



## Fourth Quarter 2020

### The Problem with the S&P 500

The S&P 500 Index had a great summer in 2020. Business news reports were full of rallies, record up days, and economic recovery.

#### The Summer Rally

*(S&P 500 Monthly Returns)*

April: up 12.7%

May: up 4.5%

June: up 1.8%

July: up 5.5%

August: up 6.6%

But before you use the S&P 500 as an indicator of the health of the economy or even the performance of the equity markets as a whole, it helps to understand what, exactly, the S&P 500 is.

The S&P 500 Index is a weighted measurement of the performance of the 500 largest publicly traded U.S. companies. Although 500 stocks are included in the index, just five stocks (1% of the companies that make up the S&P 500) currently account for more than 25% of the index. Those stocks are Microsoft, Apple, Amazon, Alphabet (Google), and Facebook, all found in the Information Technology sector. Covid-19 has been very good for the sector as Americans turned to technology for entertainment and business applications. With information technology stocks making up 27% of the S&P 500 market capitalization, a good quarter for the sector generally means a good quarter for the S&P 500.

The reason that one sector can essentially drive the performance of the whole index lies in the structure of the index. The S&P 500 index is a market capitalization weighted index. Market cap is calculated by multiplying the number of publicly traded shares outstanding by the market price of one share of the company's stock. As a result, not all companies' performance, or value, are reflected equally in the final sum. Each of the five stocks listed above has a greater influence on the S&P 500's returns than any other stock because of its market capitalization.

At the same time that their market capitalization drove changes in the value of the index, the big five were not the best performing stocks in the S&P 500 index. From the start of lockdowns on March 10th through August 2020, Abiomed Inc., Advanced Micro Devices Inc., Cadence Design Systems Inc., Chipotle Mexican Grill Inc., Halliburton Co., Nvidia Corp., PayPal Holdings Inc., Tractor Supply Co., United Parcel Service Inc. Class B and West Pharmaceutical Services Inc. were at the top of the performance list. Energy and financial companies were among the worst performers.

The concentration of the S&P 500's value in just five companies offsets the value of diversification in the index and does not reflect the U.S. economy as a whole.

There are drawbacks to being big as well. The sheer size of the big five companies makes it difficult to achieve substantial revenue growth. A 25% increase in revenue for a company with \$1.5 million in annual sales is just \$375,000. With revenue of \$273 billion for the year ending June 30, 2020, Apple would need to increase sales by \$68 billion to achieve a 25% growth rate. Its actual sales growth for the

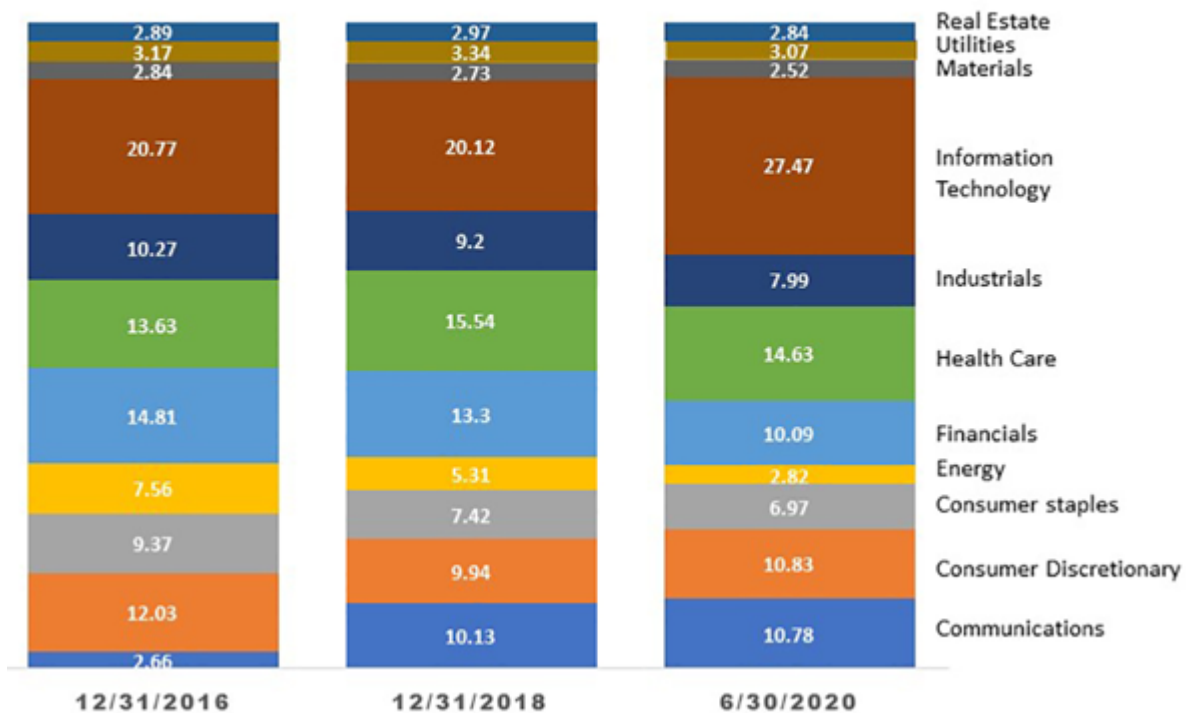
period was 5.7%.

The S&P 500 is more vulnerable to market volatility because it is the most popular investment index. While you cannot invest directly in the S&P 500, you can invest in S&P 500 index funds and funds benchmarked to the S&P 500. In fact, there is more \$11.2 trillion in U.S. dollars alone indexed or benchmarked to the S&P 500, with indexed assets comprising approximately \$4.6 trillion of this total. Demand for S&P 500 index funds creates demand for the stocks included in the index and can drive higher share prices.

There is also a significant concentration in the ownership of S&P 500 companies. 85% of the assets invested in S&P 500 index funds are managed by just five funds or ETFs: Vanguard 500 Index Admiral, Vanguard Institutional Index I, SPDR S&P 500 ETF, Fidelity Spartan 500 Index, and iShares Core S&P 500.

With much of the S&P 500's performance contributed by just five companies, all in the same sector, and five funds holding the bulk of investments in the S&P 500, a market downturn can lead to a decline in the index, unrelated to the companies' performance. The reason goes back to supply and demand. Many investors retreat to safety in a market decline, selling their positions and moving to cash or lower risk investments. With the growth of index investing and particularly investing in the S&P 500, that means a lot of selling pressure on the stock of the S&P 500 companies, particularly Microsoft, Apple, Amazon, Alphabet (Google), and Facebook, to meet liquidation requirements and keep the index funds aligned with the S&P 500. The same happens in reverse in a rising market as investors pile into S&P 500 index funds.

## S&P 500 SECTOR WEIGHTS 12/31/2016 TO 6/30/2020



In just four years, the Information Technology sector has grown by 32% to represent 27.47% of the S&P 500 Index's value, while the Energy, Financials, Industrials, Consumer Staples and Consumer Discretionary sectors have led declines in sector weight.

***The information above is designed to help you better understand the S&P 500 Index and some factors that influence its value. It is not intended as investment advice. All investments have the potential for loss as well as gain.***

***Investors should consider the investment objectives, risks, charges and expenses of the investment company carefully before investing. The prospectus and, if available, the summary***

*prospectus contain this and other important information about the investment company.*

*You can obtain a prospectus and summary prospectus from your financial representative. Read carefully before investing. Fund value will fluctuate with market conditions and it may not achieve its investment objective. All performance referenced is historical and is no guarantee of future results.*

*Because of their narrow focus, sector investing will be subject to greater volatility than investing more broadly across many sectors and companies.*

<https://www.cnbc.com/2020/08/28/sp-500-heads-for-best-august-since-1986-as-stunning-summer-rally-continues.html>

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