

Comparing Iconic Indices: The S&P 500[®] and DJIA[®]

Contributor

Garrett Glawe, CFA

Managing Director

Head of U.S. Equity Indices

garrett.glawe@spglobal.com

INTRODUCTION

The [S&P 500](#) and [Dow Jones Industrial Average[®] \(DJIA\)](#), both of which are designed to track U.S. large-cap companies, are two of the most iconic indices in the world. These indices have changed the way that investors measure the stock market and benchmark investment portfolios. They also serve as the basis for some of the world's most successful index-linked products and derivative contracts.

At the end of 2019, we estimate that there was over USD 11.2 trillion benchmarked to the S&P 500, which includes USD 4.6 trillion passively tracking the index. In comparison, there was USD 32 billion benchmarked to the DJIA, which includes USD 28 billion in passive assets.¹

According to our estimates above, the S&P 500 won the battle to attract assets. However, the DJIA offers several advantages, including its simplicity and a longer live history—it celebrated its 125th anniversary on May 26, 2021. As discussed in past research,² the trading volumes of investment products linked to the DJIA are high relative to the amount of assets tracking it.

The S&P 500 and DJIA have similar long-term risk/return profiles, and their three-year rolling correlations are high. However, there are important differences between the two indices that investors should consider.

- Number of constituents
- Size of the component companies
- Weighting scheme
- Sector representation
- Fundamentals
- Factor exposures

We will start by exploring areas in which these iconic indices are similar and then delve into the differences.

¹ Source: S&P Dow Jones Indices LLC. [Annual Survey of Assets](#). Dec. 31, 2019.

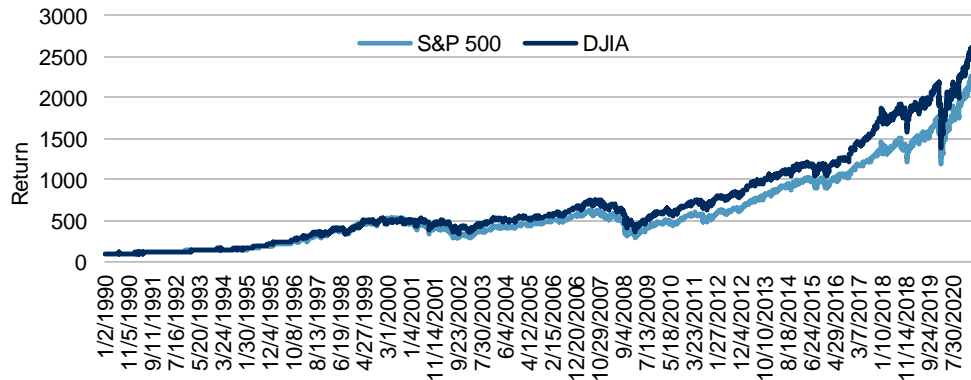
² Lazzara, Craig, Sherifa Issifu, and Tim Edwards. "[A Window on Index Liquidity: Volumes Linked to S&P DJI Indices](#)." S&P Dow Jones Indices LLC. Aug. 29, 2019.

LONG-TERM PERFORMANCE

Both designed to track U.S. large caps, the S&P 500 and DJIA are two of the most iconic indices in the world.

Exhibit 1 shows the long-term performance of the S&P 500 and the DJIA starting in 1990, with the indices rebased to 100 at the start of the period. The chart uses daily data and the total return version of each index, which includes reinvested dividends. We can see a similar return pattern for the S&P 500 and the DJIA.

Exhibit 1: Historical Performance



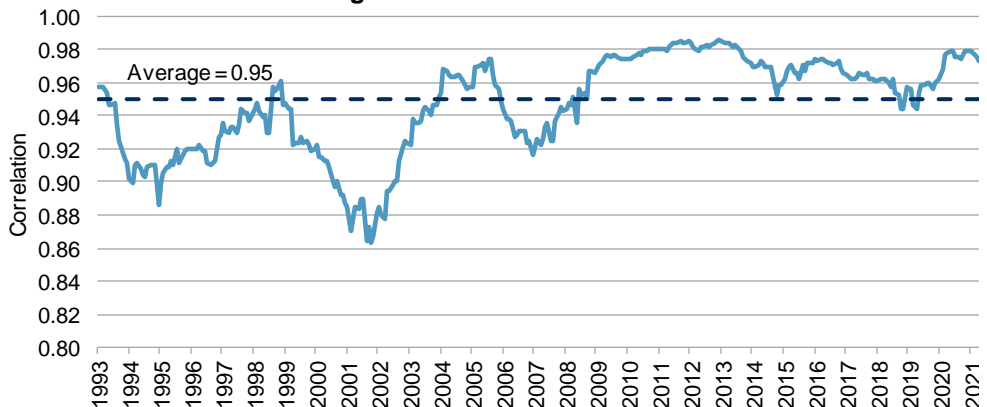
Historically, the S&P 500 and DJIA have had a similar return pattern...

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Correlation

Exhibit 2 shows the three-year rolling correlation between the S&P 500 and the DJIA, starting in 1993. The long-term average was 0.95, which is not surprising after reviewing Exhibit 1. We can see that the correlation dipped as low as 0.86 in 2001. However, since 2009 the correlation has almost always been above the long-term average of 0.95. Coupled with the similarity in historical performance, these correlation figures suggest the two indices typically reacted in similar ways to changing market environments.

Exhibit 2: Three-Year Rolling Correlation



...as well as a high three-year rolling correlation, with a long-term average correlation of 0.95.

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Return and Volatility over Time

Although the indices exhibited high correlation over time, their performance sometimes diverged substantially.

Although the returns of the two indices have exhibited high correlation over time, their performance did diverge, sometimes substantially. Exhibit 3 shows that the S&P 500 outperformed the DJIA by a wide margin over the past one- and three-year horizons. However, over the past 30 years, the DJIA outperformed slightly.

We can see that in the short term, the S&P 500 has experienced less volatility than the DJIA, but over the long term, the volatility numbers were quite similar.

Over the one- and three-year horizons, the S&P 500 significantly outperformed the DJIA.

Exhibit 3: Return and Volatility Profile			
PERIOD	S&P 500	DJIA	DIFFERENCE
ANNUALIZED TOTAL RETURNS			
1-Year	45.98	42.12	3.86
3-Year	18.67	14.52	4.15
5-Year	17.42	16.48	0.94
10-Year	14.17	12.95	1.23
20-Year	8.35	8.53	-0.18
30-Year	10.60	11.16	-0.56
ANNUALIZED VOLATILITY*			
1-Year	14.52	16.00	-1.48
3-Year	18.52	18.81	-0.29
5-Year	14.99	15.52	-0.53
10-Year	13.63	13.74	-0.11
20-Year	14.81	14.61	0.20
30-Year	14.55	14.45	0.10
ANNUALIZED RETURN / VOLATILITY			
1-Year	3.17	2.63	0.53
3-Year	1.01	0.77	0.24
5-Year	1.16	1.06	0.10
10-Year	1.04	0.94	0.10
20-Year	0.56	0.58	-0.02
30-Year	0.73	0.77	-0.04

However, the DJIA outperformed slightly over the past 30 years.

* Volatility is defined as the standard deviation of monthly total returns.

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

The two indices have gone through cycles of relative performance, specifically in the period from June 2000 to June 2003.

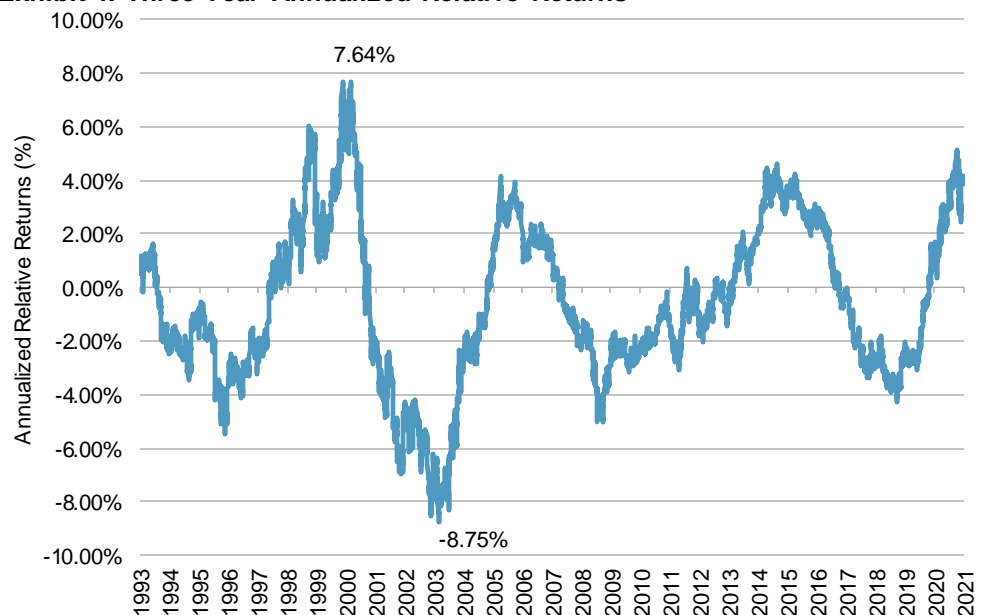
Exhibit 4 highlights the three-year rolling annualized performance difference between the S&P 500 and DJIA and clearly shows that the two indices have gone through cycles of relative performance. The period from June 2000 to June 2003 is worth investigating, as it highlights the importance of the sector allocations of each index.

On June 20, 2000, the three-year annualized returns for the S&P 500 and DJIA were 19.6% and 12.0%, respectively, resulting in a difference of 7.6%. At that time, the S&P 500 had a 33% weight to the Information Technology sector, whereas the DJIA had a weight of 20%.

The next three years saw the tech bubble burst and the S&P 500 companies within the Information Technology sector lost 32%, annualized. By June 20, 2003, the DJIA (-2.25%) had weathered the storm much better than the S&P 500 (-11.00%), resulting in a difference of 8.75%.

In June 2000, the S&P 500 had a 7.6% higher three-year annualized return than the DJIA and 13% higher weight in the Information Technology sector.

Exhibit 4: Three-Year Annualized Relative Returns



Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

The tech bubble burst and by June 2003, the DJIA (-2.25%) had weathered the storm much better than the S&P 500 (-11.00%).

INDEX METHODOLOGIES

There are some key differences between the construction of the S&P 500 and DJIA that are important to note.

There are some key differences between the construction of the S&P 500 and the DJIA that are important to be aware of. Exhibit 5 provides a summary of each index's methodology.

The S&P 500 includes companies from all 11 Global Industry Classification Standard (GICS®) sectors. The DJIA excludes the Utilities sector and the Transportation industry group, which are covered by complementary indices.

While the S&P 500 includes all 11 GICS sectors, the DJIA excludes the Utilities sector and the Transportation industry group.

The weighting method is an important difference between the two indices. Constituents in the S&P 500 are weighted by their float market capitalization. A company's market capitalization is calculated by multiplying its shares outstanding by the price per share. The term "float" refers to shares that can be easily traded by market participants.

Shares that are held by insiders and not freely traded in the market are excluded from a company's float market capitalization. Insiders can include company executives, board directors, and government agencies. When shares are held by insiders, a company's total market capitalization will be greater than its float market capitalization. For example, as of April 30, 2021, Amazon's total market capitalization was USD 1.75 trillion, but its float market capitalization was USD 1.48 trillion.

In contrast, the constituents in the DJIA are weighted simply by their stock price. We will review an example of how the weight of Microsoft is calculated in each index in the "Top 10 Holdings" section.

Constituents in the S&P 500 are weighted by their float market capitalization, whereas those in the DJIA are weighted simply by their stock price.

The S&P 500 incorporates several eligibility criteria including earnings, liquidity, public float, and IPO seasoning, which serve as guidance for new companies to be added to the index. Companies are not automatically removed from the index if they fail one of these metrics in the future.

The DJIA does not include formal eligibility criteria. A stock is typically added if the company has an excellent reputation, demonstrates sustained growth, and is of interest to a large number of investors. However, it is worth noting that the starting index universe of the DJIA is the S&P 500. If a stock is first added to the S&P 500 and later added to the DJIA, it likely passed the eligibility criteria when it was originally added to the S&P 500.

The S&P 500 is governed by the U.S. Index Committee, whereas the DJIA is governed by the Averages Committee. The committees meet regularly and make the final decision on index additions, the treatment of corporate actions, and potential changes to the index methodology.

The S&P 500 incorporates several eligibility criteria including earnings, liquidity, public float, and IPO seasoning...

...while the DJIA does not include formal eligibility criteria.

However, the DJIA uses the S&P 500 as its universe, so it is likely that its constituents meet the same criteria.

Exhibit 5: Index Methodologies

CRITERIA	S&P 500	DJIA
Sector Representation	Includes all 11 GICS sectors	Broad representation except for the Transportation industry group and Utilities sector
Weighting Method	Float Market Capitalization Weighted	Price Weighted
Earnings	The sum of the most recent four consecutive quarters' as-reported earnings should be positive, as should the most recent quarter	Stock selection is not governed by quantitative rules, but a stock is typically added only if the company has an excellent reputation, demonstrates sustained growth, and is of interest to a large number of investors.
Liquidity	The ratio of annual U.S. dollar value traded to float-adjusted market capitalization should be 1.00 or greater, and the stock should trade a minimum of 250,000 shares in each of the six months leading up to the evaluation date.	No set rule
Public Float	At least 10% of shares publicly floated**	No set rule
IPO Seasoning	12 months required	No set rule
Reconstitution of Stocks	Throughout the year, as corporate actions arise	Changes made on an as-needed basis
Rebalancing	Quarterly, effective after the close on the third Friday of March, June, September, and December	Changes made on an as-needed basis
Market Capitalization	Unadjusted company market capitalization of USD 13.1 billion or more***	No set rule (see Exhibit 6 with index characteristics)
Domicile of Constituents	U.S. companies, based on multiple criteria such as filing 10-K annual reports, fixed assets and revenues, and exchange listing	Companies should be incorporated and headquartered in the U.S. and a plurality of revenues should be derived from the U.S.
Index Universe	S&P Total Market Index (TMI)	S&P 500
Governing Index Committee	U.S. Index Committee	Averages Committee

* Prior to 2014, the S&P DJI earnings criterion required four consecutive quarters of positive earnings, instead of the sum of the last four quarters being positive.

** A company meeting the unadjusted company market capitalization criterion is also required to have a security-level float-adjusted market capitalization that is at least 50% of the respective index's unadjusted company level minimum market-capitalization threshold.

*** Effective as of June 3, 2021. Market-cap ranges are reviewed from time to time to assure consistency with market conditions.

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Table is provided for illustrative purposes.

INDEX CHARACTERISTICS

Many investors are familiar with the fact that the S&P 500 includes 500 U.S. large-cap companies, whereas the DJIA comprises only 30 names.

Exhibit 6 outlines a range of index characteristics for the S&P 500 and DJIA. Many investors are familiar with the fact that the S&P 500 includes 500 U.S. large-cap companies, whereas the DJIA comprises only 30 names. Both indices are intended to represent a broad selection of the U.S. economy.

The S&P 500 currently includes 505 constituents and 500 companies. As of April 30, 2021, there were five companies with multiple share classes in the index: Alphabet, Discovery, Fox Corp, News Corp, and Under Armour.

The DJIA was launched on May 26, 1896—over 60 years before the S&P 500. Some market participants value this extremely long live index history that goes back to important historical events, including the Great Depression.

The DJIA was launched May 26, 1896, over 60 years before the S&P 500. The long live index history is valued by some investors.

Reviewing the constituent market capitalization statistics, we can see that the DJIA had a higher mean and median total market cap. This is not surprising given that the DJIA represents blue-chip companies that are larger than many of their peers in the S&P 500. Both indices currently include Apple, which had the largest total market cap at USD 2.2 trillion. Finally, the weight of the top 10 companies in the DJIA was higher than in the S&P 500, at 53% versus 28%.

Reviewing the constituent market cap statistics, the DJIA had a higher mean and median total market cap than the S&P 500.

Turning our attention to the fundamentals, we can see that the S&P 500 was relatively expensive based on the trailing and projected price-to-earnings (P/E) ratios. However, from a price-to-book or price-to-cash-flow ratio perspective, the DJIA was more expensive. The DJIA also had a dividend yield that was 0.4% higher than the S&P 500.

Turning our attention to fundamentals, we can see that the S&P 500 was more expensive in terms of trailing and projected P/E ratios.

However, from a price-to-book and price-to-cash-flow ratio perspective, the DJIA was more expensive.

The DJIA also had a dividend yield that was 0.4% higher than the S&P 500.

Exhibit 6: Index Characteristics		
CHARACTERISTIC	S&P 500	DJIA
Number of Companies	500	30
Number of Constituents	505*	30
Launch Date	March 4, 1957	May 26, 1896
First Value Date	Jan. 3, 1928	May 26, 1896
CONSTITUENT MARKET CAP (USD MILLIONS)		
Mean	73,797	340,792
Median	30,148	204,962
Largest	2,206,963	2,206,963
Smallest	4,585	39,007
Weight of Largest Constituent (%)	5.86	7.75
Weight of Top 10 Companies (%)	28.29**	52.93
FUNDAMENTALS**		
P/E (Trailing)	39.90	28.80
P/E (Projected)	22.39	20.37
Price/Book	4.06	5.20
Price/Sales	2.76	2.73
Price/Cash Flow	26.42	31.29
Indicated Dividend Yield (%)	1.40	1.80

* The S&P 500 currently includes five companies with multiple share classes: Alphabet, Discovery, Fox Corp, News Corp, and Under Armour.

** Represents 11 constituents and 10 companies. Alphabet A and C shares are summed together.

*** For the S&P 500, the P/E (projected) and dividend yield are as of April 30, 2021. The P/E (trailing), price/book, price/sales, and price/cash flow are as of Dec. 31, 2020. For the DJIA, all fundamentals are as of April 30, 2021.

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Turnover

Next, we will review the annual turnover for the S&P 500 and DJIA from 1997 to 2020 (see Exhibit 7). Over this period, the average turnover was similar—4.56% for the S&P 500 and 5.82% for the DJIA. However, when we look at the annual differences, we see the results for the S&P 500 have been more consistent. The Averages Committee has not made many changes to the constituents of the DJIA over the years. But when it has made changes, the annual turnover jumped up significantly, since the index only holds 30 stocks.

The most recent changes to the DJIA constituents were effective prior to the opening of trading on Aug. 31, 2020. Salesforce.com replaced Exxon Mobil, Amgen replaced Pfizer, and Honeywell International replaced Raytheon Technologies. The index changes were prompted by DJIA constituent Apple's decision to split its stock 4:1, which reduced the index's weight in the GICS Information Technology sector. The changes helped to offset the reduction and diversify the index.

Exhibit 7: Annual Capitalization-Weighted Turnover (One Way)

YEAR	ONE-WAY TURNOVER (%) ³		
	S&P 500	DJIA	DIFFERENCE
2020	4.17*	14.72	-10.55
2019	4.30*	1.39	2.91
2018	4.77	1.13	3.64
2017	3.75	2.36	1.39
2016	4.69	0.00	4.69
2015	3.64	7.87	-4.23
2014	3.05	0.00	3.05
2013	3.27	10.91	-7.64
2012	4.37	3.92	0.45
2011	3.64	0.00	3.64
2010	3.73	0.07	3.66
2009	4.48	3.01	1.47
2008	3.87	9.77	-5.90
2007	5.21	0.73	4.48
2006	4.54	0.04	4.50
2005	5.73	4.00	1.73
2004	3.10	10.20	-7.10
2003	1.45	3.86	-2.41
2002	3.82	0.69	3.13
2001	4.43	8.97	-4.54
2000	8.91	9.85	-0.94
1999	6.16	23.11	-16.95
1998	9.46	1.62	7.84
1997	4.92	21.42	-16.50
AVERAGE	4.56	5.82	-

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Table is provided for illustrative purposes.

From 1997 to 2020, the average turnover for the S&P 500 and DJIA was similar, at 4.56% and 5.82%, respectively.

However, we can see that year-by-year, the turnover for the S&P 500 has been pretty consistent compared with the DJIA.

The Averages Committee rarely makes changes to the constituents of the DJIA, but when it does, the turnover jumps significantly.

³ Please refer to S&P DJI [Index Mathematics Methodology](#) for further information on how index turnover is calculated.

Top 10 Holdings

There are only two stocks that were in the top 10 companies by weight of both indices: Microsoft and Visa.

Exhibit 8 shows the top 10 companies by weight in each index. There are only two stocks that show up in both lists: Microsoft and Visa. We dig into the weight of Microsoft in each index to highlight the impact of the weighting scheme employed by each index.

As of April 30, 2021, Microsoft had the second-largest weight in the S&P 500 and a float market capitalization of USD 1.90 trillion. Microsoft's 5.38% weight in the S&P 500 is calculated by dividing its USD 1.90 trillion float market cap by the total index market cap of USD 35.38 trillion.

The weight of Microsoft, the second-largest in the S&P 500 at 5.48%, is determined by dividing its USD 1.90 trillion float market cap by the total index market cap of USD 35.38 trillion.

Recall that the DJIA is price weighted, meaning that the weight of each company in the index is determined by its stock price. As of April 30, 2021, Microsoft's stock price was USD 252.18. Its weight in the DJIA of 4.90% is calculated by dividing USD 252.18 by the sum of the prices of all 30 stocks in the DJIA (USD 5,184.54).

Exhibit 8: Top 10 Companies

S&P 500		DJIA	
COMPANY	INDEX WEIGHT (%)	COMPANY	INDEX WEIGHT (%)
Apple Inc.	5.86	Unitedhealth Group Inc	7.75
Microsoft Corp	5.38	Goldman Sachs Group Inc	6.77
Amazon.com Inc	4.19	Home Depot Inc	6.29
Alphabet Inc A + C*	3.96	Microsoft Corp	4.90
Facebook Inc A	2.21	Amgen Inc	4.65
Tesla, Inc	1.54	McDonald's Corp	4.59
Berkshire Hathaway B	1.48	Boeing Co	4.55
JP Morgan Chase & Co	1.33	Visa Inc A	4.54
Johnson & Johnson	1.21	Salesforce.com	4.47
Visa Inc A	1.12	Caterpillar Inc	4.43

* Alphabet A and C shares are summed together.
Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Table is provided for illustrative purposes.

In the price-weighted DJIA, Microsoft's weight of 4.90% is determined by dividing its stock price of USD 252.18 by the sum of all DJIA stock prices of USD 5,184.54.

Sectors

Next, we turn our attention to sector differences between the two indices. Exhibit 9 shows the GICS sector weights of the companies within each index as of April 30, 2021, sorted by the difference in sector weights.

The top three overweighted sectors for the S&P 500 relative to the DJIA were Communication Services, Information Technology, and Utilities. The top three underweighted sectors were Health Care, Financials, and Industrials.

Relative to the DJIA, the S&P 500 is overweight in Communication Services, Information Technology, and Utilities...

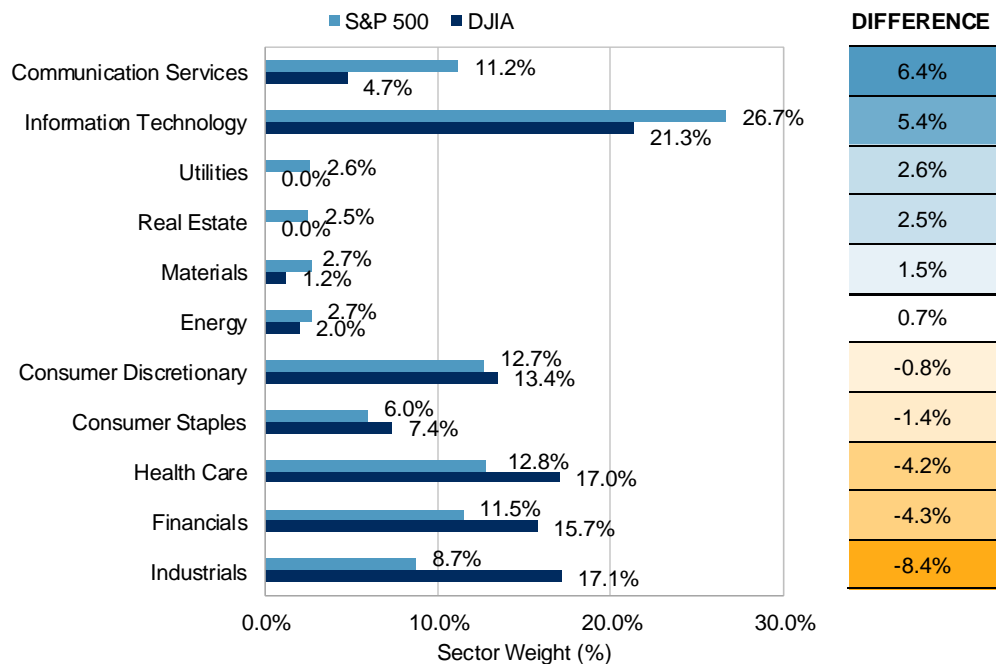
The DJIA has a 0% weight to the Utilities sector. This sector is carved out to form a separate, complementary index called the [Dow Jones Utility Average](#). In addition, the Transportation GICS industry group is carved out to form the [Dow Jones Transportation Average](#). The full group of Dow Jones Average indices are outlined as follows.

- Dow Jones Composite Average (65 constituents)
 - = Dow Jones Industrial Average (30 constituents)
 - + Dow Jones Transportation Average (20 constituents)
 - + Dow Jones Utility Average (15 constituents)

We can also see that the DJIA had a 0% weight to the Real Estate sector as of April 30, 2021. However, this sector only has a 2.5% weight in the S&P 500, so its absence doesn't have a significant impact on the DJIA's representation of the U.S. market.

...and underweight in Industrials, Financials, and Health Care.

Exhibit 9: GICS Sector Weights



The DJIA has no weight in the Utilities sector or the Transportation industry group because they are carved out into other complementary indices.

Source: S&P Dow Jones Indices LLC. Data as of April 30, 2021. Chart is provided for illustrative purposes.

Sector Attribution

We can analyze Exhibit 10 to tie together the GICS sector weights and recent performance of each index. The table shows the results of a three-year Brinson performance attribution ending on April 30, 2021, and is sorted by the total effect contributed by each GICS sector. The attribution uses the S&P 500 as the portfolio and the DJIA as the benchmark. The total three-year annualized outperformance of the S&P 500 relative to the DJIA of 4.11% can be found in the bottom right cell.

To see how GICS sector weights can affect performance, we review the three-year allocation and selection effects.

To understand these results, we review the case of the Industrials sector. In total, Industrials accounted for 2.00/4.11=49% of the outperformance of the S&P 500 relative to the DJIA. On average over the past three years, the S&P 500 was underweight Industrials by 10.01% during a time when Industrials underperformed the broad market. The allocation effect indicates that the sector underweight contributed 1.14% to the outperformance of the S&P 500. The selection effect of 0.86% tells us that the S&P 500 also benefited by overweighting the better-performing stocks within the Industrials sector.

We can see that Industrials accounted for 49% of the S&P 500 outperformance relative to the DJIA.

The Information Technology sector was the second-highest source of outperformance by the S&P 500. In this case, most of the outperformance was driven by the selection effect of stocks within the sector.

We can also see that the top two detractors of relative performance were the Financials and Energy sectors. Energy is an interesting example, as the Allocation Effect was slightly positive, at 0.10%, but the selection effect more than offset it, at -0.26%.

Finally, at the bottom of the table, we can see that the total allocation effect and selection effect each contributed about the same amount to the outperformance of the S&P 500.

During Industrials' underperformance, the S&P 500 underweighted Industrials by 10.01%, giving it an allocation effect of 1.14%.

GICS SECTOR	AVERAGE SECTOR WEIGHT (%)			EFFECT (%)		
	S&P 500	DJIA	DIFFERENCE	ALLOCATION	SELECTION	TOTAL
Industrials	9.00	19.01	-10.01	1.14	0.86	2.00
Information Technology	24.39	20.79	3.60	0.24	0.81	1.05
Communication Services	9.13	4.19	4.93	0.22	0.47	0.68
Health Care	14.29	14.40	-0.11	0.27	0.23	0.49
Materials	2.62	1.29	1.33	0.09	0.10	0.19
Real Estate	2.85	-	2.85	0.05	-	0.05
Consumer Discretionary	11.02	13.44	-2.42	-0.12	0.10	-0.02
Utilities	3.13	-	3.13	-0.02	-	-0.02
Consumer Staples	7.07	8.27	-1.19	0.07	-0.13	-0.06
Financials	12.25	14.44	-2.19	0.00	-0.15	-0.14
Energy	4.22	4.17	0.05	0.10	-0.26	-0.15
Unassigned	0.01	-	0.01	0.04	-	0.04
Total	100	100	0	2.08	2.03	4.11

The selection effect of 0.86% tells us that the S&P 500 also benefited from overweighting the better-performing stocks within the sector.

Source: S&P Dow Jones Indices LLC. Data from April 29, 2018, to April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Factor Exposures

The S&P 500 had more exposure to the earnings and sales growth, liquidity, and volatility factors...

Exhibit 11 shows the average Axioma risk model factor exposures of the S&P 500 and the DJIA over the past three years. On a relative basis, we can see that the S&P 500 had more exposure to the earnings and sales growth, liquidity, and volatility factors. The top underweights of the S&P 500 relative to the DJIA were the size, dividend yield, and leverage ratio factors.

The higher exposure to size and dividend yield of the DJIA matches intuition, given that the DJIA is composed of large blue-chip companies. These results have some commonality to the fundamentals shown in Exhibit 6, but it's important to remember that Exhibit 6 is a snapshot in time whereas Exhibit 11 shows three-year average exposures.

...while the DJIA had more exposure to size, dividend yield, and leverage ratio factors.

Exhibit 11: Three-Year Average Factor Exposure

AXIOMA RISK MODEL FACTOR	FACTOR EXPOSURE		
	S&P 500	DJIA	DIFFERENCE
Earnings and Sales Growth	-0.04	-0.33	0.29
Liquidity	-0.08	-0.25	0.17
Volatility	-0.09	-0.19	0.10
Medium-Term Momentum	-0.03	-0.11	0.08
Book-to-Price	-0.02	-0.09	0.07
Exchange Rate Sensitivity	0.01	-0.03	0.04
MidCap	0.04	0.00	0.04
Profitability	0.05	0.06	-0.01
Market Sensitivity	-0.04	-0.02	-0.02
Earnings Yield	0.04	0.09	-0.05
Size	0.14	0.27	-0.13
Dividend Yield	0.06	0.26	-0.20
Leverage Ratio	0.00	0.26	-0.26

Source: S&P Dow Jones Indices LLC. Risk model: Axioma US Fundamental Equity Risk Model, Medium Horizon (MH4). Data from April 29, 2018, to April 30, 2021. Index performance based on total return in USD. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Because the DJIA is composed of large, blue-chip companies, its high exposure to size and dividend yield matches intuition.

CONCLUSION

Looking under the hood of these two iconic indices with long and proud histories, we can see past their similar performances...

The S&P 500 and the Dow Jones Industrial Average are both iconic indices with long and proud histories. The S&P 500 serves as the benchmark for many of the world's most successful ETFs, mutual funds, and other investment vehicles. Investors value the DJIA for its simplicity, extremely long live history, and liquid trading ecosystem.

The S&P 500 and the DJIA represent U.S. large-cap companies, and their long-term risk and return profiles are similar. That may lead market participants to think that the two indices are alike in their construction and characteristics. But once we look under the hood, we can see a range of differences including the number of constituents, weighting scheme, and sector exposures.

...and find a range of differences, allowing market participants to make more informed decisions.

Once investors understand these differences, they can make more informed decisions about using these iconic indices as benchmarks or the basis for passive investment.

APPENDIX: WHAT ABOUT THE REST OF THE U.S. MARKET?

S&P DJI offers a series of equity indices that covers the full range of the U.S. market. The [S&P Composite 1500®](#) includes large-, mid-, and small-cap companies and uses a modular, non-overlapping approach.

$$\text{S\&P Composite 1500} = \text{S\&P 500} + \text{S\&P MidCap 400} + \text{S\&P SmallCap 600}$$

This modular approach allows S&P DJI to construct composite indices to represent particular slices of the market.

$$\text{Large} + \text{Mid Cap} = \text{S\&P 900} = \text{S\&P 500} + \text{S\&P MidCap 400}$$

$$\text{Mid} + \text{Small Cap} = \text{S\&P 1000} = \text{S\&P MidCap 400} + \text{S\&P SmallCap 600}$$

The [S&P Total Market Index \(TMI\)](#) is S&P DJI's most comprehensive U.S. equity index and includes large-, mid-, small-, and micro-cap companies. As of April 30, 2021, the S&P TMI had 3,884 constituents. The S&P TMI also serves as the starting universe for the S&P Composite 1500 and the S&P 500. The S&P TMI can be broken down into two components as follows.

$$\text{S\&P Total Market Index} = \text{S\&P 500} + \text{S\&P Completion Index}$$

GENERAL DISCLAIMER

© 2021 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJ, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Closing prices for S&P Dow Jones Indices' US benchmark indices are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchange. Closing prices are received by S&P Dow Jones Indices from one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a trademark of S&P and MSCI. Neither MSCI, S&P nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.