

Sector Primer Series: Industrials

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INTRODUCTION

The Global Industry Classification Standard® (GICS®) assigns a company to a single business classification according to its principal business activity. This assignment uses quantitative and qualitative factors, including revenues, earnings, and market perception. The sector is the first level of the four-tiered, hierarchical industry classification system that includes 11 sectors, 24 industry groups, 69 industries, and 158 sub-industries. GICS was developed in 1999 and is jointly managed by S&P Dow Jones Indices and MSCI.

The Industrials sector comprises companies primarily engaged in:

- Producing capital goods, such as manufacturers of aerospace and defense products, building products, electrical equipment, and machinery, as well as diversified industrial conglomerates;
- Providing commercial and professional services; and
- Transportation such as railroads, air freight and logistics, airlines, and trucking.

Exhibit 1: GICS of the Industrials Sector

SECTOR	INDUSTRY GROUP	INDUSTRY	SUB-INDUSTRY	
Industrials Code (20)	Capital Goods Code (2010)	Aerospace & Defense Code (201010)	Aerospace & Defense Code (20101010)	
		Building Products Code (201020)	Building Products Code (20102010)	
		Construction & Engineering Code (201030)	Construction & Engineering Code (20103010)	
		Electrical Equipment Code (201040)	Electrical Components & Equipment Code (20104010) Heavy Electrical Equipment Code (20104020)	
		Industrial Conglomerates Code (201050)	Industrial Conglomerates Code (20105010)	
		Machinery Code (201060)	Construction Machinery & Heavy Trucks Code (20106010) Agricultural & Farm Machinery Code (20106015) Industrial Machinery Code (20106020)	
		Trading Companies & Distributors Code (201070)	Trading Companies & Distributors Code (20107010)	
	Commercial & Professional Services Code (2020)	Commercial Services & Supplies Code (202010)		Commercial Printing Code (20201010) Environmental & Facilities Services Code (20201050) Office Services & Supplies Code (20201060) Diversified Support Services Code (20201070) Security & Alarm Services Code (20201080)
			Professional Services Code (202020)	Human Resource & Employment Services Code (20202010) Research & Consulting Services Code (20202020)
			Air Freight & Logistics Code (203010)	Air Freight & Logistics Code (20301010)
				Airlines Code (203020)
		Marine Code (203030)		Marine Code (20303010)
	Transportation Code (2030)	Road & Rail Code (203040)	Railroads Code (20304010)	
			Trucking Code (20304020)	
		Transportation Infrastructure Code (203050)	Airport Services Code (20305010) Highways & Railtracks Code (20305020) Marine Ports & Services Code (20305030)	

Source: S&P Dow Jones Indices LLC, MSCI. Data as of Dec. 31, 2018. Table is provided for illustrative purposes.

COMPOSITION

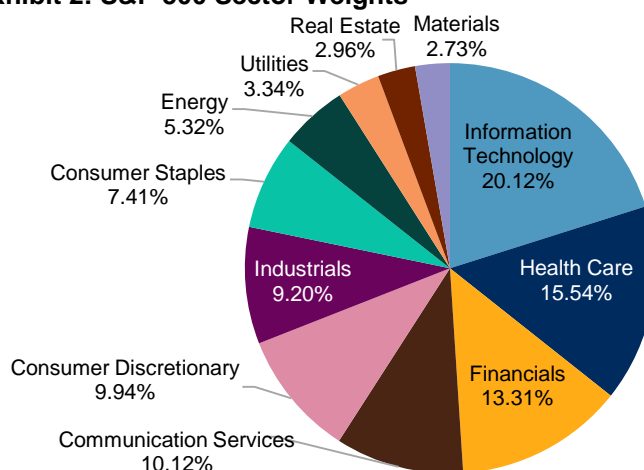
Industrials is the sixth-heaviest sector in the S&P 500...

The [S&P 500® Industrials](#) comprises all companies in the [S&P 500](#) included in the sector by GICS. Created in 1957, the S&P 500 was the first broad U.S. market-cap-weighted stock market index. Today, it is the basis of many listed and over-the-counter investment instruments.

The Industrials sector is the sixth most heavily weighted of the 11 sectors within the S&P 500. As of Dec. 31, 2018, the sector represented 9.20% of the S&P 500 (see Exhibit 2). Since the index is market-capitalization weighted, this sector has an above-average influence on the overall index performance.

Exhibit 2: S&P 500 Sector Weights

...representing 9.20% of the index at year-end 2018.



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Chart is provided for illustrative purposes.

The sector was the second heaviest in the S&P MidCap 400 and S&P SmallCap 600.

There is a higher exposure to Industrials in the mid- and small-cap indices. Industrials had the second-heaviest sector weight in the [S&P MidCap 400®](#) and [S&P SmallCap 600®](#), at 15.41% and 18.65%, respectively. Overall, in the [S&P Total Market Index](#), which consists of over 3,800 stocks—including those in the S&P 500, S&P MidCap 400, S&P SmallCap 600, and micro caps—the Industrials sector was the fifth largest, with 495 securities and a weight of 9.91%.

With a total float-adjusted market capitalization of USD 1,934,630.81 million, 69 companies comprised the S&P 500 Industrials as of Dec. 31, 2018. The two largest companies in the sector were Boeing Co (BA) and 3M Co (MMM), with float-adjusted market caps of USD 170,322.91 million and USD 110,948.96 million, translating to S&P 500 weights of 0.81% and 0.53%, respectively. There were no Industrials companies in the top 10 of the S&P 500—Boeing Co ranked as the 25th largest. The mean market cap of S&P 500 Industrials stocks was USD 28,038.13 million, the median market cap was USD 16,502.49 million, and the minimum market cap was USD 4,395.52 million. The top 10 Industrials holdings made up 46.04% of the sector (see Exhibit 3).

Exhibit 3: Snapshot of the Top 10 Holdings in the S&P 500 Industrials

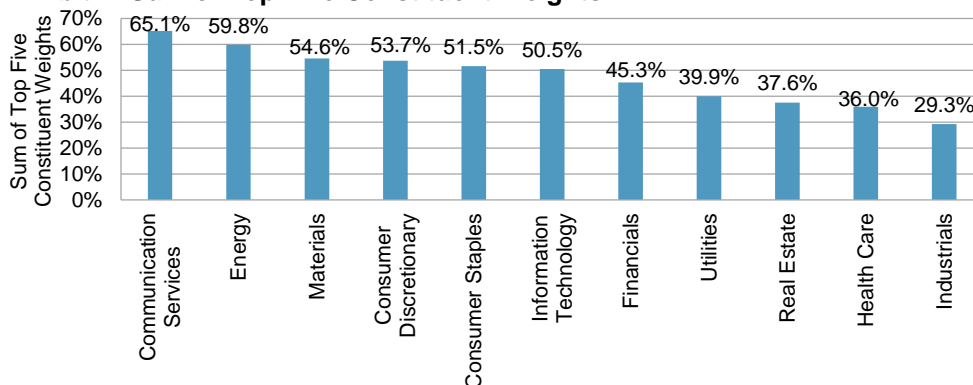
CONSTITUENT NAME	TICKER	S&P 500 WEIGHT (%)	S&P 500 INDUSTRIALS WEIGHT (%)
Boeing Co	BA	0.81	8.80
3M Co	MMM	0.53	5.73
Union Pacific Corp	UNP	0.48	5.26
Honeywell Intl Inc	HON	0.47	5.06
United Technologies Corp	UTX	0.41	4.47
Caterpillar Inc	CAT	0.36	3.88
United Parcel Service Inc B	UPS	0.32	3.50
General Electric Co	GE	0.31	3.40
Lockheed Martin	LMT	0.31	3.35
CSX Corporation	CSX	0.24	2.58
Total		4.24	46.04

The two largest companies in the Industrials sector were Boeing Co and 3M Co.

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Table is provided for illustrative purposes.

There were no Industrials companies in the top 10 of the S&P 500.

The Industrials sector was the least “top heavy” of the 11 GICS sectors. In fact, it was the only S&P 500 sector index whose top 10 constituent weights added up to less than 50%. The top five constituents of the S&P 500 Industrials summed to 29.3%, significantly less than the second lowest, which was Health Care at 36.0% (see Exhibit 4).

Exhibit 4: Sum of Top Five Constituent Weights

Industrials was the least top-heavy sector, with the top five constituents adding up to 29.3% of the sector.

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Chart is provided for illustrative purposes.

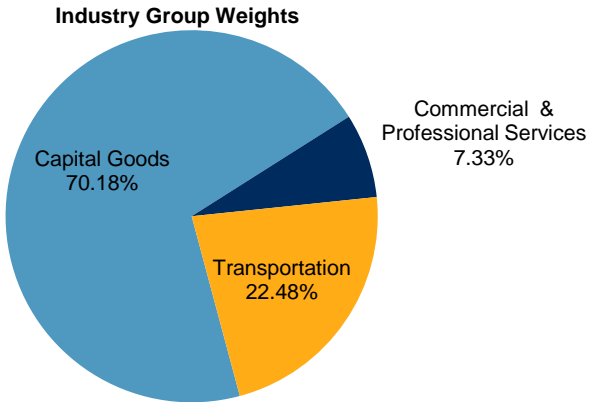
Within the S&P 500 Industrials, Capital Goods was by far the heaviest of the three industry groups. As of Dec. 31, 2018, it was 70.2% of the sector, Transportation was 22.5%, and Commercial & Professional Services accounted for the remaining 7.3%. The three largest industries were Aerospace & Defense (27.1%), Machinery (16.7%), and Industrial Conglomerates (15.6%)—all three from the Capital Goods industry group.

On the sub-industry level, the heaviest weight was Aerospace & Defense at 27.1%, consisting of manufacturers of civil or military aerospace and defense equipment, parts, or products, such as Boeing Co. The second-heaviest weight was Industrial Conglomerates at 15.6%, including

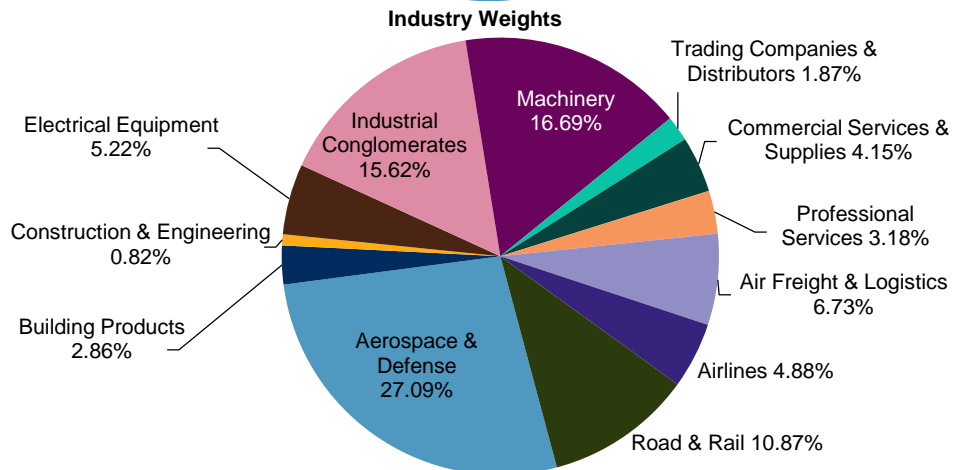
companies like 3M Co and Honeywell Intl Inc. The third-heaviest sub-industry was Railroads at 10.5%, including constituents such as Union Pacific Corp.

Capital Goods was by far the heaviest of the three industry groups.

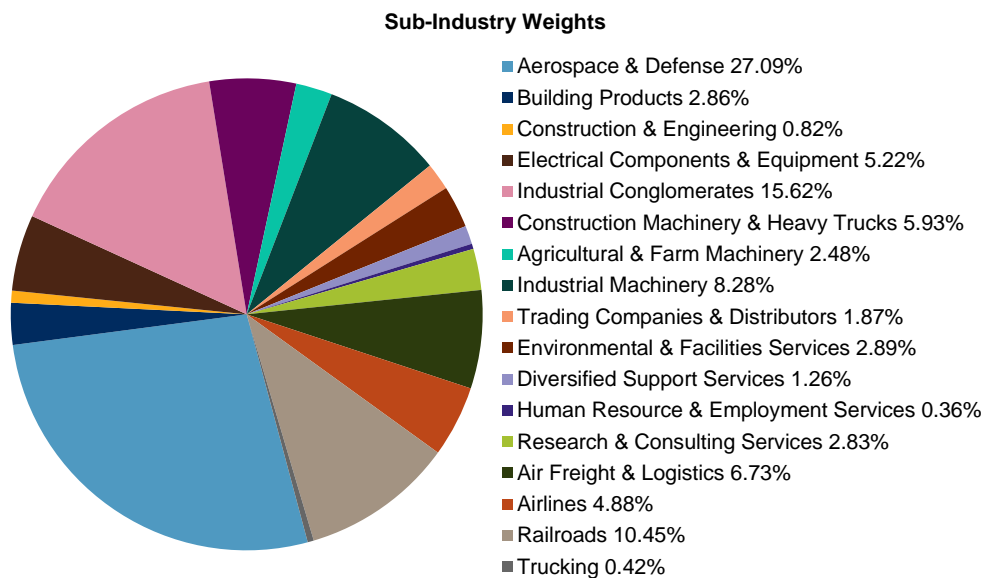
Exhibit 5: Industry Group, Industry, and Sub-Industry Weights in the S&P 500 Industrials



On the sub-industry level, the heaviest weight was Aerospace & Defense at 27.1%...



...and the second and third were Machinery and Industrial Conglomerates.

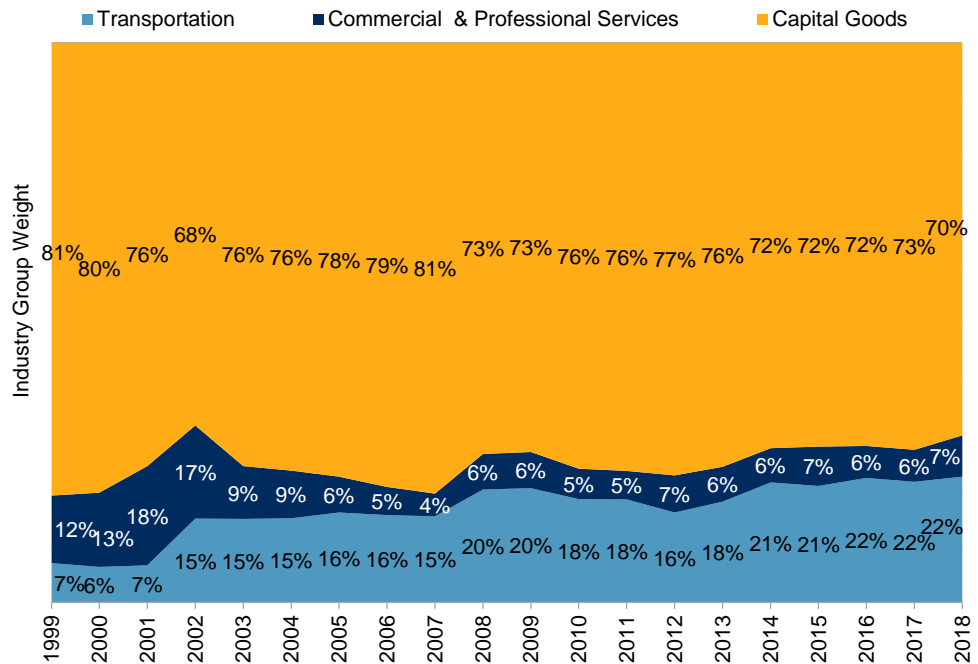


Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Charts are provided for illustrative purposes.

A key feature of GICS is that it has the ability to evolve. Its structure is intended to reflect the current state of industries in the equity investment universe. Annual reviews are conducted by S&P Global and MSCI to ensure that the structure remains fully representative of the current global market. However, there have not been any significant changes to the structure within the Industrials sector. The distribution of industry group weights within the Industrials sector has been relatively stable. Capital Goods has always been the largest industry group. The Transportation industry group has more than tripled in weight since 1999, from 7% to 22%.

There have not been any significant changes to the structure within the Industrials sector...

Exhibit 6: Industry Weights of the S&P 500 Industrials



...as Capital Goods has always been the largest industry group.

Transportation has more than tripled in weight since 1999, from 7% to 22%.

Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1999, through Dec. 31, 2018. Chart is provided for illustrative purposes.

FUNDAMENTALS

Across all three size segments, the Industrials sector had higher price-to-book-value (P/BV) and lower price-to-sales ratios than the broader market. However, the 12-month trailing price-to-earnings (P/E) ratio, one-year forward P/E, and indicated dividend yield were mixed. All five metrics tended to be average relative to the other 10 sectors. Industrials ranked no better than fourth and no worse than ninth in any of the five metrics across all three size segments.

Exhibit 7: Fundamental Data Comparison

INDEX	12-MONTH TRAILING P/E	ONE-YEAR FORWARD P/E	P/BV	PRICE-TO-SALES	INDICATED DIVIDEND YIELD (%)
S&P 500	18.94	15.55	3.00	1.87	2.23
S&P 500 Industrials	20.18	14.94	4.29	1.46	2.46
S&P MidCap 400	23.27	15.45	2.00	1.11	1.90
S&P MidCap 400 Industrials	18.09	15.31	2.41	0.97	1.39
S&P SmallCap 600	36.24	17.11	1.81	0.84	1.76
S&P SmallCap 600 Industrials	22.26	15.98	2.13	0.76	1.02

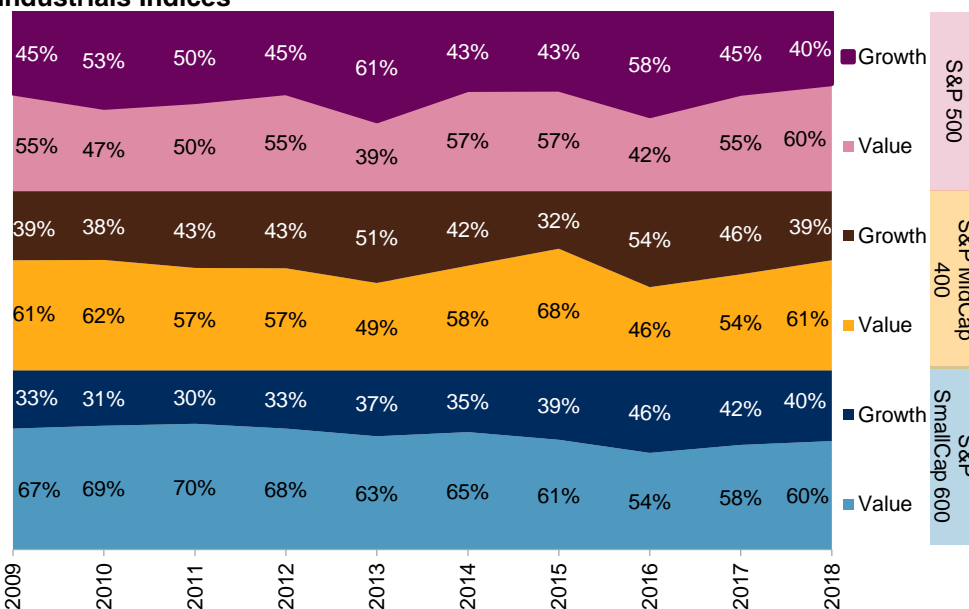
The Industrials sector had higher P/BV and lower price-to-sales ratios than the broader market.

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Industrials sector companies tend to be historically tilted toward value, especially in mid and small caps. As of Dec. 31, 2018, S&P 500 Industrials companies averaged 60% value and 40% growth. The average was 61% value and 39% growth for Industrials companies in the S&P MidCap 400 and 60% value and 40% growth in the S&P SmallCap 600.

Exhibit 8: Growth and Value Factor Tilts of the Large-, Mid-, and Small-Cap Industrials Indices

Industrials sector companies tend to be historically tilted toward value, especially in mid and small caps...



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2009 through Dec. 31, 2018. Chart is provided for illustrative purposes.

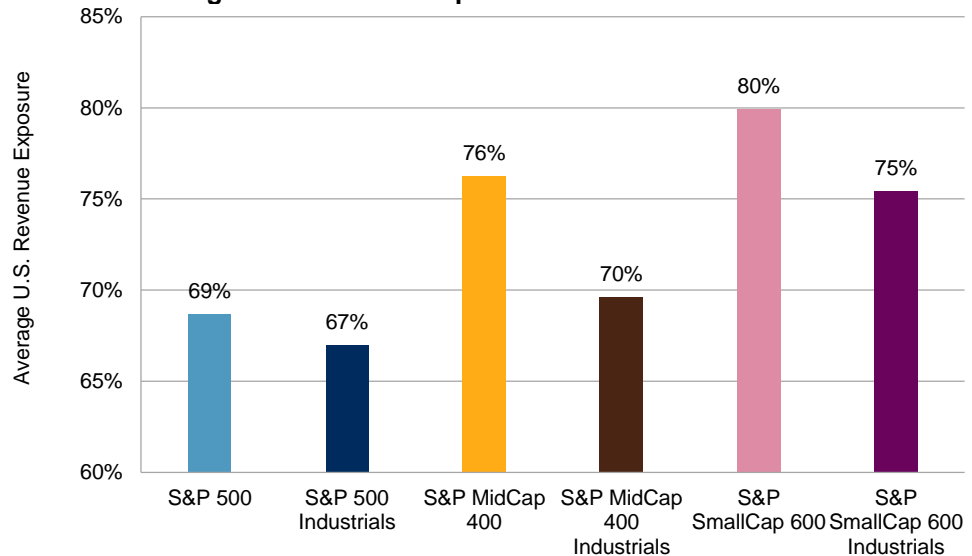
...averaging about 60% value and 40% growth as of year-end 2018.

In terms of revenue exposure, Industrials companies are less insulated from regions outside the U.S., according to data from the FactSet Geographic Revenue Exposure (GeoRev™) database. Generally, if international exposure is a goal, large-cap companies do the most global business. As of Dec. 31, 2018, S&P 500 Industrials companies had an average U.S. revenue exposure of 67%. Mid- and small-cap Industrials companies were only slightly more insulated from foreign markets, with averages of approximately 70% and 75%, respectively, of revenue sourced domestically (see Exhibit 9). Industrials ranked fifth among large-cap

sectors, third among mid-cap sectors, and third among small-cap sectors on the amount of revenue sourced from outside the U.S., meaning Industrials companies are more likely to be affected by foreign policies and trade.

In terms of revenue exposure, Industrials companies are less insulated from regions outside the U.S.

Exhibit 9: Average U.S. Revenue Exposure

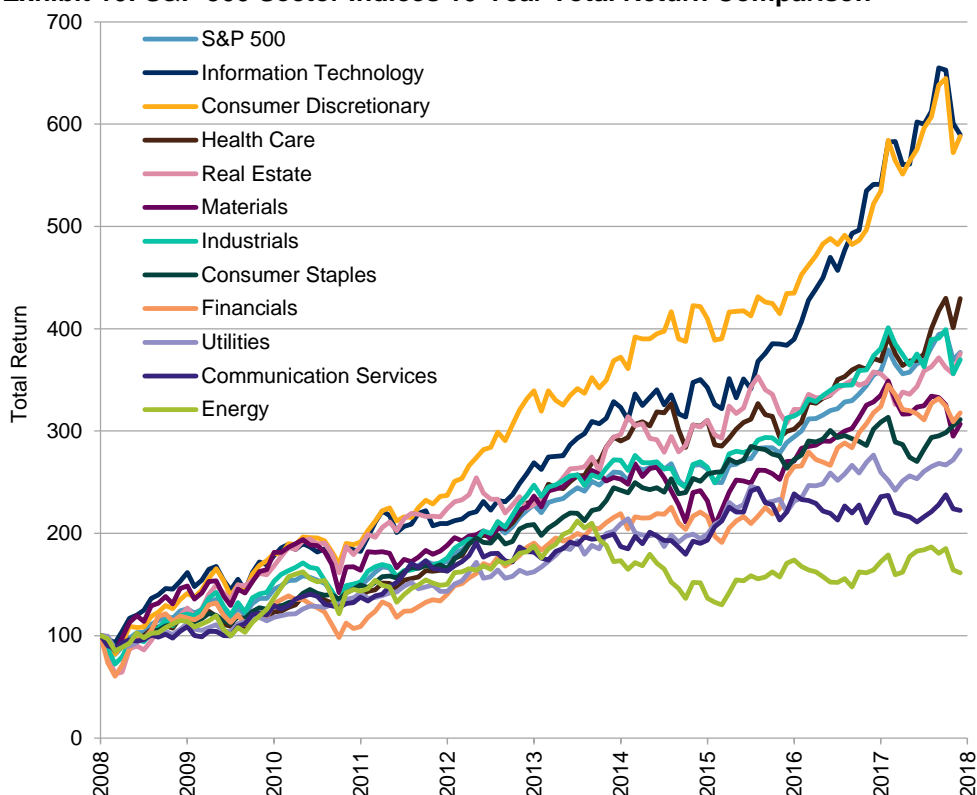


Source: S&P Dow Jones Indices LLC, FactSet GeoRev database. Data as of Dec. 31, 2018. Chart is provided for illustrative purposes.

PERFORMANCE

S&P 500 Industrials companies had an average U.S. revenue exposure of 67%.

Over the 10-year period ending in 2018, Industrials had a 12.68% annualized return, which was fifth best (see Exhibit 10). Industrials slightly underperformed the S&P 500, which as a whole had a 10-year annualized return of 13.12%. Industrials slightly outperformed the simple average of the 11 sector returns, which was 11.98%. In terms of risk, defined as standard deviation and calculated based on the total returns of monthly values, Industrials was the fifth highest. On a total return basis, the S&P 500 Industrials offered a 10-year annualized risk-adjusted return of 0.70, which was the sixth best (see Exhibit 11).

Exhibit 10: S&P 500 Sector Indices 10-Year Total Return Comparison

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Indices rebased to 100 on Dec. 31, 2008. Performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 11: Annualized Returns of S&P 500 Sector Indices

INDEX NAME	1-YEAR	3-YEAR	5-YEAR	10-YEAR
ANNUALIZED RETURN (%)				
S&P 500 Industrials	-13.29	7.65	5.95	12.68
S&P 500	-4.38	9.26	8.49	13.12
S&P 500 Communication Services	-12.53	2.17	2.58	7.51
S&P 500 Consumer Discretionary	0.83	9.55	9.69	18.35
S&P 500 Consumer Staples	-8.38	3.09	6.26	10.96
S&P 500 Energy	-18.10	1.07	-5.56	3.50
S&P 500 Financials	-13.03	9.28	8.16	10.92
S&P 500 Health Care	6.47	8.14	11.12	14.65
S&P 500 Information Technology	-0.29	16.37	14.93	18.36
S&P 500 Materials	-14.70	7.22	3.84	11.07
S&P 500 Real Estate	-2.22	3.87	8.84	13.28
S&P 500 Utilities	4.11	10.72	10.74	10.46

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Risk is defined as standard deviation calculated based on total returns using monthly values. Performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

In terms of risk, Industrials was the fifth highest.

Exhibit 11: Annualized Returns of S&P 500 Sector Indices (cont.)

INDEX NAME	1-YEAR	3-YEAR	5-YEAR	10-YEAR
RISK				
S&P 500 Industrials	20.11	14.59	13.53	18.11
S&P 500	15.33	10.95	10.94	13.60
S&P 500 Communication Services	13.60	15.90	14.40	14.54
S&P 500 Consumer Discretionary	19.89	13.58	13.69	16.54
S&P 500 Consumer Staples	15.13	11.39	11.35	11.32
S&P 500 Energy	23.75	18.71	18.95	19.33
S&P 500 Financials	16.57	16.46	14.69	21.95
S&P 500 Health Care	18.47	13.69	13.06	13.33
S&P 500 Information Technology	18.65	15.29	14.53	16.10
S&P 500 Materials	15.36	14.51	15.34	19.50
S&P 500 Real Estate	14.46	13.01	13.08	21.48
S&P 500 Utilities	9.80	12.39	12.78	12.62
ANNUALIZED RISK-ADJUSTED RETURNS				
S&P 500 Industrials	-0.66	0.52	0.44	0.70
S&P 500	-0.29	0.85	0.78	0.96
S&P 500 Communication Services	-0.92	0.14	0.18	0.52
S&P 500 Consumer Discretionary	0.04	0.70	0.71	1.11
S&P 500 Consumer Staples	-0.55	0.27	0.55	0.97
S&P 500 Energy	-0.76	0.06	-0.29	0.18
S&P 500 Financials	-0.79	0.56	0.56	0.50
S&P 500 Health Care	0.35	0.59	0.85	1.10
S&P 500 Information Technology	-0.02	1.07	1.03	1.14
S&P 500 Materials	-0.96	0.50	0.25	0.57
S&P 500 Real Estate	-0.15	0.30	0.68	0.62
S&P 500 Utilities	0.42	0.86	0.84	0.83

The S&P 500 Industrials offered a 10-year annualized risk-adjusted return of 0.70, which was the seventh best...

...and was most correlated with the S&P 500 Consumer Discretionary, at 0.89.

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Risk is defined as standard deviation calculated based on total returns using monthly values. Performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

The Industrials sector has been most correlated with Consumer Discretionary and least correlated with Utilities. Exhibit 12 shows that as of Dec. 31, 2018, the S&P 500 Industrials had a correlation of 0.89 with the [S&P 500 Consumer Discretionary](#) and 0.29 with the [S&P 500 Utilities](#), based on 10 years of monthly returns. Correlation with other major country indices also varied. Outside of the U.S., the S&P 500 Industrials was most correlated with the [S&P Developed Ex-U.S. BMI](#) (0.81) and S&P Germany BMI (0.80). It was least correlated with the [S&P Japan BMI](#) (0.59).

The Industrials sector was least correlated with Utilities, at 0.29.

Exhibit 12: Correlations of the S&P 500 Industrials

S&P 500 SECTOR (TR)	CORRELATION	INDEX (TR)	CORRELATION
Consumer Discretionary	0.89	S&P Developed Ex-U.S. BMI	0.81
Materials	0.88	S&P Germany BMI	0.80
Financials	0.87	S&P Global Ex-U.S. BMI	0.80
Information Technology	0.76	S&P France BMI	0.76
Real Estate	0.72	S&P United Kingdom BMI	0.75
Energy	0.71	S&P Canada BMI	0.74
Health Care	0.70	S&P Switzerland BMI	0.71
Consumer Staples	0.63	S&P Australia BMI	0.71
Communication Services	0.47	S&P Korea BMI	0.70
Utilities	0.29	S&P Emerging BMI	0.69
		S&P China BMI	0.60
		S&P Japan BMI	0.59
		S&P United States BMI	0.94
		S&P 500	0.94
		S&P MidCap 400	0.92
		S&P Developed BMI	0.90
		S&P SmallCap 600	0.90
		S&P Global BMI	0.89

Regionally, Industrials was most correlated with the S&P Developed Ex-U.S. BMI and S&P Germany BMI...

Source: S&P Dow Jones Indices LLC. Correlations based on monthly total return data from January 2009 to December 2018. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance of various industry group, industry, and sub-industry buckets within the Industrials sector can vary. These groupings, based on qualitative and quantitative factors, are increasingly more specific to the types of companies included. Exhibit 13 shows the annualized returns of the company groupings within the Industrials sector.

...and least correlated with the S&P Japan BMI.

Exhibit 13: Annualized Returns of the S&P 500 Industrials GICS Sub-Indices

INDEX	ANNUALIZED RETURN (%)			
	1-YEAR	3-YEAR	5-YEAR	10-YEAR
S&P 500 Industrials	-13.29	7.65	5.95	12.68
INDUSTRY GROUP				
S&P 500 Capital Goods	-15.76	6.27	5.13	12.49
S&P 500 Commercial & Professional Services	-1.73	7.83	7.36	10.07
S&P 500 Transportation	-8.16	11.94	8.55	14.19
INDUSTRY				
S&P 500 Aerospace & Defense	-8.07	15.61	12.67	17.15
S&P 500 Building Products	-24.38	-3.29	5.81	12.02
S&P 500 Construction & Engineering	-23.03	3.92	-6.64	1.17
S&P 500 Electrical Equipment	-14.16	9.67	0.81	10.62
S&P 500 Industrial Conglomerates	-26.88	-10.04	-2.92	6.73
S&P 500 Machinery	-14.64	17.61	7.68	15.44
S&P 500 Trading Companies & Distributors	-8.35	12.41	2.35	13.99
S&P 500 Commercial Services & Supplies	0.49	15.16	11.15	11.31
S&P 500 Professional Services	-5.13	-0.28	3.32	10.41
S&P 500 Air Freight & Logistics	-20.15	5.27	3.27	9.25
S&P 500 Airlines	-15.82	1.62	13.91	14.79
S&P 500 Road & Rail	5.53	24.61	12.43	19.02
SUB-INDUSTRY				
S&P 500 Aerospace & Defense	-8.07	15.61	12.67	17.15
S&P 500 Building Products	-24.38	-3.29	5.81	12.02
S&P 500 Construction & Engineering	-23.03	3.92	-6.64	1.17
S&P 500 Electrical Components & Equipment	-14.16	9.67	0.81	10.62
S&P 500 Industrial Conglomerates	-26.88	-10.04	-2.92	6.73
S&P 500 Construction Machinery & Heavy Trucks	-18.06	21.80	5.62	13.13
S&P 500 Agricultural & Farm Machinery	-2.89	27.81	-	-
S&P 500 Industrial Machinery	-15.13	12.87	7.72	16.61
S&P 500 Trading Companies & Distributors	-8.35	12.41	2.35	13.99
S&P 500 Environmental & Facilities Services	1.33	12.33	11.84	11.62
S&P 500 Diversified Support Services	5.45	22.73	24.48	20.04
S&P 500 Human Resource & Employment Services	4.82	8.80	8.29	12.20
S&P 500 Research & Consulting Services	-6.33	-1.31	2.60	10.17
S&P 500 Air Freight & Logistics	-20.15	5.27	3.27	9.25
S&P 500 Airlines	-15.82	1.62	13.91	14.79
S&P 500 Railroads	6.71	25.59	12.98	19.42
S&P 500 Trucking	-18.41	9.17	4.96	10.63

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Performance of industry groups, industries, and sub-industries within the Industrials sector has varied.

CONCLUSION

The sector's fundamentals tend to be similar to broader market benchmarks...

As of Dec. 31, 2018, the S&P 500 Industrials had the fifth-best 10-year annualized return of the 11 GICS sector indices. Industrials was the sixth largest of the 11 GICS sectors in the U.S. market and accounted for approximately 9% of the weight of the S&P 500. Within the sector, Capital Goods has historically been by far the highest-weighted industry group, with Aerospace & Defense the largest industry and sub-industry. Boeing Co Inc was the largest Industrials company, with an approximate weight of 9% in the S&P 500 Industrials. The Industrials sector is the least top concentrated of the 11 GICS sectors. The largest five companies account for only 29% of the sector. In the mid- and small-cap segments, Industrials was more prominent as the second-heaviest-weighted sector, at 15% and 19%, respectively.

...and somewhat average relative to other sectors.

A closer look at the sector's characteristics provides further insights into the investment profile. Companies from the Industrials sector on average were tilted toward value as of Dec. 31, 2018. The sector has higher foreign revenue exposure than the broader market benchmarks. The sector's fundamentals tend to be similar to broader market benchmarks and somewhat average relative to other sectors. Additionally, Industrials has varying correlations with different sectors and countries, with highest correlations to the Consumer Discretionary sector and Germany.

PERFORMANCE DISCLOSURE

The S&P 500 Real Estate was launched September 19, 2016. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spdji.com. Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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