

## Second-Half Outlook

The halfway mark of the 2021 calendar year is nearly upon us. But to understand where we've been – and likely to go – one should start the examination a bit further back. The last decline of 5% or more for the S&P 500 ended on 9/23/20. Through the most recent all-time high on June 14, all component sizes, styles, and sectors in the S&P Composite 1500 rose in price, led by small- and mid-caps, along with value stocks and the energy, financials, and materials sectors. Laggards included the defensive groups, including consumer staples, health care, and utilities. Finally, all but one of the 147 sub-industries in the S&P 1500 were higher, with coal, department stores, and oil & gas drilling taking the top spots, while household products (the sole decliner), hypermarkets, and integrated telecom ended up on the bottom.

S&P 1500 Sector/Sub-Industry Price Returns\*

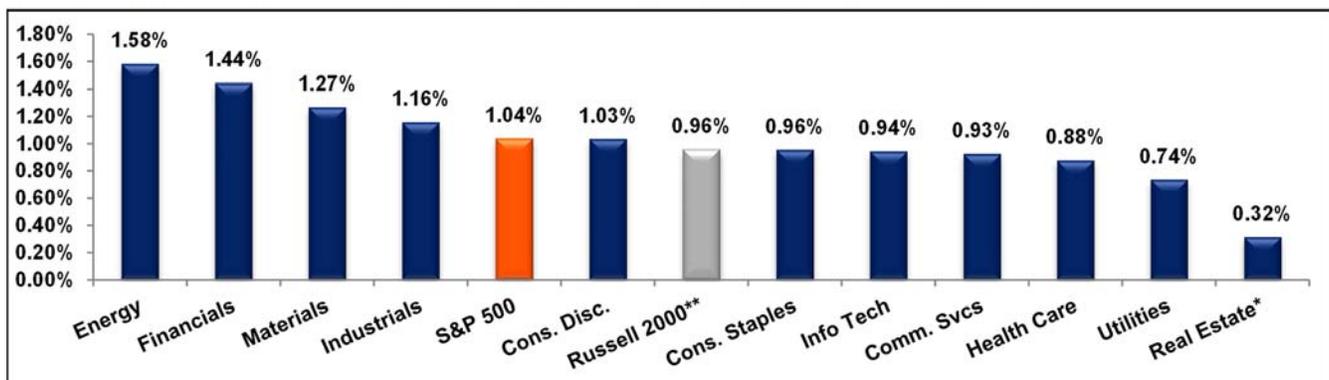
Regions/Sizes/Sectors	% Chg.	Best S&P 1500 Sub-Industries	% Chg.
Energy	83.0	Coal & Consumable Fuels	275.1
<b>S&amp;P SmallCap 600</b>	<b>68.6</b>	Oil & Gas Drilling	183.0
Financials	60.6	Department Stores	179.9
<b>S&amp;P MidCap 400</b>	<b>52.1</b>	Copper	167.3
Materials	41.9	Diversified Real Estate Activities	137.8
Communication Services	39.0	Steel	124.0
Industrials	38.6	Tires & Rubber	118.8
Real Estate	38.6	Security & Alarm Services	113.7
<b>S&amp;P 500 Value</b>	<b>36.3</b>	<b>Worst S&amp;P 1500 Sub-Industries</b>	<b>% Chg.</b>
<b>S&amp;P 500</b>	<b>31.5</b>	Metal & Glass Containers	14.0
Info. Technology	30.5	Multi Utilities	13.2
<b>Nasdaq-100</b>	<b>30.4</b>	Biotechnology	12.3
<b>S&amp;P 500 Growth</b>	<b>27.6</b>	Footwear	10.5
Consumer Discretionary	23.7	Internet Services & Infrastructure	8.7
Health Care	23.2	HyperMarkets & Super Centers	8.5
Utilities	16.6	Integrated Telecom. Services	0.4
Consumer Staples	14.5	Household Products	(1.2)
<b>Positive Sectors:</b>	<b>100%</b>	<b>Positive Sub-Industries:</b>	<b>99%</b>

Source: CFRA, S&P DJ Indices. \*9/23/20-6/14/21.

Investment influences have been many this year, but the dominant one has been the implication of rising inflation as a result of the decline in the number of Covid-19 cases, the economic reopening, additional fiscal stimulus, and the ongoing zero interest rate policy embraced by the Federal Reserve. As a result, it is not surprising to see in the table above that the strongest sector returns have come from those sectors that traditionally performed well during months in which the 10-year vs. one-year yield curve steepened since 1970, as shown below.

Representative companies from this list of S&P 1500 sub-industries with the highest returns from 9/23/20 through 6/14/21 are: CNX Resources (CNX 13 \*\*\*\*), Patterson-UTI Energy (PTEN 10 \*\*\*\*), Macy's (M 18 \*\*), Freeport-McMoRan (FCX 35 \*\*\*\*), St. Joe Co. (JOE 43 NR), Cleveland-Cliffs (CLF 20 \*\*\*\*), Goodyear Tire & Rubber (GT 17 \*\*), and Brinks (BCO 75 NR).

Average Monthly S&P 500 Sector Total Returns During Months of Steepening 10-Yr. Minus 1-Yr. Yield Curve



Source: CFRA, S&P Global, \*NAREIT, Federal Reserve. Past performance is no guarantee of future results. Data 12/31/1970-6/18/2021. \*\*Since 12/31/1978.

## Historical Precedent

Year-to-date through June 18, 2021, the S&P 500 gained 10.9%, the 21st strongest first half since WWII. Despite nervousness over CPI and Covid-19, this YTD return was the third strongest of first-year presidents since Harry S Truman, behind Bush-41's 14.5% surge and JFK's jump of 11.2%.

Where will the market likely go from here? History says, but does not guarantee, that the second half should be good, but not as good as the first half. Indeed, following the top-20 first half returns since 1945, the second half gained an average of about 50% of the first half. Interesting, because CFRA's late May update to its 12-month target price for the S&P 500 (now 4620) indicated a 4444 year-end 2021 price, which is 6.6% higher than the recent close.

Other indicators also point to a favorable end to the trading year. First, the S&P 500 recorded 10 new all-time highs YTD through the end of February. Historically, that was a sign of more strength ahead, not an early expending of valuable energy. Indeed, following the 11 other years since WWII in which so many new highs were set so early in the year, the S&P 500 rose an average 15.7% during the full calendar year and recorded a frequency of advance (FoA) of 91%, both of which surpassed the average of 9.0% and 74%, respectively, for all years since 1945. In the second half of top new-high years, the market gained an average 4.9% and rose in price 73% of the time, outpacing the average for all years. In Q4, the 500 gained an average 3.3%, slightly below the long-term average, but recorded a higher FoA. Second, the S&P 500 also did not trade below the December 2020 low during the first quarter of 2021. Traditionally, this has been a favorable indicator for the full year, not only in average price gain but also in FoA. The second half and final quarter of such years also delivered equal or slightly higher average returns than for all years. Third, the S&P 500 posted the 21<sup>st</sup> highest first-half return (through June 18) since 1945. Should this ranking continue or even improve by the end of the month, history indicates above-average price gains and FoAs in the second half and final quarter. Finally, while the first year of first term presidents delivered below-average full-year returns, the second half and final quarter were above average.

## Economic Outlook

So what will help propel share prices during the second half of this year? Even though the easy comparisons with the first-half Covid-induced shutdown in 2020 have already been experienced, Action Economics (AE) projects economic growth to continue above trend for the remainder of this year and into 2022. GDP growth should be influenced by strength in personal consumption and capital spending, more than offsetting the pullback from government spending. The unemployment rate should continue to revert toward the pre-pandemic average of 3.7% for all of 2019, while core inflation settles down from the May reading of 3.8% to 3.3% later this

## S&P 500 Price Returns During First Years of New Presidencies

First-Term Presidents	Year	S&P 500 Price Chgs.			
		1st Half	Rank	2nd Half	Rank
Truman	1949	(6.8)	11	18.4	2
Eisenhower	1953	(9.1)	13	2.8	8
Kennedy	1961	11.2	2	10.7	4
Johnson	1965	(0.7)	7	9.9	6
Nixon	1969	(5.9)	9	(5.8)	10
Carter	1977	(6.5)	10	(5.4)	9
Reagan	1981	(3.4)	8	(6.6)	12
Bush-41	1989	14.5	1	11.1	3
Clinton	1993	3.4	5	3.5	7
Bush-43	2001	(7.3)	12	(6.2)	11
Obama	2009	1.8	6	21.3	1
Trump	2017	8.2	4	10.3	5
Biden	2021	10.9	3	??	??
<b>Average</b>		<b>0.8</b>		<b>5.3</b>	
<b>Democrats</b>	<b>7</b>	<b>1.9</b>		<b>9.7</b>	
<b>Republicans</b>	<b>6</b>	<b>(0.5)</b>		<b>0.9</b>	

Source: S&P Capital IQ. Past performance is no guarantee of future results. Data as of 6/18/21.

## Stock Market Milestone Returns

Market Milestone	Full Year		2nd Half		4th Qtr.	
	% Chg.	FoA	% Chg.	FoA	% Chg.	FoA
10+ New Highs Through Feb. 28	15.7	91%	4.9	73%	3.3	82%
Q1 Low Not < the Prior Dec.'s Low	18.3	95%	4.6	70%	4.0	79%
Top 20 First Half Since 1945	25.9	100%	8.0	80%	5.9	85%
First Year, First Term Presidents	6.1	62%	5.3	67%	4.3	83%
<b>Average of Milestones</b>	<b>16.5</b>	<b>87%</b>	<b>5.7</b>	<b>72%</b>	<b>4.4</b>	<b>82%</b>
<b>All Years</b>	<b>9.0</b>	<b>74%</b>	<b>4.5</b>	<b>70%</b>	<b>3.9</b>	<b>79%</b>

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data: 12/31/44-6/18/21. FoA: Frequency of Advance.

## U.S. Economic Projections

Economic Indicators	1st Half 2021		2nd Half 2021		Year 2022E
	Q1A	Q2E	Q3E	Q4E	
U.S. GDP	6.4%	8.2%	6.7%	4.6%	4.5%
>Personal Consumption	11.3%	10.5%	3.1%	3.3%	3.5%
>Fixed Investment	11.3%	7.7%	8.4%	8.5%	5.9%
>Gov't. Spending	5.8%	-0.8%	-1.1%	-0.8%	-0.5%
Unemployment	6.2%	5.8%	5.2%	4.8%	3.9%
Y/Y Core CPI	1.3%	3.8%	3.2%	3.3%	2.5%
Fed Funds	0.13%	0.13%	0.13%	0.13%	0.13%
10-Year Yield	1.74%	1.55%	1.70%	1.85%	1.90%
FRB Major Dollar Index	103.4	102.6	101.6	101.3	100.9
WTI Oil	\$57.84	\$65.97	\$72.28	\$71.20	\$78.38

Source: Action Economics. Data as of 6/18/21.

year and averages 2.5% for all of next year. The 10-year yield will likely creep higher as the year progresses but remain below 2.0% both this year and next, on average. AE also sees the value of the U.S. dollar weakening through this year and next versus a basket of foreign currencies, while oil prices continue to firm as the global economic recovery extends into 2022 and beyond. AE projects global Real GDP to expand by 5.4% in 2021 and 4.6% in 2022.

What the Fed does in the period ahead will likely be the key to market movements during the remainder of this year and into 2022. Following the June FOMC meeting, Fed Chair Powell acknowledged that the FOMC sees upside risks to inflation and could alter its monetary stance, as well as begin tapering its asset purchases, sooner rather than later. However, the FOMC left the 0%-0.25% policy band intact along with the \$120bn in monthly asset purchases. Of concern to investors was that the “dot plot” median showed two quarter-point hikes by the end of 2023, and seven members now expect a hike as soon as 2022, up from four in March. What’s more, Fed President James Bullard recently said on financial TV that a rate hike could come as early as 2022. The FOMC has another meeting on July 27-28, which also might be too soon for the Fed to announce tapering, though the August 26-28 Jackson Hole meeting offers a possible time frame for the Fed to outline QE plans if data shows a more clear picture.

### Earnings Expectations

As the economy continues to grow, so too should corporate profits. Indeed, S&P 500 EPS are projected to grow 32.3% in 2021, according to S&P Capital IQ consensus earnings estimates, though much of that will be the result of very easy comparisons in the first half. Second-quarter results, which will start in earnest during the second week of July, are seen surging nearly 60%. Second-half growth will also be strong, but average less than one-third of the full-year expected advance. The S&P 500 is seen growing profits by 11.8% in 2022, but these forecasts are dwarfed by projected improvements for mid- and small-cap indices, which are seen posting 2021 and 2022 growth of 62.8% and 8.3%, respectively, for the S&P MidCap 400 and 98.6% and 15.7%, respectively, for the S&P SmallCap 600. What’s more, this earnings expansion will not be just in the U.S. Developed international and emerging markets are forecast to record EPS growth of 54.0% and 44.7% in 2021, respectively, followed up with 10%+ gains in 2022.

### EPS Growth Projections

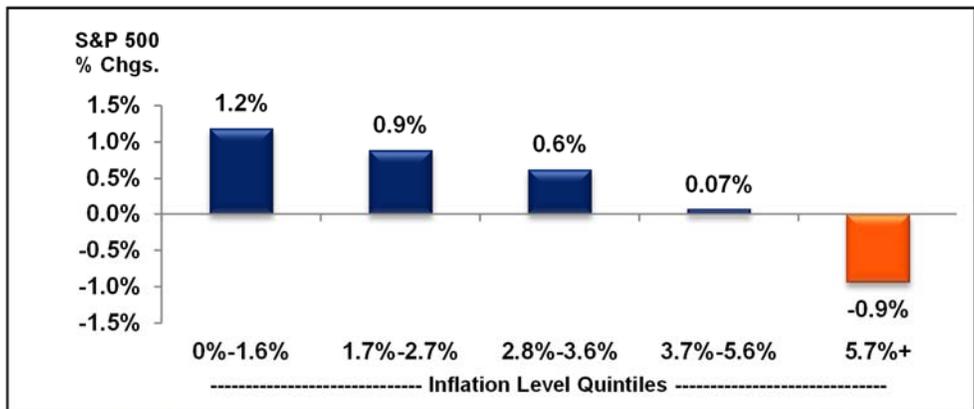
Operating EPS Y/Y % chgs. S&P 500 Sector	2021				Year 2022E	
	Q1A	Q2E	Q3E	Q4E		
Communication Services	54.2	37.3	17.0	6.0	26.1	11.8
Consumer Discretionary	161.4	132.4	(8.0)	23.0	45.3	35.5
Consumer Staples	11.2	8.2	5.0	5.6	7.4	9.3
Energy	16.4	NM	NM	NM	NM	23.2
Financials	87.1	112.3	10.4	(1.3)	39.8	0.6
Health Care	25.3	13.2	9.9	11.9	14.9	7.9
Industrials	(2.9)	327.9	74.3	133.1	87.2	36.8
Information Technology	42.2	29.7	20.7	9.9	23.9	11.1
Materials	62.5	113.2	72.7	17.0	61.2	(3.4)
Real Estate	(18.5)	21.5	54.0	(13.6)	3.6	6.1
Utilities	0.8	1.8	2.2	9.2	3.1	6.4
<b>S&amp;P 500</b>	<b>42.2</b>	<b>59.2</b>	<b>20.5</b>	<b>17.2</b>	<b>32.3</b>	<b>11.8</b>
S&P MidCap 400	90.8	147.9	43.6	22.1	62.8	8.3
S&P SmallCap 600	1080.7	NM	25.6	16.3	98.6	15.7
S&P Developed Intl. BMI					54.0	10.1
S&P Emerging BMI					44.7	10.0

Source: S&P Global. Data as of 6/18/21.

### Inflation and the Market

Of primary concern to investors today is just how high inflation will go and for how long. More important, how will rising inflation affect share prices? Again using history as a guide, the S&P 500 has traditionally posted positive monthly returns even as the Y/Y readings for Headline CPI have risen, up until around 4.0% when the

Average S&P 500 Monthly Price % Change During Periods of Rising Y/Y Headline CPI



Source: CFRA, S&P DJ Indices, BLS. Past performance is no guarantee of future results. Data: 1949-2021.

returns went flat and then negative. The table on the following page shows the Y/Y change in CPI at the beginning and end of each decade since 1950, along with its 10-year average. Not surprisingly, the S&P 500's CAGR for most decades was dramatically influenced by the trajectory of inflation. For instance, even though the average rise in headline CPI was above average in the 1980s, the S&P 500's CAGR for that decade was nearly 500 basis points above the 70+ year average, due to the downward trend in inflation. Conversely, the 1970s saw the weakest S&P 500 CAGR, due to the sharply upward bias for inflation in the decade prior to the Fed's decision to choke off inflation by sharply hiking short-term rates.

Y/Y % Changes in Headline CPI by Decade

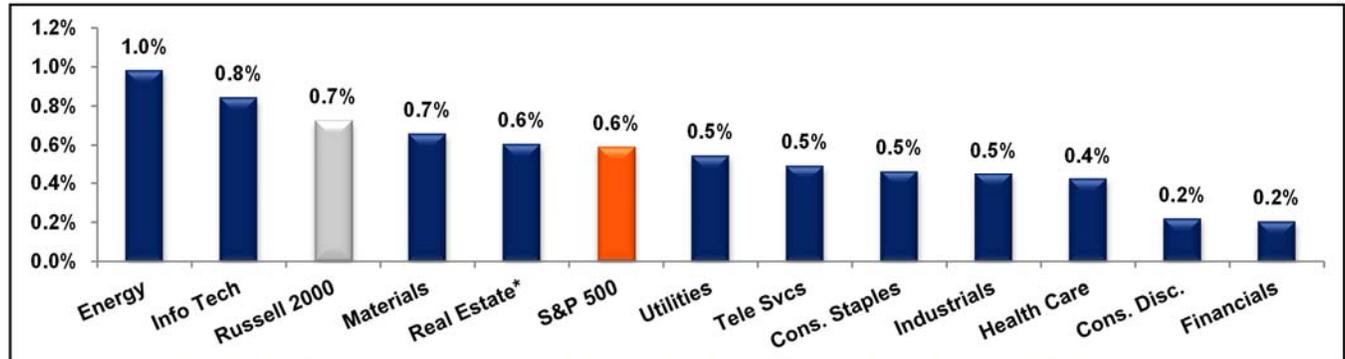
Decade	Y/Y % Chg. In Headline CPI			S&P 500
	Start	Average	End	CAGR %
1950s	8.0	2.1	1.4	13.5
1960s	1.6	2.8	5.6	4.4
1970s	5.3	7.9	12.4	1.6
1980s	11.8	4.8	6.3	12.6
1990s	5.6	2.8	3.4	15.3
2000s	3.7	2.4	(2.0)	(2.7)
2010s	1.7	1.7	1.3	11.2
Since 12/31/49		3.5		7.8

Source: CFRA, S&P Global, BLS.

Past performance is no guarantee of future results.

CFRA sees the S&P 500's annual return coming down to more normal levels as this bull market continues in its second full year and inflation and interest rates creep higher. Indeed, higher prices have traditionally been recorded during periods of rising inflation. Since 1970, as seen in the chart below, the S&P 500 recorded an average 0.6% total return during those months in which Y/Y Headline CPI increased, led by energy, materials, and tech stocks, along with small-cap issues, while consumer discretionary, financials, and health care lagged.

Average Monthly S&P 500 Sector Total Returns During Months of Rising Y/Y Headline CPI



Source: CFRA, NAREIT, BLS. Past performance is no guarantee of future results. Data 12/31/1969-12/31/2020. \*Since 12/31/1971.

## 1970s Revisited?

Some investors wonder if we are headed for a repeat of the 1970s hyper-inflation, due to the over-stimulation of the U.S. economy through fiscal spending and the Fed's zero-rate policy. Though CFRA does not see inflation staying lofty for long, the table below shows sector returns when the 10-year yield was on the rise during the "Disco Decade." Leadership was seen in the energy, materials, and real estate sectors, while weakness was evident in consumer staples, financials, and health care. Also, the table shows the S&P 500 sub-industries with the highest average monthly returns along with current constituents that have the highest CFRA STARS.

1970s: Average Monthly Price Changes During Months of Rising 10-Year Yield

Equal-Weighted Sectors	% Chg.	Sub-Industries	% Chg.	Favored Stocks (Ticker, Price, CFRA STARS)
Energy	1.6	Gold & Precious Metals	3.9	Newmont Corp. (NEM 63 *****)
Materials	1.4	Aluminum	2.0	Arconic Corp. (ARNC 34 NR)
Real Estate	1.2	Oil & Gas (Drilling & Equip.)	1.8	Patterson-UTI (PTEN 10 ****)
Communication Services	0.9	Diversified Metals & Mining	1.7	BHP Group (BBL 56 ****)
Information Technology	0.7	Homebuilding	1.5	D.R. Horton (DHI 90 *****)
Industrials	0.6	Aerospace/Defense	1.4	Spirit AeroSystems (SPR 49 *****)
Consumer Discretionary	0.3	Publishing	1.4	New York Times (NYT 41 ****)
Utilities	0.1	Railroads	1.3	CSX Corp. (CSX 95 ****)
Health Care	0.1	Trucking	1.3	Knight-Swift Transportation (KNX 45 *****)
Consumer Staples	0.0	Integrated Oil & Gas	1.3	Chevron (CVX 103 ***)
Financials	(0.8)	Industrial Machinery	1.2	Stanley, Black & Decker (SWK 195 *****)
<b>S&amp;P 500</b>	<b>(0.3)</b>	Electr. Equip. & Instruments	1.2	Cognex Corp. (CGNX 78 ***)

Source: CFRA, S&P Global. Past performance is no guarantee of future results. Data: 12/31/69-12/31/79. Prices as of 6/18/21. NR=Not Ranked.

## Current Sector Strength

As we head into the second half of 2021, inflation trends do remain central to investors' thinking. Just as a 200-day moving average serves as long-term price support for individual stocks and the market as a whole, it also offers guidance for sectors in large-, mid-, and small-cap U.S.

benchmarks, along with the S&P Euro 350 and Asia-Pacific Indices. Indeed, the strategy of separating the 11 sectors at the end of each month into three groups representing the top 4, middle 3, and bottom 4 based on trailing nine-month returns, and then

rebalancing at the end of each successive month, delivered market-beating three-year CAGRs for all five global benchmarks. As a result, this approach encouraged investors to "let your winners ride" and "cut your losers short." What's more, this strategy offered the highest alpha for the international benchmarks.

As seen in the table above, history continues to at least rhyme, if not repeat, and strength is seen in those groups that have historically done well during periods of a steepening yield curve. Energy and financials, and to a lesser extent consumer discretionary and materials, head into the second half with the greatest global strength, while consumer staples, health care, and utilities show the weakest. The table below identifies one stock by sector and benchmark with the highest CFRA STARS (tie goes to the stock with the highest target-price differential).

### Favored Stocks by Region & Sector, Based on STARS & Target-Price Differential

Sector	Favored Stocks by Region & Sector				
	S&P 500 (\$)	MC 400 (\$)	SC 600 (\$)	Euro 350	AsiaPac
Comm. Services	NWSA 26 *****	TGNA 18 ****	AMCX 62 *****	ORA FP €10 *****	762 HK HKD4 *****
Cons. Discretionary	MHK 184 *****	DAN 24 *****	MTH 95 *****	OCDO LN €19 ****	3690 HK HKD301 ****
Cons. Staples	SYU 76 ****	SAM 970 ****	FIZZ 48 ***	BATS LN £28 *****	322 HK HKD15 ****
Energy	DVN 28 ****	TRGP 45 *****	REGI 68 *****	FP FP €41 *****	386 HK HKD4 ****
Financials	ALL 127 *****	SBNY 244 *****	WABC 60 ***	CABK SM €3 *****	5 HK HKD47 *****
Health Care	LH 260 *****	NBIX 98 ****	OMI 45 ****	QIA GY €39 ****	1177 HK HKD8 ****
Industrials	PWR 87 *****	KNX 45 *****	SPXC 58 ****	MAERSK B DC kr18,320 *****	1186 HK HKD5 *****
Info. Tech.	PTC 134 *****	LITE 81 *****	SANM 40 ****	ERICB SS kr110 ****	2454 TT TWD985 *****
Materials	BLL 80 *****	CLF 21 *****	CLW 29 *****	HOLN VX Fr57 *****	914 HK HKD41 ****
Real Estate	PLD 123 *****	NNN 48 ****	SVC 14 ***	GFC FP €134 *****	688 HK HKD19 *****
Utilities	NEE 75 ****	MDU 32 ****	SJI 27 ***	EDF FP €12 *****	836 HK HKD9 *****

Source: CFRA's MarketScope Advisor. Data: 6/18/21.

## Summary

So there you have it. We think 2021 has the potential to be a positive but volatile year. The year started strongly, and we think it will post a favorable finale. We see the S&P 500 trading at 4444 by year end, as investors remain encouraged by rising projections for global GDP and corporate profits. The threat of higher inflation and interest rates will remain forward in investors' minds, but we think the Y/Y rise in Headline and Core CPI will begin to moderate as the year progresses and the 10-year yield will average below 2.00%. We also think the gridlock in Washington will lead to little-to-no change in tax rates, and we remind investors that in the 10 times since 1968 that the capital gains tax rate was raised, the S&P 500 gained an average of nearly 11% in that calendar year, falling once, trading water twice, but rising in the remaining seven years, implying that taxes alone don't dictate the direction of the market. We continue to favor the cyclical sectors over the defensive ones and remind investors that since corrections are inevitable, it is typically better to buy than bail.

### Nine-Month Relative Strength Rankings.

Top 4 = "+" Middle 3 = "0" Bottom 4 = "-"

Sector	S&P Global Indices Relative Strength Rankings				
	S&P 500	MC 400	SC 600	Euro 350	AsiaPac
Comm. Services	+	-	0	0	0
Consumer Discretionary	-	+	+	+	0
Consumer Staples	-	-	-	-	-
Energy	+	+	+	+	+
Financials	+	+	0	+	+
Health Care	-	-	0	-	-
Industrials	+	0	-	+	-
Info. Tech.	0	0	+	0	+
Materials	0	+	+	0	+
Real Estate	0	0	-	-	0
Utilities	-	-	-	-	-

### Monthly Rebalancing of Equal Exposure to Top / Bottom Sectors

Three-Year CAGRs	S&P 500	MC 400	SC 600	Euro 350	AsiaPac
<b>Benchmark</b>	<b>15.8%</b>	<b>10.2%</b>	<b>9.4%</b>	<b>5.5%</b>	<b>6.0%</b>
Top 4 Sectors	15.4%	12.3%	11.4%	11.2%	10.5%
Bottom 4 Sectors	10.5%	6.1%	1.0%	2.5%	1.9%

Source: CFRA, S&P Global. Past performance is no guarantee of future results. MC 400: S&P MidCap 400. SC 600: S&P SmallCap 600. Euro 350: S&P Euro 350. AsiaPac: S&P Asia Pacific BMI. Data: 6/17/21.

## Contact CFRA

1 New York Plaza, 34th Floor  
New York, NY 10004  
USA  
P: +1-800-220-0502  
cservices@cfra.com  
[www.cfra.com](http://www.cfra.com)

---

## Glossary

### ★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

### ★★★★☆ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months.

### ★★★☆☆ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months.

### ★★☆☆☆ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months.

### ★☆☆☆☆ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

## CFRA Ranking Definitions:

- Overweight rankings are assigned to approximately the top quartile of the asset class.
- Marketweight rankings are assigned to approximately the second and third quartiles of the asset class.
- Underweight rankings are assigned to approximately the bottom quartile of the asset class.

## Disclosures

Stocks are ranked in accordance with the following ranking methodologies:

### STARS Stock Reports

Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

### Quantitative Stock Reports

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

### STARS Stock Reports and Quantitative Stock Reports

The methodologies used in STARS Stock Reports and Quantitative Stock Reports (collectively, the "Research Reports") reflect different criteria, assumptions and analytical methods and may have differing recommendations. The methodologies and data used to generate the different types of Research Reports are believed by the author and distributor reasonable and appropriate. Generally, CFRA does not generate reports with different ranking methodologies for the same issuer. However, in the event that different methodologies or data are used on the analysis of an issuer, the methodologies may lead to different views or recommendations on the issuer, which may at times result in contradicting assessments of an issuer. CFRA reserves the right to alter, replace or vary models, methodologies, or assumptions from time to time and without notice to clients.

### Analyst Certification

STARS Stock Reports are prepared by the equity research analysts of CFRA and its affiliates and subsidiaries. All of the views expressed in STARS Stock Reports accurately reflect the research analyst's personal views regarding any and all of the subject securities or issuers. Analysts generally update stock reports at least four times each year. No part of analyst, CFRA, or its affiliates or subsidiaries compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in a STARS Stock Report.

## About CFRA Equity Research's Distributors

This Research Report is published and originally distributed by Accounting Research & Analytics, LLC d/b/a CFRA ("CFRA US"), with the following exceptions: In the UK/EU/EEA, it is published and originally distributed by CFRA UK Limited ("CFRA UK"), which is regulated by the Financial Conduct Authority (No. 775151), and in Malaysia by CFRA MY Sdn Bhd (Company No. 683377-A). These parties and their subsidiaries maintain no responsibility for reports redistributed by third parties such as brokers or financial advisors.

## General Disclosure

### Notice to all jurisdictions:

Where Research Reports are made available in a language other than English and in the case of inconsistencies between the English and translated versions of a Research Report, the English version will control and supersede any ambiguities associated with any part or section of a Research Report that has been issued in a foreign language. Neither CFRA nor its affiliates guarantee the accuracy of the translation. The content of this report and the opinions expressed herein are those of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content (including ratings, credit-related analyses and data, 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 by any means, or stored in a database or retrieval system, without the prior written permission of CFRA. The Content shall not be used for any unlawful or unauthorized purposes. CFRA and any third-party providers, as well as their directors, officers, shareholders, employees, or agents do not guarantee the accuracy, completeness, timeliness or availability of the Content.

### Past performance is not necessarily indicative of future results.

This document may contain forward-looking statements or forecasts; such forecasts are not a reliable indicator of future performance. This report is not intended to, and does not, constitute an offer or solicitation to buy and sell securities or engage in any investment activity. This report is for informational purposes only. Recommendations in this report are not made with respect to any particular investor or type of investor. Securities, financial instruments, or strategies mentioned herein may not be suitable for all investors and this material is not intended for any specific investor and does not take into account an investor's particular investment objectives, financial situations or needs. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

CFRA may license certain intellectual property or provide services to, or otherwise have a business relationship with, certain issuers of securities that are the subject of CFRA research reports, including exchange-traded investments whose investment objective is to substantially replicate the returns of a proprietary index of CFRA. In cases where CFRA is paid fees that are tied to the amount of assets invested in a fund or the volume of trading activity in a fund, investment in the fund may result in CFRA receiving compensation in addition to the subscription fees or other compensation for services rendered by CFRA, however, no part of CFRA's compensation for services is tied to any recommendation or rating. Additional information on a subject company may be available upon request.

CFRA's financial data provider is S&P Global Market Intelligence. THIS DOCUMENT CONTAINS COPYRIGHTED AND TRADE SECRET MATERIAL DISTRIBUTED UNDER LICENSE FROM S&P GLOBAL MARKET INTELLIGENCE. FOR RECIPIENT'S INTERNAL USE ONLY.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence. GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by CFRA.

## Other Disclaimers and Notice

Certain information in this report is provided by S&P Global, Inc. and/or its affiliates and subsidiaries (collectively "S&P Global"). Such information is subject to the following disclaimers and notices: "Copyright © 2021, S&P Global Market Intelligence (and its affiliates as applicable). All rights reserved. Nothing contained herein is investment advice and a reference to a particular investment or security, a credit rating or any observation concerning a security or investment provided by S&P Global is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. This may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of S&P Global's information and third party content in any form is prohibited except with the prior written permission of S&P Global or the related third party, as applicable. Neither S&P Global nor its third party providers guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such information or content. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE AND ALL S&P INFORMATION IS PROVIDED ON AN AS-IS BASIS. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR INFORMATION OR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice."

Certain information in this report may be provided by Securities Evaluations, Inc. ("SE"), a wholly owned subsidiary of Intercontinental Exchange. SE is a registered investment adviser with the United States Securities and Exchange Commission (SEC). SE's advisory services include evaluated pricing and model valuation of fixed income securities, derivative valuations and Odd-Lot Pricing that consists of bid- and ask-side evaluated prices for U.S. Municipal and U.S. Corporate Securities (together called valuation services). Such information is subject to the following disclaimers and notices: "No content (including credit-related analyses and data, 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 by any means, or stored in a database or retrieval system, without the prior written permission of SE. The Content shall not be used for any unlawful or unauthorized purposes. SE and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively SE Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. SE Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. SE 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 SE 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 or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. Credit-related and other analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. SE assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. SE's opinions and analyses do not address the suitability of any security. SE does not act as a fiduciary or an investment advisor. While SE has obtained information from sources it believes to be reliable, SE does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Valuations services are opinions and not statements of fact or recommendations to purchase, hold or sell any security or instrument, or to make any investment decisions. The information provided as part of valuations services should not be intended as an offer, promotion or solicitation for the purchase or sale of any security or other financial instrument nor should it be considered investment advice. Valuations services do not address the suitability of any security or instrument, and securities, financial instruments or strategies mentioned by SE may not be suitable for all investors. SE does not provide legal, accounting or tax advice, and clients and potential clients of valuation services should consult with an attorney and/or a tax or accounting professional regarding any specific legal, tax or accounting provision(s) applicable to their particular situations and in the countries and jurisdictions where they do business. SE has redistribution relationships that reflect evaluated pricing, derivative valuation and/or equity pricing services of other unaffiliated firms with which SE has contracted to distribute to its client base.

Pricing and data provided by these third-party firms are the responsibilities of those firms, and not SE, and are produced under those firms' methodologies, policies and procedures. Valuations services provided by SE and products containing valuations services may not be available in all countries or jurisdictions. Copyright © 2021 by Intercontinental Exchange Inc. All rights reserved."

#### **For residents of the European Union/European Economic Area**

Research reports are originally distributed by CFRA UK Limited (company number 08456139 registered in England & Wales with its registered office address at New Derwent House, 69-73 Theobalds Road, London, WC1X 8TA). CFRA UK Limited is regulated by the UK Financial Conduct Authority (No. 775151).

#### **For residents of Malaysia**

Research reports are originally produced and distributed by CFRA MY Sdn Bhd (Company No. 683377-A).

#### **For residents of all other countries**

Research reports are originally distributed Accounting Research & Analytics, LLC d/b/a CFRA.

Copyright © 2021 CFRA. All rights reserved. CFRA and STARS are registered trademarks of CFRA.