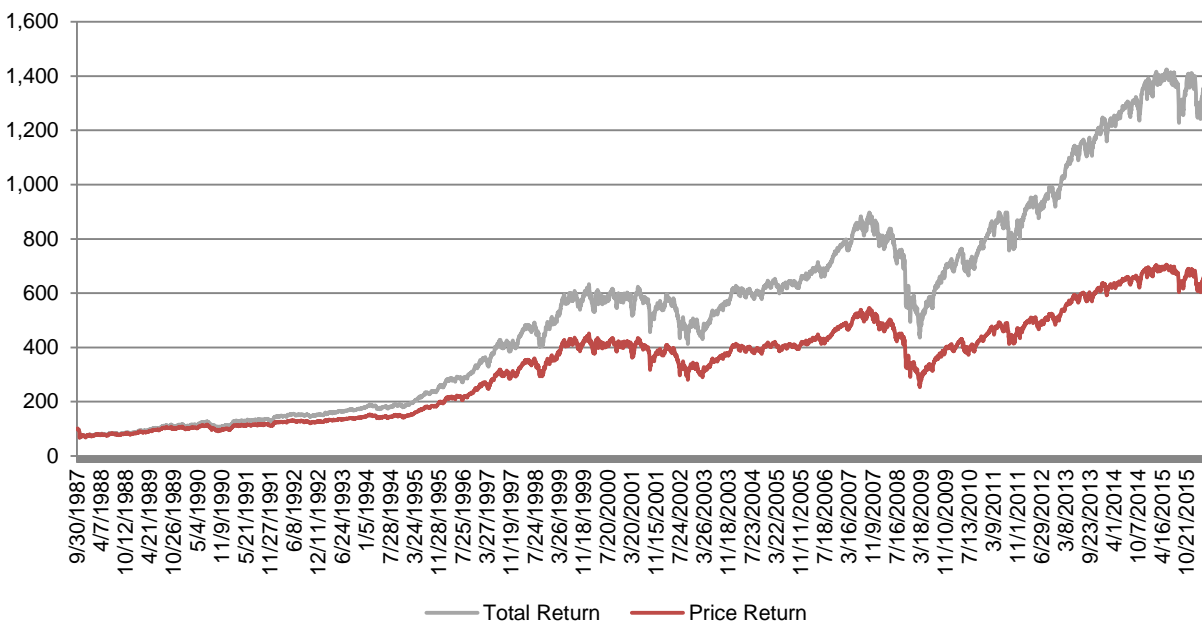
The Dow Turns 120: Commentary, Facts and Figures

PRICE RETURN VS. TOTAL RETURN

Both price return and total return versions are calculated for the Dow Jones Industrial Average—it is the *price return* version that is most often displayed and reported. History for the total return version of the DJIA is available from October 1987.

As described earlier, the price return version is calculated by dividing the sum of the current constituents by the current divisor. In a total return calculation, the index values reflect the reinvestment of gross dividends. The chart below, which plots the price vs. total return versions of the DJIA, illustrates the power of those reinvested dividends.

DJIA: Price Return vs. Total Return



THE DJIA'S PERFORMANCE DURING PRESIDENTIAL ADMINISTRATIONS

Hereby offered in light of the ongoing 2016 US Presidential campaign—and intentionally presented without any judgment, analysis or historical context—is the performance of the Dow Jones Industrial Average during each Presidential administration since the Average's inception in May 1896.

Observers will take from this what they will. Individual beliefs and motivations introduce bias, but stock market returns certainly require the aforementioned and absent context: administrations beset with times of war or peace; economic expansion or recession; a cooperative or antagonistic Congress; a conducive or tumultuous global climate; societal, cultural, technological changes; and, countless other factors can support or deflate asset values.

The Dow Turns 120: Commentary, Facts and Figures

In Chronological Order

President	Party	Admin. Start	DJIA Start	Admin. End	DJIA End	Admin. Return
			Value*		Value*	
Grover Cleveland**	Democrat	March 4, 1893	40.94	March 4, 1897	41.34	0.98%
William McKinley	Republican	March 4, 1897	41.34	September 14, 1901	67.25	62.68%
Theodore Roosevelt	Republican	September 14, 1901	67.25	March 4, 1909	81.79	21.62%
William Howard Taft	Republican	March 4, 1909	81.79	March 4, 1913	80.71	-1.32%
Woodrow Wilson***	Democrat	March 4, 1913	80.71	July 30, 1914	71.42	-11.51%
Woodrow Wilson (expanded DJIA)	Democrat	December 12, 1914	54.62	March 4, 1921	75.11	37.51%
Warren G. Harding	Republican	March 4, 1921	75.11	August 2, 1923	88.20	17.43%
Calvin Coolidge	Republican	August 2, 1923	88.20	March 4, 1929	313.86	255.85%
Herbert Hoover	Republican	March 4, 1929	313.86	March 4, 1933	53.84	-82.85%
Franklin D. Roosevelt	Democrat	March 4, 1933	53.84	April 12, 1945	158.48	194.35%
Harry S. Truman	Democrat	April 12, 1945	158.48	January 20, 1953	288.00	81.73%
Dwight D. Eisenhower	Republican	January 20, 1953	288.00	January 20, 1961	634.37	120.27%
John F. Kennedy	Democrat	January 20, 1961	634.37	November 22, 1963	711.49	12.16%
Lyndon B. Johnson	Democrat	November 22, 1963	711.49	January 20, 1969	931.25	30.89%
Richard Nixon	Republican	January 20, 1969	931.25	August 9, 1974	777.30	-16.53%
Gerald Ford	Republican	August 9, 1974	777.30	January 20, 1977	959.03	23.38%
Jimmy Carter	Democrat	January 20, 1977	959.03	January 20, 1981	950.68	-0.87%
Ronald Reagan	Republican	January 20, 1981	950.68	January 20, 1989	2,235.36	135.13%
George H. W. Bush	Republican	January 20, 1989	2,235.36	January 20, 1993	3,241.95	45.03%
Bill Clinton	Democrat	January 20, 1993	3,241.95	January 20, 2001	10,587.59	226.58%
George W. Bush	Republican	January 20, 2001	10,587.59	January 20, 2009	7,949.09	-24.92%
Barack Obama****	Democrat	January 20, 2009	7,949.09	March 31, 2016	17,685.09	122.48%

Ranked Best to Worst

President	Party	Admin. Start	DJIA Start	Admin. End	DJIA End	Admin. Return
			Value*		Value*	
Calvin Coolidge	Republican	August 2, 1923	88.20	March 4, 1929	313.86	255.85%
Bill Clinton	Democrat	January 20, 1993	3,241.95	January 20, 2001	10,587.59	226.58%
Franklin D. Roosevelt	Democrat	March 4, 1933	53.84	April 12, 1945	158.48	194.35%
Ronald Reagan	Republican	January 20, 1981	950.68	January 20, 1989	2,235.36	135.13%
Barack Obama****	Democrat	January 20, 2009	7,949.09	March 31, 2016	17,685.09	122.48%
Dwight D. Eisenhower	Republican	January 20, 1953	288.00	January 20, 1961	634.37	120.27%
Harry S. Truman	Democrat	April 12, 1945	158.48	January 20, 1953	288.00	81.73%
William McKinley	Republican	March 4, 1897	41.34	September 14, 1901	67.25	62.68%
George H. W. Bush	Republican	January 20, 1989	2,235.36	January 20, 1993	3,241.95	45.03%
Woodrow Wilson (expanded DJIA)	Democrat	December 12, 1914	54.62	March 4, 1921	75.11	37.51%
Lyndon B. Johnson	Democrat	November 22, 1963	711.49	January 20, 1969	931.25	30.89%
Gerald Ford	Republican	August 9, 1974	777.30	January 20, 1977	959.03	23.38%
Theodore Roosevelt	Republican	September 14, 1901	67.25	March 4, 1909	81.79	21.62%
Warren G. Harding	Republican	March 4, 1921	75.11	August 2, 1923	88.20	17.43%
John F. Kennedy	Democrat	January 20, 1961	634.37	November 22, 1963	711.49	12.16%
Grover Cleveland**	Democrat	March 4, 1893	40.94	March 4, 1897	41.34	0.98%
Jimmy Carter	Democrat	January 20, 1977	959.03	January 20, 1981	950.68	-0.87%
William Howard Taft	Republican	March 4, 1909	81.79	March 4, 1913	80.71	-1.32%
Woodrow Wilson***	Democrat	March 4, 1913	80.71	July 30, 1914	71.42	-11.51%
Richard Nixon	Republican	January 20, 1969	931.25	August 9, 1974	777.30	-16.53%
George W. Bush	Republican	January 20, 2001	10,587.59	January 20, 2009	7,949.09	-24.92%
Herbert Hoover	Republican	March 4, 1929	313.86	March 4, 1933	53.84	-82.85%

Average Return by Party

Party	# of Admins.	Average Return
Republican	12	46.31%
Democrat	9	69.43%

*The most immediate prior date was used to calculate returns if the DJIA wasn't calculated on the date in question.

**Return calculated from inception of DJIA to end of administration.

***NYSE & DJIA ceased during opening months of WW1.

****Calculated to the end of Q1 2016.

The Dow Turns 120: Commentary, Facts and Figures

CURRENT DJIA COMPONENTS

- The longest serving of the current DJIA components, General Electric (GE), is also the only company that was present at the inception. GE, however, was not a component for the entire history of the Average. It was removed from the Average in 1898, restored the next year, removed again in 1901 and then restored again in 1907. It has been a DJIA component ever since.
- The average tenure of the current composition is approximately 29 years and 11 months; of the current companies, 5 were inducted in the first half of the 20th century, 15 in the second half of the 20th century and 10 in the 21st.
- DJIA companies were solely drawn from NYSE listings until November 1, 1999 when the first NASDAQ-listed stocks—MSFT and INTC—were added. Currently, 4 companies are NASDAQ listings (MSFT, INTC, CSCO and AAPL); the remaining 26 companies are listed on the NYSE.

Ticker	Company	Industry	Last Addition Date
GE	General Electric Company	Industrials	November 7, 1907
XOM	Exxon Mobil Corp.	Energy	October 1, 1928
PG	Procter & Gamble	Consumer Staples	May 26, 1932
DD	E. I. du Pont de Nemours and Company	Materials	November 20, 1935
UTX	United Technologies Corp.	Industrials	March 14, 1939
MMM	3M Company	Industrials	August 9, 1976
IBM	Intl Business Machines Corp.	Information Technology	June 29, 1979
MRK	Merck & Company Inc.	Health Care	June 29, 1979
AXP	American Express Company.	Financials	August 30, 1982
MCD	McDonald's Corp.	Consumer Discretionary	October 30, 1985
BA	Boeing Company	Industrials	March 12, 1987
KO	Coca-Cola Company	Consumer Staples	March 12, 1987
DIS	Walt Disney Company	Consumer Discretionary	May 6, 1991
CAT	Caterpillar Inc.	Industrials	May 6, 1991
JPM	JP Morgan Chase & Company.	Financials	May 6, 1991
JNJ	Johnson & Johnson	Health Care	March 17, 1997
WMT	Wal-Mart Stores	Consumer Staples	March 17, 1997
HD	Home Depot Inc.	Consumer Discretionary	November 1, 1999
MSFT	Microsoft Corp.	Information Technology	November 1, 1999
INTC	Intel Corp.	Information Technology	November 1, 1999
VZ	Verizon Communications Inc.	Telecommunication Services	April 8, 2004
PFE	Pfizer Inc.	Health Care	April 8, 2004
CVX	Chevron Corp.	Energy	February 19, 2008
TRV	Travelers Companies Inc.	Financials	June 8, 2009
CSCO	Cisco Systems Inc.	Information Technology	June 8, 2009
UNH	Unitedhealth Group Inc.	Health Care	September 24, 2012
GS	Goldman Sachs Group Inc.	Financials	September 20, 2013
V	Visa Inc.	Financials	September 20, 2013
NKE	NIKE Inc.	Consumer Discretionary	September 20, 2013
AAPL	Apple Inc.	Information Technology	March 19, 2015

The Dow Turns 120: Commentary, Facts and Figures

POINTS CONTRIBUTION

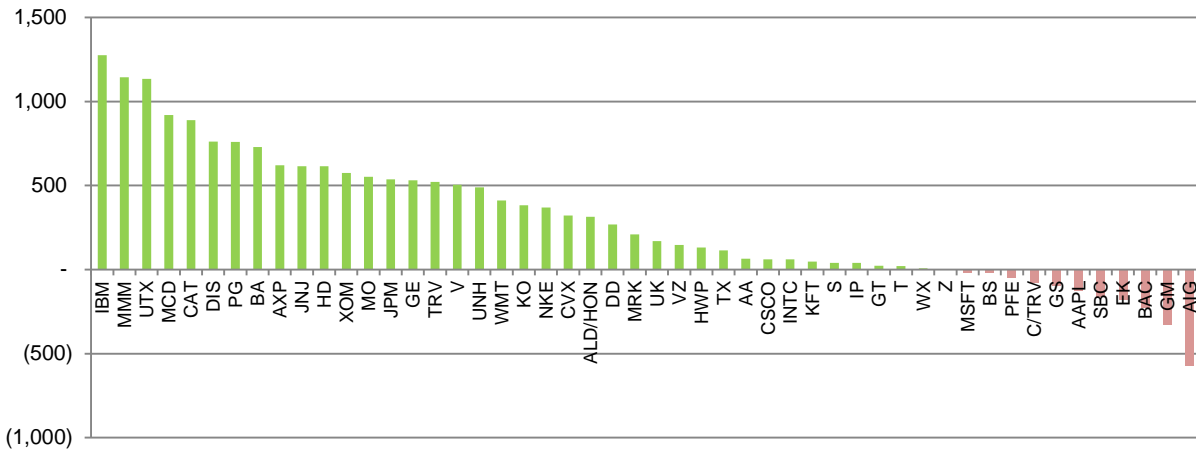
By Ticker

Just as we calculate the DJIA, we can determine the contribution that an individual stock makes to the DJIA's advance or decline by dividing its price movement by the current divisor.

Following is the contribution by stock during the past 25 calendar years (1992 to Q1 2016):

DJIA: Points Contributed by Stock

1992 to Q1 2016



- 50 different companies were DJIA components during the period.
- 38 companies contributed points to the advance of the DJIA; 12 detracted points.
- International Business Machines (IBM) contributed the most points during the period. MMM and UTX rounded out the top 3.
- AIG detracted the most from the DJIA during the period. A theme is evident in the laggards: stocks that were hit especially hard during the Financial Crisis—AIG, GM, C—are clustered at the right of the chart.

The Dow Turns 120: Commentary, Facts and Figures

Point Contribution by DJIA Component

1992 to Q1 2016

Ticker	Points +/-	Ticker	Points +/-
IBM	1,276.44	UK	169.68
MMM	1,143.55	VZ	146.33
UTX	1,135.79	HWP	131.23
MCD	918.94	TX	113.67
CAT	888.69	AA	64.11
DIS	761.67	CSCO	61.65
PG	759.07	INTC	60.96
BA	730.25	KFT	47.44
AXP	621.35	S	40.86
JNJ	616.06	IP	40.63
HD	615.91	GT	22.20
XOM	575.02	T	20.94
MO	552.74	WX	8.68
JPM	537.94	Z	(4.00)
GE	531.07	MSFT	(20.25)
TRV	522.30	BS	(20.88)
V	505.62	PFE	(52.13)
UNH	489.11	C/TRV	(77.68)
WMT	411.00	GS	(95.64)
KO	382.20	AAPL	(130.06)
NKE	369.32	SBC	(161.59)
CVX	321.72	EK	(178.90)
ALD/HON	314.87	BAC	(226.22)
DD	267.67	GM	(326.97)
MRK	209.58	AIG	(575.51)

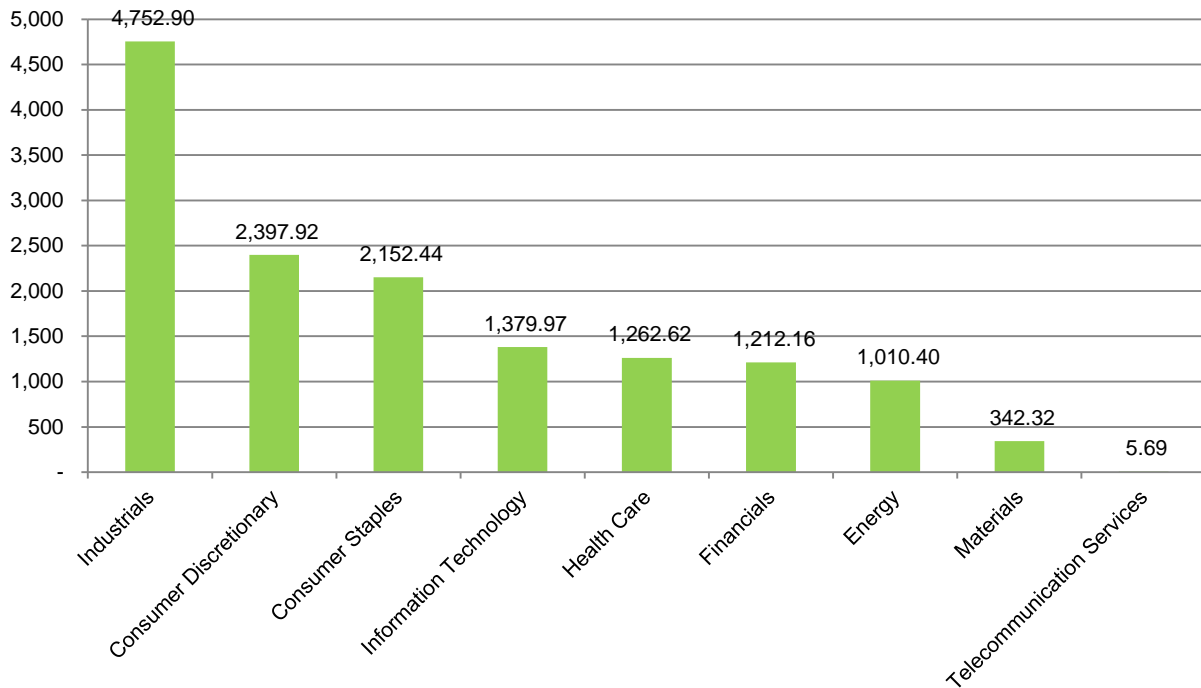
The Dow Turns 120: Commentary, Facts and Figures

By Industry

Each stock in the DJIA—and, in fact, in the broader S&P Dow Jones Indices family—is classified according to the Global Industry Classification Standard (GICS). Leveraging GICS, we can aggregate DJIA points to determine how each industry contributed to the Average during the period.

DJIA: Points Contributed by Industry

1992 to Q1 2016



- All industries made positive contributions to the DJIA's advance during the period.
- Industrials led the way followed by Consumer Discretionary and Consumer Staples.
- Telecommunications—with just over 5 points contributed during the two decades plus—made the least impact.

The Dow Turns 120: Commentary, Facts and Figures

Points Contributed by Stock, by Year (alphabetically)

Symbol	Company	Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
AA	Aluminum Co. of America	Materials	11.18	(8.96)	44.33	18.68	31.36	16.55	17.87	229.97	(101.14)	11.24	(88.44)	111.28	(48.09)
AAPL	Apple Inc.	Information Technology													(76.82)
AIG	American International Group Inc.	Financials													14.09
ALD/HON	Allied-Signal Inc./Honeywell International Inc.	Industrials	30.70	40.48	(15.24)	37.25	56.82	47.82	21.43	58.96	(53.60)	(90.32)	(68.19)	68.90	14.09
AMP	American Express Co.	Financials	8.60	12.83	6.19	32.59	44.74	116.41	50.20	307.77	(75.94)	(126.87)	(2.28)	91.59	60.29
BA	Boeing Co., The	Industrials	(14.67)	6.32	8.21	88.83	84.05	(9.46)	(67.08)	39.60	144.88	(186.36)	(40.32)	67.60	68.74
BAC	Bank of America Corp.	Financials													
BS	Bethlehem Steel Corp.	Materials	3.27	9.83	(6.53)	(11.13)	(14.79)	(1.54)							
C/TRV	CitiGroup/Travelers Group Inc.	Financials						93.80	(19.96)	128.86	79.14	(3.80)	(89.08)	94.90	(1.37)
CAT	Caterpillar Inc.	Industrials	16.29	78.10	51.76	9.16	48.17	98.85	(11.02)	(1.61)	12.46	31.79	(45.27)	267.11	109.06
CSCO	Cisco Systems Inc.	Information Technology													
CVX	Chevron Corp.	Energy	1.27	38.45	7.54	21.98	36.83	38.99	23.91	35.53					
DD	Du Pont (E.I.) De Nemours & Co.	Materials	(1.37)	1.17	16.88	37.54	71.93	77.09	(30.16)	55.56	(87.04)	(39.21)	(0.78)	27.34	23.16
DIS	Disney (Walt) Co.	Consumer Discretionary	79.30	(1.66)	9.46	35.44	31.23	107.77	18.74	(6.17)	(12.74)	(56.99)	(30.38)	50.30	33.34
EK	Eastman Kodak Co.	Materials	(13.80)	35.27	8.51	53.59	38.65	(71.86)	44.27	(26.36)	(149.61)	(71.90)	38.83	(63.16)	(11.33)
GE	General Electric Co.	Industrials	18.14	44.46	(13.28)	59.06	79.39	110.97	115.39	262.48	(17.01)	(54.18)	(109.03)	46.96	40.40
GM	General Motors Corp.	Consumer Discretionary	3.12	50.30	(33.51)	29.88	8.41	30.04	43.65	65.49	(132.20)	(20.77)	(81.58)	121.58	(98.95)
GS	Goldman Sachs	Financials													
GT	Goodyear Tire & Rubber Co.	Consumer Discretionary	25.53	39.54	(29.48)	32.71	17.61	41.69	(54.60)	(50.80)					
HD	Home Depot Inc.	Consumer Discretionary								129.10	(119.37)	35.08	(186.94)	82.48	53.80
HWP	Hewlett-Packard Co.	Information Technology						26.79	24.32	211.59	(69.83)	(74.49)	(22.01)	40.54	(14.11)
IBM	International Business Machines Corp.	Information Technology	(84.77)	11.10	44.16	49.85	174.34	151.22	328.66	188.10	(139.34)	238.17	(300.64)	107.71	44.41
INTC	Intel Corp.	Information Technology								23.76	32.37	9.85	(109.73)	117.94	(65.10)
IP	International Paper Co.	Materials	(8.87)	3.14	19.92	13.76	7.15	2.85	6.92	53.77	(71.42)	(2.43)	(37.27)	58.37	(5.26)
JNJ	Johnson & Johnson	Health Care						31.05	73.27	43.55	77.93	34.87	(36.91)	(13.34)	85.67
JPM	J.P. Morgan Chase & Co.	Financials	(1.86)	11.02	(33.79)	66.93	51.52	53.06	(33.73)	87.47	230.40	(62.12)	(85.69)	90.31	18.11
KFT	Kraft Foods Inc. Cl A	Consumer Staples													
KO	Coca-Cola Co., The	Consumer Staples	7.21	6.51	19.76	63.71	59.75	45.82	(1.65)	(43.13)	20.73	(23.02)	(23.02)	52.06	(67.31)
MCD	McDonald's Corp.	Consumer Discretionary	20.71	18.69	3.98	44.32	(0.04)	5.99	115.71	45.61	(31.87)	(49.90)	(71.91)	62.09	54.02
MMM	Minnesota Mining & Manufacturing Co. (3M)	Industrials	11.72	17.09	(8.74)	36.57	56.82	(10.62)	(45.04)	123.41	148.01	(14.77)	35.47	229.74	(23.11)
MO	Morris (Phillip) Cos./Altria	Consumer Staples	(3.46)	(47.79)	5.63	92.71	65.70	30.79	34.55	(139.20)	122.46	11.45	(37.20)	102.10	51.48
MRK	Merck & Co.	Health Care	(39.53)	(21.83)	11.39	77.85	40.55	94.92	167.26		118.30	(392.09)	146.85	(100.34)	(0.08)
MSFT	Microsoft Corp.	Information Technology													15.15
NKE	Nike Inc.	Consumer Discretionary													(64.69)
PFE	Pfizer Inc.	Health Care													75.11
PG	Procter & Gamble Co.	Consumer Staples	18.13	7.80	13.72	58.98	72.63	148.13	45.96	89.41	(138.06)	9.46	51.81	100.85	75.11
S	Sears, Roebuck & Co.	Consumer Discretionary	14.28	52.85	(15.88)	66.33	20.15	(8.47)	(13.20)						
SBC	SBC Communications	Telecommunication Services								(10.63)	(2.63)	(57.34)	(83.60)	(5.10)	(2.28)
T	AT&T Corp.	Telecommunication Services	24.23	4.41	(6.31)	40.99	(18.00)	81.73	58.18	7.47	(183.63)	41.29	(42.90)	(40.19)	(5.78)
TRV	Travelers Cos. Inc.	Financials													
TX	Texaco Inc.	Energy	(4.14)	9.81	(12.25)	52.72	57.92	9.62							
UK	Union Carbide Corp.	Materials	23.20	12.42	16.45	22.29	9.00	1.94	(3.21)	87.59					
UNH	UnitedHealth Group Inc	Health Care													
UTX	United Technologies Corp.	Industrials	(12.58)	28.42	1.11	89.73	110.17	14.73	145.00	104.58	85.99	(96.43)	(18.67)	236.18	63.27
V	Visa Inc.	Financials													
VZ	Verizon Communications Inc.	Telecommunication Services													23.89
WMT	Wal-Mart Stores Inc.	Consumer Staples						38.73	169.85	155.64	(80.00)	31.12	(48.52)	16.27	(0.94)
WX	Westinghouse Electric Corp.	Industrials	(9.90)	3.14	(4.46)	11.80	10.01	(1.92)							
XOM	Exxon Mobil Corp.	Energy	0.48	3.89	(5.19)	54.29	53.34	42.67	47.76	33.36	37.74	(38.29)	(30.20)	44.27	74.85
Z	Woolworth Corp./VENATOR GP.	Consumer Discretionary	10.50	(14.36)	(23.98)	(5.72)	25.72	3.85							
TOTAL			132.28	452.98	80.35	1,282.68	1,331.14	1,459.98	1,273.19	2,315.69	(710.27)	(765.35)	(1,679.87)	2,112.29	329.08

Symbol	Company	Industry	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 Q1	TOTAL
AA	Aluminum Co. of America	Materials	(12.13)	3.53	52.69	(203.15)	36.60	(5.46)	(51.01)	0.20	(3.00)				64.11
AAPL	Apple Inc.	Information Technology													(130.06)
AIG	American International Group Inc.	Financials	25.11	27.45	(108.09)	(443.17)							(155.60)	25.54	(275.53)
ALD/HON	Allied-Signal Inc./Honeywell International Inc.	Industrials	14.14	63.97	132.63	(44.95)									314.87
AMP	American Express Co.	Financials	19.14	73.73	(69.83)	(268.55)	168.64	18.18	32.17	78.34	238.48	14.83	(154.08)	(55.81)	621.35
BA	Boeing Co., The	Industrials	139.80	148.88	(11.24)	(361.61)	90.67	84.15	61.23	15.07	444.47	(41.81)	91.16	(120.87)	730.25
BAC	Bank of America Corp.	Financials				(228.87)	6.50	(13.01)	(58.88)	46.23	21.81				(226.22)
BS	Bethlehem Steel Corp.	Materials													(20.88)
C/TRV	CitiGroup/Travelers Group Inc.	Financials	3.77	57.43	(212.95)	(182.54)	(25.89)								(77.68)
CAT	Caterpillar Inc.	Industrials	80.47	28.50	90.59	(232.19)	90.58	277.50	(23.16)	(7.47)	1.83	4.62	(155.18)	58.76	888.69
CSCO	Cisco Systems Inc.	Information Technology					30.76	(28.05)	(16.27)	12.20	24.08	34.45	(4.53)	9.01	61.65
CVX	Chevron Corp.	Energy				(75.96)	20.95	108.03	114.66	12.84	128.80	(81.75)	(147.59)	37.25	321.72
DD	Du Pont (E.I.) De Nemours & Co.	Materials	(50.11)	49.72	(37.64)	(148.98)	63.95	122.67	(31.03)	(6.76)	59.53	112.45	204.39	(7.05)	369.32
DIS	Disney (Walt) Co.	Consumer Discretionary	(29.82)	82.45	(12.57)	(76.01)	73.17	39.82	(0.08)	93.23	190.03	114.25	69.06	(39.51)	761.67
EK	Eastman Kodak Co.	Materials													(178.90)
GE	General Electric Co.	Industrials	(11.14)	17.30	(0.92)	(168.04)	(9.17)	23.93	(2.88)	23.39	49.01	(17.72)	39.21	4.38	531.07
GM	General Motors Corp.	Consumer Discretionary	(162.02)	90.42	(47.38)	(174.86)	(18.60)								(326.97)
GS	Goldman Sachs	Financials										48.23	106.41	(91.06)	(159.22)
GT	Goodyear Tire & Rubber Co.	Consumer Discretionary													22.20
HD	Home Depot Inc.	Consumer Discretionary	(16.47)	(2.55)	(107.06)	(31.15)	45.13	46.40	52.83	151.31	150.64	145.33	179.28	8.08	615.91
HWP	Hewlett-Packard Co.	Information Technology	59.25	100.55	75.63	(113.33)	115.46	(71.12)	(123.67)	(87.85)	53.53				131.23
IBM	International Business Machines Corp.	Information Technology	(118.64)	119.69	89.33	(188.75)	362.64	120.12	280.94	57.61	(27.48)	(174.23)	(152.48)	94.71	1,276.44
IP	International Paper Co.	Materials	10.28	(37.71)	52.23	(96.81)	43.89	4.78	24.37	(28.33)	38.20	66.34	(10.98)	(14.38)	60.95
JNJ	Johnson & Johnson	Health Care	(27.72)	47.38	6.20	(54.09)	33.02	(19.32)	28.23	34.40	162.63	83.36	(11.65)	37.53	616.06
JPM	J.P. Morgan Chase & Co.	Financials	7.69	68.92	(37.81)	(95.93)	77.86	5.74	(69.40)	82.16	104.29	26.33	23.10	(46.64)	537.94
KFT	Kraft Foods Inc. Cl A	Consumer Staples				(64.67)	2.40	32.76	44.27	32.67					47.44
KO	Coca-Cola Co., The	Consumer Staples	(11.67)	63.56	106.67	(129.73)	90.35	66.45	31.79	42.51	36.46	5.85	5.26	23.49	382.90
MCD	McDonald's Corp.	Consumer Discretionary	14.65	84.94	118.42	27.07	0.94	108.33	178.39	(91.38)	67.57	(21.39)	162.33	51.64	918.94

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Points Contribution by Stock, by Year (ranked by total contribution during the period)

Symbol	Company	Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
IBM	International Business Machines Corp.	Information Technology	(84.77)	11.10	44.16	49.85	174.34	151.22	328.66	188.10	(139.34)	238.17	(300.64)	107.71	44.41
MMM	Minnesota Mining & Manufacturing Co. (3M)	Industrials	11.72	17.09	(8.74)	36.57	56.82	(10.62)	(45.04)	123.41	148.01	(14.77)	35.47	229.74	(23.11)
UTX	United Technologies Corp.	Industrials	(12.58)	28.42	1.11	89.73	110.17	14.73	145.00	104.58	85.99	(96.43)	(18.67)	236.18	63.27
MCD	McDonald's Corp.	Consumer Discretionary	20.71	18.69	3.98	44.32	(0.04)	5.99	115.71	45.61	(31.87)	(49.90)	(71.91)	62.09	54.02
CAT	Caterpillar Inc.	Industrials	16.29	78.10	51.76	9.16	48.17	98.85	(11.02)	(1.61)	12.46	31.79	(45.27)	267.11	109.06
DIS	Disney (Walt) Co.	Consumer Discretionary	79.30	(1.66)	9.46	35.44	31.23	107.77	18.74	(6.17)	(12.74)	(56.99)	(30.38)	50.30	33.34
PG	Procter & Gamble Co.	Consumer Staples	18.13	7.80	13.72	58.98	72.63	148.13	45.96	89.41	(138.06)	9.46	51.81	100.85	75.11
BA	Boeing Co., The	Industrials	(14.67)	6.32	8.21	88.83	84.05	(9.46)	(67.08)	39.60	144.88	(186.36)	(40.32)	67.60	68.74
AXP	American Express Co.	Financials	8.60	12.83	6.19	32.59	44.74	116.41	50.20	307.77	(75.94)	(126.87)	(2.28)	91.59	60.29
JNJ	Johnson & Johnson	Health Care						31.05	73.27	43.55	77.93	34.87	(36.91)	(13.34)	85.67
HD	Home Depot Inc.	Consumer Discretionary								129.10	(119.37)	35.08	(186.94)	82.48	53.80
XOM	Exxon Mobil Corp.	Energy	0.48	3.89	(5.19)	54.29	53.34	42.67	47.76	33.36	37.74	(38.29)	(30.20)	44.27	74.85
MO	Morris (Philip) Cos./Altria	Consumer Staples	(3.46)	(47.79)	5.63	92.71	65.70	30.79	34.55	(139.20)	122.46	11.45	(37.20)	102.10	51.48
JPM	J.P. Morgan Chase & Co.	Financials	(1.86)	11.02	(33.79)	66.93	51.52	53.06	(33.73)	87.47	230.40	(62.12)	(85.69)	90.31	18.11
GE	General Electric Co.	Financials	18.14	44.46	(13.28)	59.06	79.39	110.97	115.39	262.48	(17.01)	(54.18)	(109.03)	46.96	40.40
TRV	Travelers Cos. Inc.	Financials													
V	Visa Inc.	Financials													
UNH	Unitedhealth Group Inc	Health Care													
WMT	Wal-Mart Stores Inc.	Consumer Staples						38.73	169.85	155.64	(80.00)	31.12	(48.52)	16.27	(0.94)
KO	Coca-Cola Co., The	Consumer Staples	7.21	6.51	19.76	63.71	59.75	45.82	(1.65)	(43.13)	20.73	(89.22)	(23.02)	52.06	(67.31)
NKE	Nike Inc.	Consumer Discretionary													
CVX	Chevron Corp.	Energy	1.27	38.45	7.54	21.98	36.83	38.99	23.91	35.53					
ALD/HON	Allied-Signal Inc. / Honeywell International Inc.	Industrials	30.70	40.48	(15.24)	37.25	56.82	47.82	21.43	58.96	(53.60)	(90.32)	(68.19)	68.90	14.09
DD	Du Pont (E.I.) De Nemours & Co.	Materials	(1.37)	1.17	16.88	37.54	71.93	77.09	(30.16)	55.56	(87.04)	(39.21)	(0.78)	27.30	23.16
MRK	Merck & Co.	Health Care	(39.53)	(21.83)	11.39	77.85	40.55	94.92	167.26	(18.12)	155.15	(231.13)	(15.08)	54.34	(104.61)
UK	Union Carbide Corp.	Materials	23.20	12.42	16.45	22.29	9.00	1.94	(3.21)	87.59					
VZ	Verizon Communications Inc.	Telecommunication Services													23.89
HWP	Hewlett-Packard Co.	Information Technology						26.79	24.32	211.59	(69.83)	(74.49)	(22.01)	40.54	(14.11)
TX	Texaco Inc.	Energy	(4.14)	9.81	(12.25)	52.72	57.92	9.62							
AA	Aluminum Co. of America	Materials	11.18	(8.96)	44.33	18.68	31.36	16.55	17.87	229.97	(101.14)	11.24	(88.44)	111.28	(48.09)
CSCO	Cisco Systems Inc.	Information Technology										23.76	32.37	9.85	(109.73)
INTC	Intel Corp.	Information Technology													117.94
KFT	Kraft Foods Inc. CI A	Consumer Staples													(65.10)
S	Sears, Roebuck & Co.	Consumer Discretionary	14.28	52.85	(15.88)	66.33	20.15	(8.47)	(13.20)	(75.20)					
IP	International Paper Co.	Materials	(8.57)	3.14	19.92	13.76	7.15	2.85	6.92	53.77	(71.42)	(2.43)	(37.27)	58.37	(5.26)
GT	Goodyear Tire & Rubber Co.	Consumer Discretionary	25.53	39.54	(29.48)	32.71	17.61	41.69	(54.60)	(50.80)					
T	AT&T Corp.	Telecommunication Services	24.23	4.41	(6.31)	40.99	(18.00)	81.73	58.18	7.47	(183.63)	41.29	(42.90)	(40.19)	(5.78)
WX	Westinghouse Electric Corp.	Industrials	(9.90)	3.14	(4.46)	11.80	10.01	(1.92)							
Z	Woolworth Corp. /VENATOR GP.	Consumer Discretionary	10.50	(14.36)	(23.98)	(5.72)	25.72	3.85							
MSFT	Microsoft Corp.	Information Technology									118.30	(392.09)	146.85	(100.34)	(0.08)
BS	Bethlehem Steel Corp.	Materials	3.27	9.83	(6.53)	(11.13)	(14.79)	(1.54)							
PFE	Pfizer Inc.	Health Care													(64.69)
C/TRV	CitiGroup/Travelers Group Inc.	Financials						93.80	(19.96)	128.86	79.14	(3.80)	(89.08)	94.90	(1.37)
GS	Goldman Sachs	Financials													
AAPL	Apple Inc.	Information Technology													
SBC	SBC Communications	Telecommunication Services								(10.63)	(2.63)	(57.34)	(83.60)	(5.10)	(2.28)
EK	Eastman Kodak Co.	Materials	(13.80)	35.27	8.51	53.59	38.65	(71.86)	44.27	(26.36)	(149.61)	(71.90)	38.83	(63.16)	(1.33)
BAC	Bank of America Corp.	Financials													
GM	General Motors Corp.	Consumer Discretionary	3.12	50.30	(33.51)	29.88	8.41	30.04	43.65	65.49	(132.20)	(20.77)	(81.58)	121.58	(98.95)
AIG	American International Group Inc.	Financials													(76.82)
TOTAL			132.28	452.98	80.35	1,282.68	1,331.14	1,459.98	1,273.19	2,315.69	(710.27)	(765.35)	(1,679.87)	2,112.29	329.08

Symbol	Company	Industry	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 Q1	TOTAL
IBM	International Business Machines Corp.	Information Technology	(118.64)	119.69	89.33	(188.75)	362.64	120.12	280.94	57.61	(27.48)	(174.23)	(152.48)	94.71	1,276.44
MMM	Minnesota Mining & Manufacturing Co. (3M)	Industrials	(32.42)	5.42	52.10	(215.30)	191.30	27.52	(34.59)	84.28	338.56	154.58	(91.94)	109.50	1,143.55
UTX	United Technologies Corp.	Industrials	39.57	52.88	113.67	(184.81)	120.62	70.52	(42.61)	68.15	238.83	7.71	(127.81)	27.60	1,156.79
MCD	McDonald's Corp.	Consumer Discretionary	14.65	84.94	118.42	27.07	0.94	108.33	178.39	(91.38)	67.57	(21.39)	162.33	51.64	918.94
CAT	Caterpillar Inc.	Industrials	80.47	28.50	90.59	(223.19)	90.58	277.50	(23.16)	(7.47)	1.83	4.62	(155.18)	58.76	888.69
DIS	Disney (Walt) Co.	Consumer Discretionary	(29.82)	82.45	(12.57)	(76.01)	73.17	39.82	(0.08)	93.23	190.03	114.25	69.06	(39.51)	761.67
PG	Procter & Gamble Co.	Consumer Staples	22.46	51.15	74.51	(92.84)	(12.51)	28.01	18.01	9.22	101.29	62.16	(76.17)	19.86	759.07
BA	Boeing Co., The	Industrials	139.80	148.88	(11.24)	(361.61)	90.67	84.15	61.23	15.07	444.47	(41.81)	91.16	(120.87)	730.25
AXP	American Express Co.	Financials	19.14	73.73	(69.83)	(268.55)	168.64	18.18	32.17	78.34	238.48	14.83	(154.08)	(55.81)	621.35
JNJ	Johnson & Johnson	Health Care	(27.72)	47.38	6.20	(54.09)	33.02	(19.32)	28.23	34.40	162.63	(81.65)	(11.65)	37.53	616.06
HD	Home Depot Inc.	Consumer Discretionary	(16.47)	(2.55)	(107.06)	(31.15)	45.13	46.40	52.83	151.31	150.64	145.33	179.28	8.08	615.91
XOM	Exxon Mobil Corp.	Energy	34.30	163.79	138.80	(112.78)	(90.76)	37.44	88.10	13.56	96.73	(56.19)	(95.57)	38.62	575.02
MO	Morris (Philip) Cos./Altria	Consumer Staples	104.82	88.85	94.62	(24.79)									552.74
JPM	J.P. Morgan Chase & Co.	Financials	7.69	68.92	(37.81)	(95.93)		77.86	5.74	(69.40)	82.16	104.29	26.33	23.10	(46.64)
GE	General Electric Co.	Financials	(11.14)	17.30	(0.92)	(168.04)		(9.17)	23.93	(2.88)	23.39	49.01	(17.72)	39.21	4.38
TRV	Travelers Cos. Inc.	Financials					46.18	44.28	26.19	96.91	138.13	98.32	45.93	26.37	522.30
V	Visa Inc.	Financials										153.16	253.80	105.99	(7.33)
UNH	Unitedhealth Group Inc	Health Care								(14.90)	155.78	165.62	105.49	77.11	489.11
WMT	Wal-Mart Stores Inc.	Consumer Staples	(45.65)	(4.97)	10.88	70.07	(21.76)	3.69	44.12	63.55	76.73	46.17	(163.22)	49.24	411.00
KO	Coca-Cola Co., The	Consumer Staples	(11.67)	63.56	106.67	(129.73)	90.35	66.45	31.79	42.51	36.46	5.85	5.26	23.49	382.20
NKE	Nike Inc.	Consumer Discretionary										59.53	112.45	204.39	(7.05)
CVX	Chevron Corp.	Energy				(75.96)	20.95	108.03	114.66	12.84	128.80	(81.75)	(147.59)	37.25	321.72
ALD/HON	Allied-Signal Inc. / Honeywell International Inc.	Industrials	14.14	63.97	132.63	(44.95)									314.87
DD	Du Pont (E.I.) De Nemours & Co.	Materials	(90.11)	49.72	(37.64)	(148.98)	63.95	122.67	(31.03)	(6.76)	146.61	57.60	(28.00)	(22.46)	267.67
MRK	Merck & Co.	Health Care	(2.07)	94.36	117.87	(225.21)	44.64	(3.76)	12.56	24.14	67.40	43.28	(26.77)	6.62	209.58
UK	Union Carbide Corp.	Materials													169.68
VZ	Verizon Communications Inc.	Telecommunication Services	(79.51)	67											

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