



Michael O'Keeffe, CFA

Chief Investment Officer

**Dori Schwartz** 

Portfolio Solutions Specialist

Nik Eftimov, CFA

*Director, Investment Management & Guidance* 

**Brian Moody** 

Investment Strategist

**David Motsonelidze, CFA** 

*Director of Macro Strategy* 

**Sneha Jose** 

Director of Behavioral Finance

**INVESTMENT STRATEGY BRIEF** 

## An Outlook for a Strong Recovery

page 3

## **Pandemic Update**

page 7

### **Macro Environment**

page 13

### Markets

page 29

## **Dynamic Leanings**

page 39

## Finding Our Guidance

page 43

An Outlook for a Strong Recovery

### Previewing our 2022 Outlook

- Robust economic recovery remains intact, another above-trend year for GDP
- A turning point to the next normal pandemic to endemic?
  - Vaccinations and continued medical innovation
- Key considerations (4 P's) Politics, Policy, Prices, Profits
  - U.S. Midterm elections
  - Monetary and fiscal policy
  - Inflation and supply chain bottlenecks
  - Corporate and personal income taxes
- Outlook published first week in January 2022

#### Risks

#### Troublesome coronavirus variants

- Faster-spreading variants of the virus
- Possibly resistant to vaccine
- Impact of the boundary of herd immunity

#### **Market Excess**

- Focused segments of the market are richly valued
- Certain market areas are disconnected from fundamentals

## Higher Growth and Supply Chain/Reopening Frictions

- Higher inflation
- Increasing rates

### **Slower Global Recovery**

Certain countries falling behind vaccination curve

#### **Possible Market Correction**

- Some possibility of a market correction in the second half of 2021
- Pullback as a temporary pause possible even in our <u>Base Case</u>

## Coronavirus/Major Investment Themes

Productive Competition



Fourth
Industrial
Revolution



**Shifting Demographics** 



**Geopolitical Tensions** and **Protectionism** 



Managing Through Economic Recovery



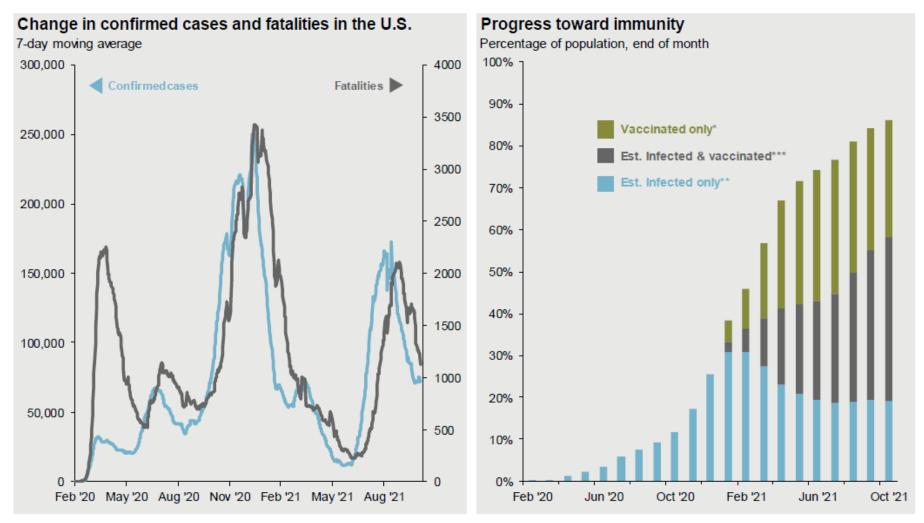
**VIEW REPORT** 

**VIEW VIDEO** 

**Pandemic Update** 







Source: Centers for Disease Control and Prevention, Johns Hopkins CSSE, Our World in Data, J.P. Morgan Asset Management.

\*Share of the total population that has received at least one vaccine dose. \*\*Est. Infected represents the number of people who may have been infected by COVID-19 by using the CDC's estimate that 1 in 4.2 COVID-19 infections were reported. \*\*\*Est. Infected & vaccinated assumes those infected equally likely to be vaccinated as those not infected.

\*Guide to the Markets – U.S. Data are as of November 9, 2021.

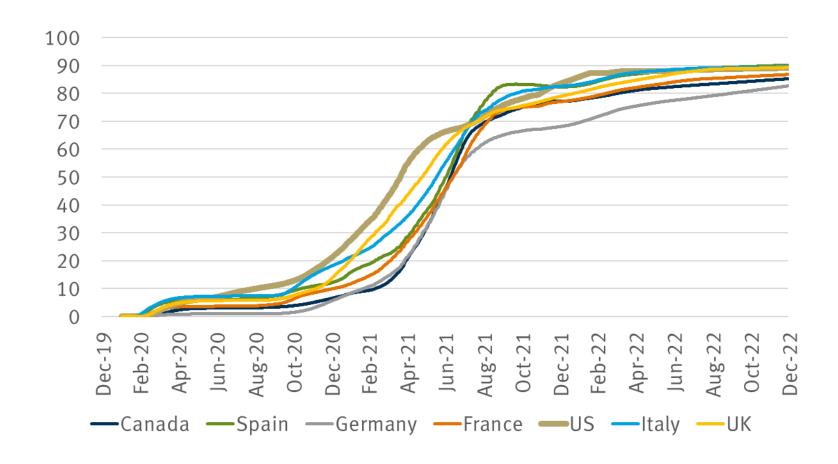


## **Expert Opinions on Future COVID Mutation**

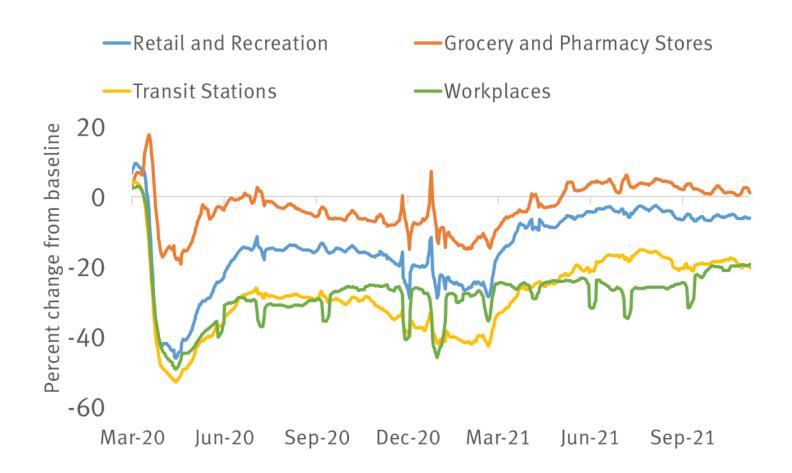
Quote	Bottom Line
"More-fit variants can be expected to emerge over time but we believe that these will not continue to emerge indefinitelyeventually the virus will reach its form of 'maximum transmission.'"  -Roberto Burioni (Vita-Salute San Raffaele University) and Eric Topol (Scripps Research)	-Mutation will eventually stop
"It is unlikely that we will see a variant that completely evades the properties of the highly protective vaccines (especially the cellular immunity). But in biology, you can never say never.'"  -Luciana Borio (Former U.S. FDA)	-Unlikely for mutation to completely evade immunity
"There's a ton of tolerated mutational space that the virus can take while trying to evade immunity. It's quite flexibleI don't think there will ever be a variant that completely escapes our immune systems'".  -Tyler Starr (Fred Hutchinson Cancer Research Institute)	-Unlikely for mutation to completely evade immunity
"At some point, inevitably, we're going to have to make variant vaccines - if vaccines are the way population immunity will be maintained - but we're not at the point where we can confidently predict the evolution of the virus."  -Paul Bieniasz (The Rockefeller University)	-Eventually mutation will cut through vaccine immunity



### **Estimated Percent of Population With Immunity**



Source: Stifel Investment Strategy via Goldman Sachs, as of November 10, 2021; Hospitalization protection measured above.



This data shows how community movement in specific locations has changed relative to the period before the pandemic. Source: Stifel Investment Strategy via Google Mobility Trends, as of November 10, 2021; based on 7-day moving average data. pandemic.

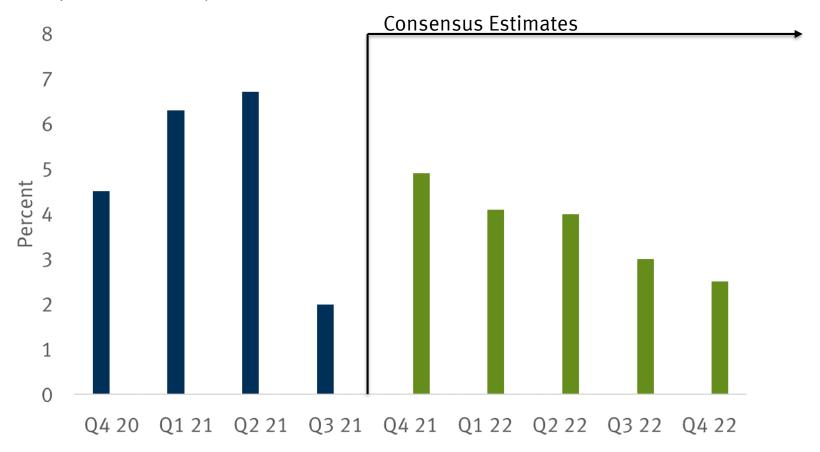


## **Macro Environment**



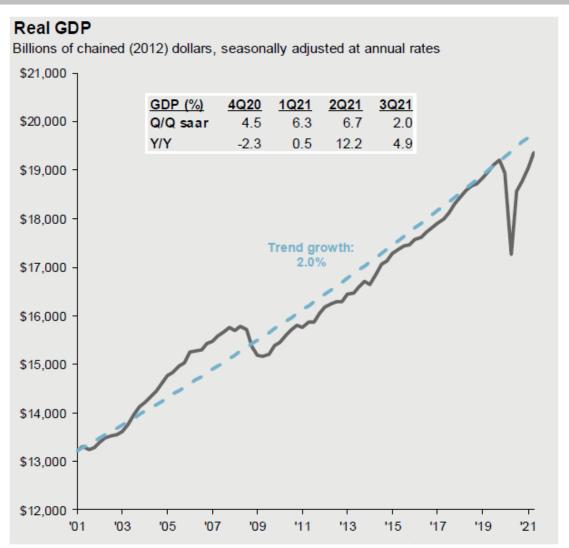
## Market Sight|Lines - July 9, 2021

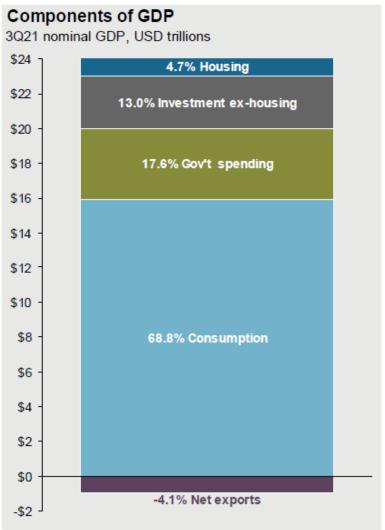
## Real GDP (QoQ% SAAR)



Source: Stifel Investment Strategy data via Bloomberg, as of November 10, 2021; Quarter-over-quarter (QoQ) Seasonally Adjusted Annual Rate (SAAR)







Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Trend growth is measured as the average annual growth rate from business cycle peak 1Q01 to business cycle peak 4Q19.

Guide to the Markets – U.S. Data are as of November 9, 2021.



#### The Consumer

113.8

Conference Board Consumer Confidence (as of Oct 31, 2021) +13.9%

Retail Sales (as of Sep 30, 2021)

7.5%

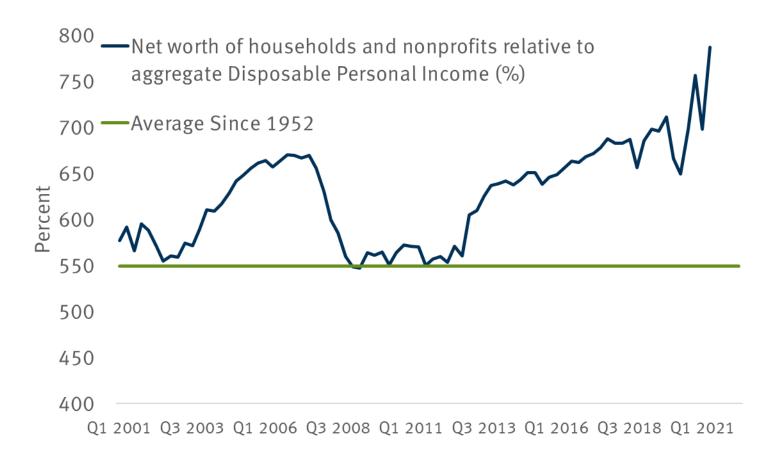
Savings Rate (as of Sep 30, 2021) 4.6%

Unemployment Rate (as of Oct 31, 2021)

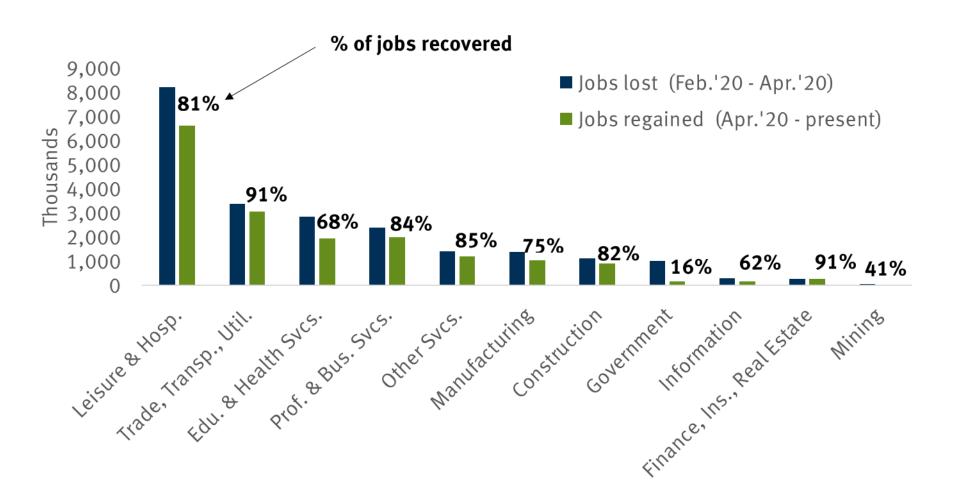
Source: Stifel Investment Strategy data via Bloomberg, as of November 10, 2021; Number of 100 is considered positive for Conference Board Consumer Confidence.



### **Consumer Net Worth**









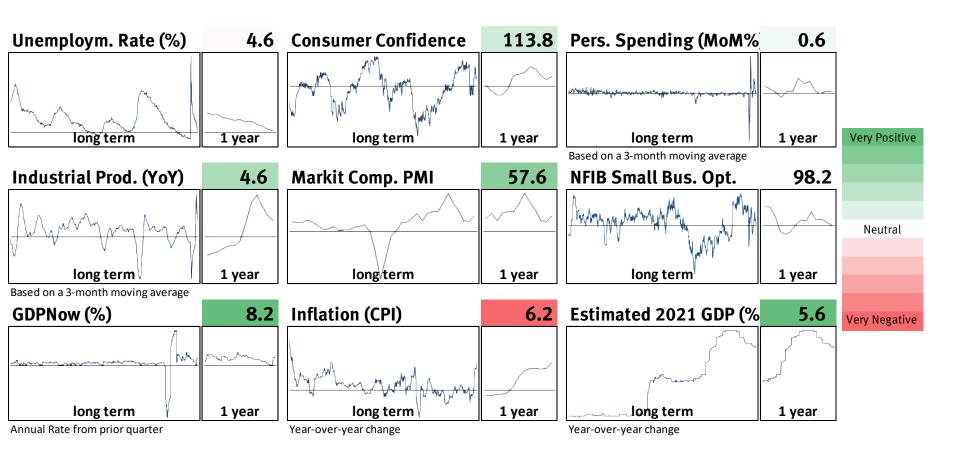
## % change in U.S. job postings, seasonally adjusted, Oct 22 2021

	% change since 2/1/20	% points change vs 4 weeks ago
Better than economy average		
Human Resources	98.9%	11.7%
Loading & Stocking	96.8%	8.8%
Pharmacy	87.4%	6.2%
Software Development	86.2%	11.5%
Similar to economy average Childcare Driving Dental Retail	55.6% 52.6% 46.7% 41.6%	5.7% -3.7% 1.0% 4.8%
Worse than economy average Hospitality & Tourism Sales	23.8% 22.7%	9.9% 4.6%
Sports	14.2%	2.5%
Beauty & Wellness	1.4%	-0.5%

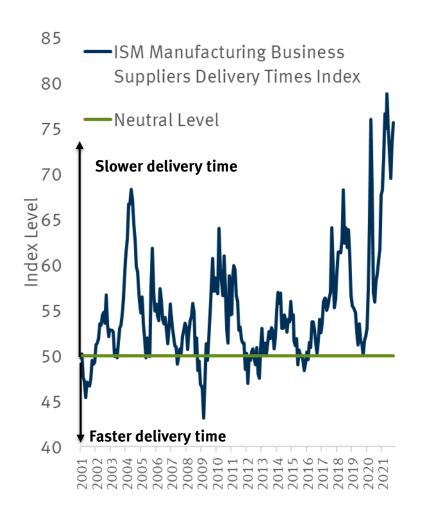
Source: Stifel Investment Strategy data via Indeed, as of November 10, 2021

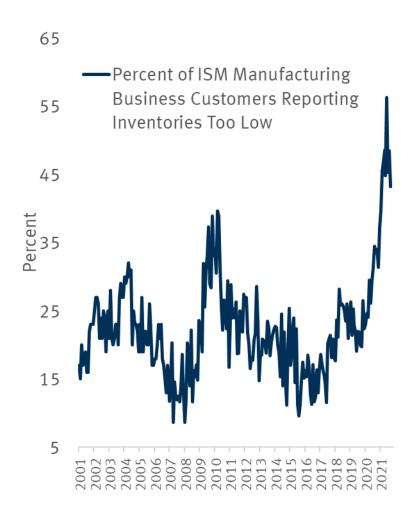


### The Economy



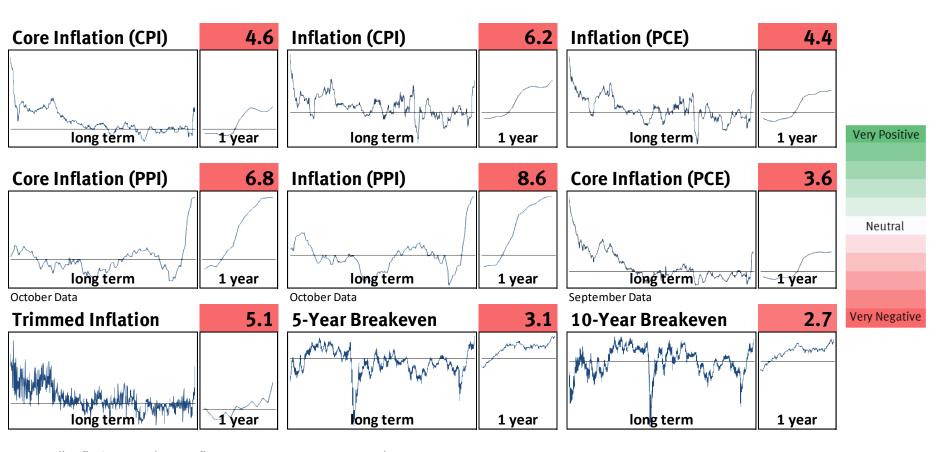








## Inflation



All Inflation numbers reflect percent year-over-year changes.

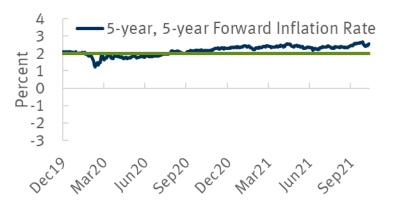


### Inflation



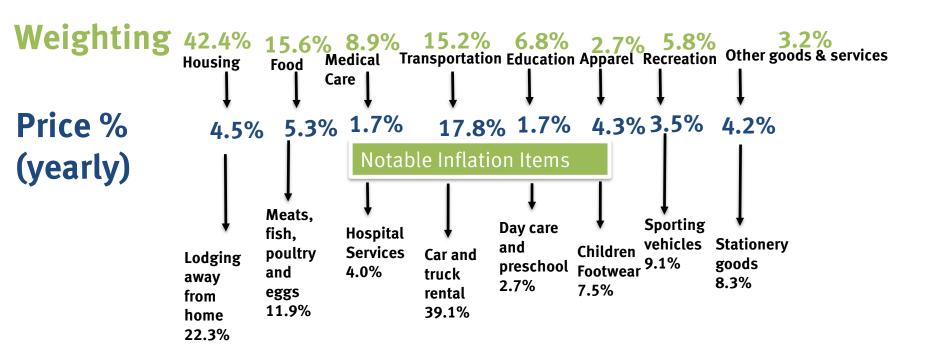








## **CPI (6.2%)**



Source: Stifel Investment Strategy data via Capital Economics, Bloomberg, as of November 10, 2021 (https://www.bls.gov/cpi/tables/relative-importance/home.htm#Archived%20Relative%20Importance%20Data)

## **Monetary Policy**

- Dual mandate: price stability and maximum employment
- Key considerations:
  - Is inflation transitory?
  - What maximum employment means post-COVID?
  - Fed will remain data dependent, transitory does not mean short-lived
- What to expect in 2022?
  - Tapering (announced at last meeting) to conclude sometime in 2Q 2022
  - Federal funds rate liftoff possible in 2H 2022
  - Discussion around balance sheet "normalization"
- Chair Jerome Powell's term ends February 2022
  - Lael Brainard possible rival for appointment

## **Government Spending**

- End of government COVID-19 unemployment benefits poses test for consumer
- 2 major fiscal packages in focus
  - Bipartisan Infrastructure Package \$1.2 Trillion bill was signed into law
  - Build Back Better (BBB) almost \$1.75 Trillion (likely to be scaled back)
- Key considerations for BBB:
  - What programs to keep, what to scrap, and how to fund the proposals?
  - How willing is Congress to increase taxes?
  - Impact of passage (or lack thereof) on 2022 midterms
- Stifel's Chief Washington Policy Strategist sees 70% probability of both bills passing

#### **Short Term**

#### **Coronavirus**

Variants
Herd Immunity

#### **Macro Environment**

Money Supply

Inflation

Rates

#### **Policy**

Fiscal Stimulus Appetite

**Taxes** 

Regulation

#### **Fundamentals**

**Valuations** 

**Earnings Growth** 

"Zombie" Companies

#### **Geopolitics**

Trade Tensions
Productive Competition

#### **Technical**

Market Breadth

Hedge Fund Leverage Seasonality

### **Long Term**

#### Debt

Government and Corporate Foreign Holders of National Debt Misallocation of Capital

#### **Valuations**

"Big-Tech"

**Dollar Devaluation** 

#### Social

Inequality

Climate Change

**Environmental and Health** 

#### **Economic Growth**

**Productivity** 

**Labor Force** 

**Policy Intervention** 

**New Cold War** 

## Macro Environment: GDP Survey

U.S. GDP	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21	2020	2021	2022
Consensus Estimates	-5.1	-31.2	33.8	4.5	6.3	6.7	2.0	4.9 (5.6)	-3.4	5.6 <b>(6.2)</b>	4.0 (4.3)
Stifel*	-2.6	-28.4	18.0	3.8	7.0	8.2	5.0	4.5	-3.5	5.4 <b>(5.8)</b>	3.7 (4.1)
IHS Markit	3.0	-35.5	33.2	2.9	6.7	8.0	1.5	4.4 (5.8)	-3.6	5.5 <mark>(6.1)</mark>	4.3 (4.4)
Goldman Sachs	-9.0	-33.0	35.0	5.0	7.5	8.3	3.3	4.5 <mark>(5.5)</mark>	-3.4	5.5 <mark>(6.4)</mark>	3.9 (4.4)
Pantheon Macro	-6.0	-30.0	35.0	6.0	6.4	8.0	2.2	8.0 (6.0)	-3.4	5.7 <mark>(6.6)</mark>	5.0
Capital Economics	-3.5	-30.0	30.0	4.5	7.0	8.0	2.6	3.5 (3.1)	-3.5	5.6 <mark>(5.8)</mark>	2.7 (3.5)
Strategas	0.0	-33.0	25.0	8.5	10.0	11.0	2.0	4.0 (4.5)	-3.2	5.4 <mark>(5.8)</mark>	3.3 (3.7)
Julius Baer	-4.0	-25.0	29.5	2.0	4.0	11.5	3.7	5.5 (4.0)	-3.5	5.5 <mark>(6.0)</mark>	3.8 (3.4)
UBS	-5.1	-31.7	29.7	4.5	4.0	9.0	3.4	6.0 (8.9)	-3.5	5.7 <mark>(6.5)</mark>	5.2 (6.0)
Wells Fargo	-1.2	-36.8	28.6	4.0	4.8	9.2	3.0	4.4 (6.1)	-3.5	5.6 <mark>(6.2)</mark>	4.0 (4.4)
Bloomberg Economics	3.0	-37.0	28.0	2.5	6.0	9.3	3.5	5.7 <b>(5.3)</b>	-3.5	5.8 <b>(6.1)</b>	4.7
Barclays	-1.5	-31.7	30.0	4.0	5.0	8.5	3.0	5.0 (6.0)	-3.5	5.5 <mark>(6.1)</mark>	4.0 (4.1)
JPMorgan Chase	-10.0	-32.9	34.5	4.8	3.5	8.0	3.0	4.0 (3.0)	-3.5	5.4 <mark>(6.2)</mark>	3.3 (3.9)
Bank of America ML	-7.0	-35.0	33.0	5.0	7.0	10.0	4.5	6.0	-3.5	5.9 <mark>(6.2)</mark>	4.8 (5.5)
Congressional Budget Office**									-2.4	7.4	3.1
Federal Reserve**									-2.4	5.9 <mark>(7.0)</mark>	3.8 (3.3)

The (red) numbers are from 9/3/21.

Annualized percent change from prior quarter and year-over-year change are shown for quarterly and yearly periods, respectively.

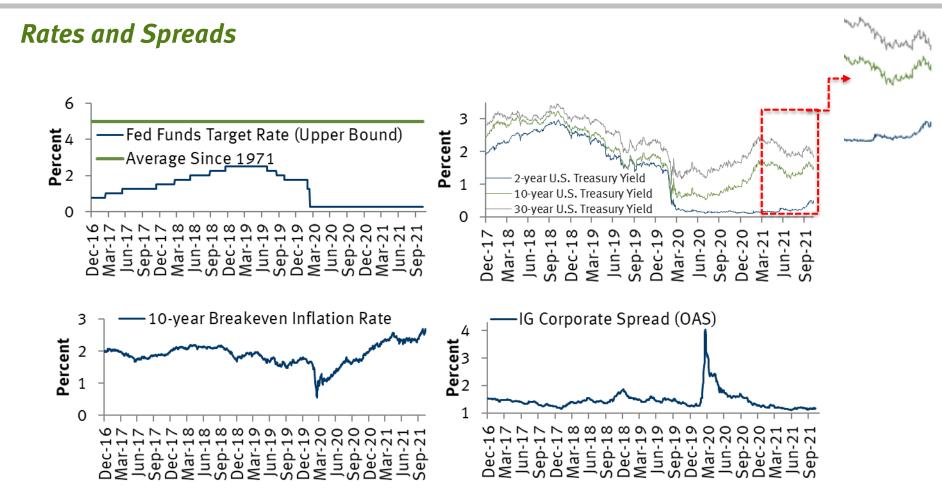
\*Based on Stifel sell-side Economics department estimates. \*\*Percent change from fourth quarter to fourth quarter one year ago.

Source: Stifel Investment Strategy data via Bloomberg, as of November 11, 2021. Federal Reserve estimates are as of September 22, 2021. Congressional Budget Office estimates are as of July 1, 2021. Figures in grey areas under "Consensus Estimates" represent reported results.

## **Markets**



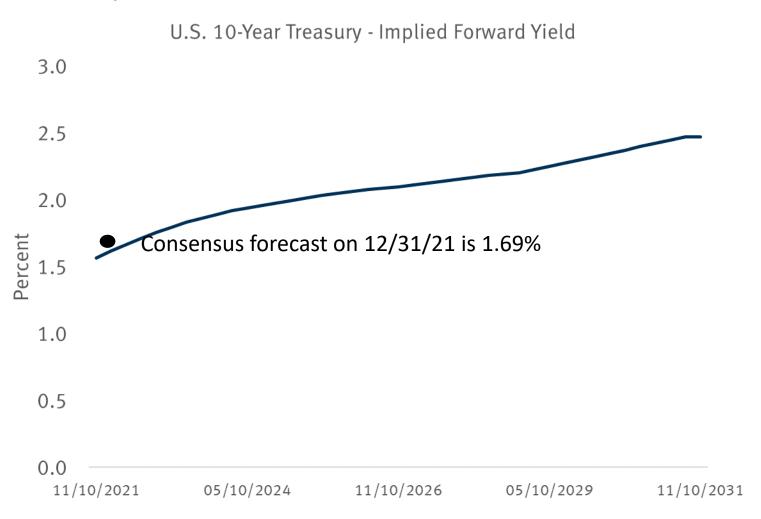




OAS Spread is the measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is adjusted to take into account an embedded option



### 10-Year Treasury



## **Performance**

### 2020

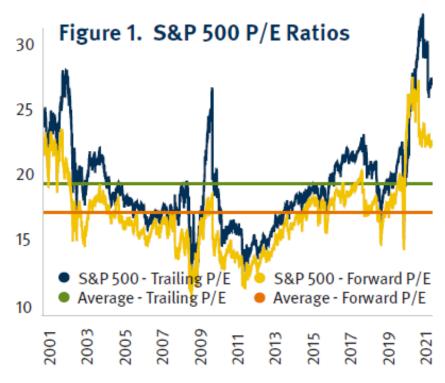
Index	12/31 to 2/19	2/19 to 3/23	3/23 to 12/31	Full 2020
S&P 500 Index	5.1%	-33.8%	70.2%	18.4%
S&P 500 Equal Weighted Index	2.6%	-39.0%	80.2%	12.8%
NYSE FANG+ Index	25.6%	-30.9%	133.9%	103.1%
Russell 2000 Index	1.6%	-40.7%	99.0%	19.9%
MSCI EAFE Index	-0.8%	-32.7%	61.4%	7.8%
MSCI EM Index	-0.9%	-31.2%	73.5%	18.3%
Bloomberg U.S. Agg	2.0%	-0.9%	6.4%	7.5%

### 2021

Index	12/31 to 1/29	1/29 to 11/10	2021 YTD
S&P 500 Index	-1.0%	26.5%	25.2%
S&P 500 Equal Weighted Index	-0.8%	28.4%	27.4%
NYSE FANG+ Index	1.9%	20.5%	22.8%
Russell 2000 Index	4.8%	16.1%	21.9%
MSCI EAFE Index	-1.1%	13.3%	12.0%
MSCI EM Index	3.1%	-2.5%	0.5%
Bloomberg U.S. Agg	-0.7%	-0.8%	-1.5%

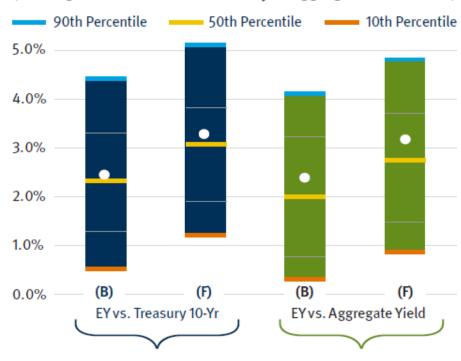


### Market Sight|Lines - September 17, 2021



Source: Stifel Investment Strategy data via Bloomberg, as of September 15, 2021

Figure 3. Excess Yield (Earnings Yield vs. 10-Year Treasury & Aggregate Bond Index)



Source: Stifel Investment Strategy data via Bloomberg, as of September 15, 2021. EY — Earnings Yield, (B) — Backward-Looking, (F) — Forward-Looking. Dots represents current values. Aggregate Bond Index is the Bloomberg U.S. Aggregate Bond Index.

## Market Sight|Lines - October 8, 2021

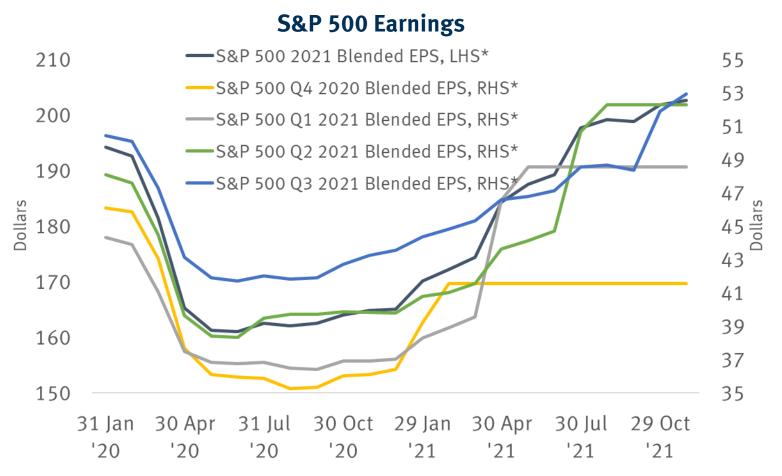
	2010	2010 Companies in the S&P 500						
	Index	Dropped	Remaining	Added	- 2021 Index			
Communication Services	6.2%	1.1%	6.4%	15.5%	9.4%			
Consumer Discretionary	7.6	23.0	7.0	16.5	12.5			
Consumer Staples	10.5	5.1	10.9	1.4	6.1			
Energy	11.8	23.2	11.3	1.6	2.9			
Financials	15.8	6.8	16.4	6.0	9.9			
Health Care	10.8	1.3	11.2	18.0	14.0			
Industrials	11.6	10.9	11.4	8.5	8.1			
Information Technology	16.7	12.9	16.8	23.2	28.5			
Materials	3.6	9.7	3.3	3.0	2.5			
Real Estate	2.3	1.5	2.3	5.5	3.7			
Utilities	3.2	4.0	3.1	1.0	2.6			
Not Classified	0.0	0.6	0.0	0.0	0.0			
Forward P/E	18.6x	21.6x	18.5x	40.5x	27.7x			
Consensus Growth	13.8%	13.3%	13.8%	17.9%	15.6%			

The "2010 Index" column refers to the S&P 500 index as of 2010. The "Dropped" column refers to the portfolio of companies removed from the S&P 500 index since 2010. The "Remaining" column refers to the portfolio of 2010 companies that are currently still part of the index. The "Added" column refers to the portfolio of new companies added to the index since 2010 that are current members of the S&P 500 index. The "2021 index" refers to the current S&P 500 Index. (sector percentage weights shown)

Source: Stifel Investment Strategy via Bloomberg, as of October 5, 2021.



## **Earnings**

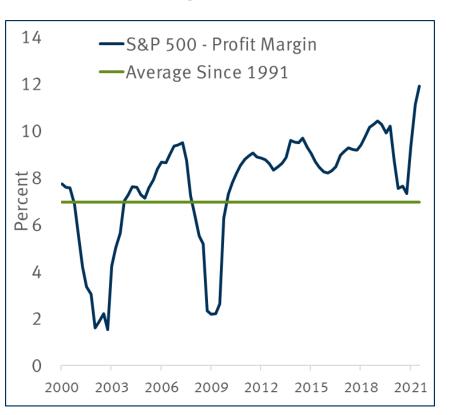


Source: Stifel Investment Strategy via FactSet, as of November 10, 2021; The blended rate combines actual results for companies that have reported and estimated results for companies that have yet to report.

\*LHS – left hand side, RHS – right hand side.

## Market Monitor: **Equities**

## **S&P 500** - **Margins**



## Percent of Non-Earning Companies

	Current	Long-Term Average	High Since 1990
Russell 1000 Growth	22.6%	10.5%	33.5%
Russell 1000	17.3%	11.5%	28.4%
Russell 1000 Value	14.7%	12.6%	37.0%
Russell 2000 Growth	52.7%	28.9%	54.8%
Russell 2000	44.5%	26.9%	48.6%
Russell 2000 Value	40.2%	24.6%	46.2%

STIFEL Stagflation

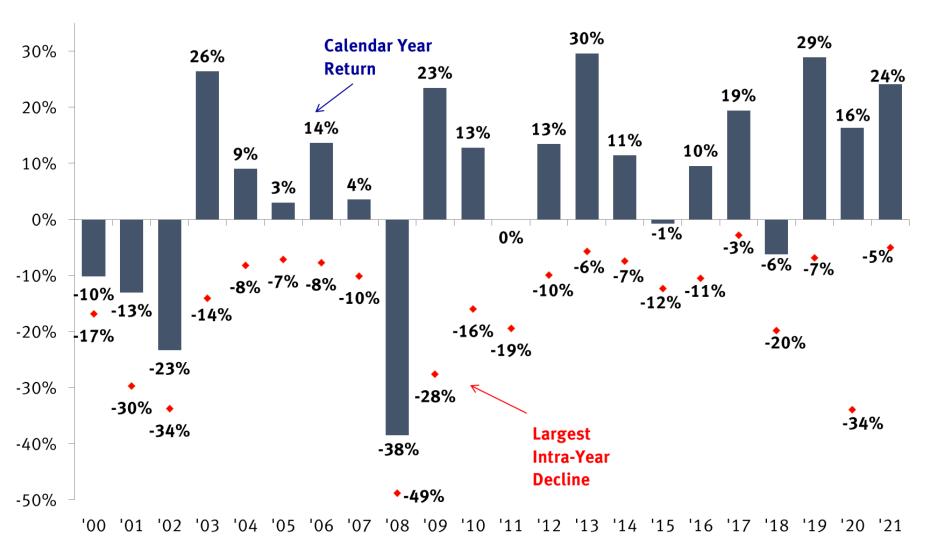
## Market Sight|Lines -November 5, 2021

Annualized		Inflation											
Quarterly Returns		>4	%			2%-4%				<2%			
Real GDP	<b>&lt;1%</b>	1%-3%	>3%	All	<1%	1%-3%	>3%	All	<1%	1%-3%	>3%	All	
Agriculture	-2.6%	5.8%	11.1%	6.2%	-16.4%	9.1%	6.8%	4.6%	-10.9%	5.4%	-3.1%	-1.8%	
Base Metals	N/M	N/M	N/M	N/M	-4.4%	-3.0%	17.8%	4.6%	-16.0%	9.1%	10.0%	3.7%	
Commodities	12.9%	18.1%	8.6%	11.8%	-18.6%	9.6%	9.2%	5.6%	-17.6%	4.3%	8.2%	1.0%	
Energy Equities	N/M	N/M	N/M	N/M	-18.8%	10.6%	17.1%	8.4%	-16.5%	8.8%	21.3%	8.1%	
Materials Equities	N/M	N/M	N/M	N/M	-16.6%	6.4%	13.6%	5.6%	-12.0%	14.9%	19.7%	10.8%	
Real Assets	N/M	N/M	N/M	N/M	-13.3%	6.7%	18.2%	6.0%	-6.3%	9.7%	14.0%	6.5%	
Semiconductors	N/M	N/M	N/M	N/M	-38.7%	-12.8%	22.6%	-5.6%	-11.2%	16.2%	34.2%	13.6%	
U.S. REITs	30.3%	14.2%	14.7%	18.5%	30.3%	9.3%	11.5%	12.7%	-14.5%	17.8%	18.5%	10.6%	
U.S. TIPs	N/M	N/M	N/M	N/M	4.6%	9.6%	-0.2%	4.8%	5.5%	5.8%	5.8%	5.7%	
Utilities Equities	23.8%	16.6%	13.8%	16.9%	0.5%	16.6%	3.0%	8.3%	-3.7%	10.8%	19.8%	11.4%	
Value Stocks	21.7%	9.9%	11.0%	13.4%	0.5%	12.0%	7.9%	8.7%	-10.6%	11.4%	20.9%	10.3%	
S&P 500	24.6%	9.9%	11.0%	14.2%	-4.4%	17.5%	8.8%	10.7%	-9.1%	13.0%	24.2%	12.6%	

Based on quarterly data from 12/31/74-9/30/21. N/M means no meaningful data for the category index during the inflationary period. Source: Stifel Investment Strategy data via Bloomberg, as of November 3, 2021.

## S&P 500 Calendar Year Returns vs. Intra-Year Declines

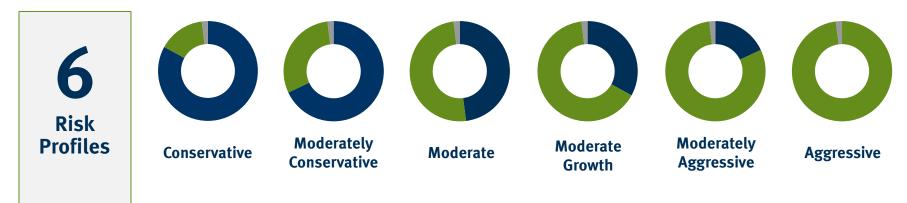
### Despite frequent intra-year declines, returns are positive most of the time



# **Dynamic Leanings**



#### 144 ASSET ALLOCATION MODELS FOR YOUR SELECTION





## **Allocation Insights**

Asset Class	Previous	Current	t Comments
U.S. Equity	•	•	Our base case assumes above-trend economic growth in 2021 and into 2022 supported by fiscal and monetary stimulus, a gradual return to "normal," and herd immunity. Equity markets outside the U.S., which generally underperformed in 2020, are more dependent on trade and levered to cyclical sectors, which should bode well for their future performance. A weakening/ stable dollar is expected to be a tailwind for non-U.S. markets. Valuations of non-U.S. stocks are attractive relative to U.S.
U.S. Large Cap	•	•	The macroeconomic data is still supportive, especially for smaller companies, and we believe that small caps remain well positioned to benefit from the ongoing global economic recovery, an accelerating CapEx cycle, and the latest infrastructure package.
Large Value vs. Large Growth	<b>A</b>	<b>A</b>	The underlying sector composition of the large value investment style is more cyclical (financials, energy, materials, industrials, etc.) and hence more closely correlated to economic growth and the ongoing reopening of the global economy. We believe that large value stocks should continue to perform well as global economic growth is expected to remain above trend in 2022 (supportive of earnings) and U.S. Treasury yields have room to move higher.
U.S. Small Cap		<b>A</b>	The macroeconomic data is still supportive, especially for smaller companies, and we believe that small caps remain well positioned to benefit from the ongoing global economic recovery, an accelerating CapEx cycle, and the latest infrastructure package.
Small Value vs. Small Growth			We recommend a diversified approach, investing in both small cap value and growth.
Non-U.S. Equity	<b>A</b>		Our base case assumes above-trend economic growth in 2021 and into 2022 supported by fiscal and monetary stimulus, a gradual return to "normal," and herd immunity. Equity markets outside the U.S., which generally underperformed in 2020, are more dependent on trade and levered to cyclical sectors, which should bode well for their future performance. A weakening/stable dollar is expected to be a tailwind for non-U.S. markets. Valuations of non-U.S. stocks are attractive relative to U.S.
Non-U.S. Developed Markets	-		We are neutral within non-U.S. equity between developed and emerging markets as we find the risks to be balanced between both.
Europe vs. Japan			The European economy is more exposed to global trade, with public companies generating 50% of revenue outside of Europe. Japan's ongoing structural and corporate reform is a tailwind for company earnings. However, both Europe and Japan face some challenges that keep us at neutral within developed markets, for now.
Emerging Markets	•	•	A weaker dollar, stable oil prices, and a stronger global economy should benefit most emerging market countries. However, weaker healthcare systems and uncertainty around vaccine supply keep us neutral for now, despite attractive relative valuations to non-U.S. developed markets.



**Equity** 



	Asset Class	Previous	Current	Comments
	U.S. Investment Grade	•	•	Within fixed income, we are tilting to an overweight of U.S. high yield relative to U.S. investment grade with the use of active management. Default rates in high yield have come down, and while the impacts of COVID-19 will persist, we believe there is opportunity in certain cyclical sectors and the potential for yield enhancement in a low-yield environment.
	Corporates Government/Agency MBS	•		We recommend a diversified approach to the full spectrum of investment-grade fixed income.
Fixed	Inflation Protected			The Fed has revised its policy framework to allow for inflation to be above 2% for extended periods of time. We maintain an overweight as a hedge against higher inflation.
Income	Duration	•	-	The Fed is expected to stay accommodative for the foreseeable future, and while interest rates will likely move higher as the economy recovers and the Fed begins tapering, we don't anticipate rates rising dramatically. We believe we are in a lower-for-longer environment and remain neutral duration.
	U.S. High Yield	<b>A</b>	<b>A</b>	Within fixed income, we are tilting to an overweight of U.S. high yield relative to U.S. investment grade with the use of active management. Default rates in high yield have come down, and while the impacts of COVID-19 will persist, we believe there is opportunity in certain cyclical sectors and the potential for yield enhancement in a low-yield environment.
	Private Assets	•		For investors interested in alternative investments and able to handle illiquidity, exposure to some combination of private equity, private debt, and/or private real estate can be considered as part of a diversified portfolio.
Alternatives	Hedge Funds	•	•	For investors interested in alternative investments and able to handle less liquidity who have conviction about manager skill, exposure to hedge funds can be a helpful part of a diversified portfolio. This is especially true in volatile, low-return environments.
▲ Ov	verweight Vunder	weight		Neutral

Finding Our Guidance



## Stifel Guidance

The following summarizes how we deliver our economic and market analysis and corresponding investment guidance, along with some helpful links.

- Sight|Lines is a weekly note for clients, along with a <u>video summary</u> and a podcast on <u>Spotify</u>, <u>Apple</u>, <u>Omny</u>, and <u>Google</u>.
- Market Pulse is shared when the S&P 500 Index moves up or down 2%.
- The monthly *Investment Strategy Brief* video series shares our update on the current economic and market environment. The podcast: <u>Spotify</u>, <u>Apple</u>, <u>Omny</u>, and <u>Google</u>.
- In <u>Conversations Podcast</u>, Stifel's Chief Investment Officer, Michael O'Keeffe, sits down with leaders at Stifel and in the finance industry to have thought-provoking conversations related to the finance industry. Episodes are released monthly.
- The <u>weekly</u>, <u>monthly</u>, and <u>quarterly</u> *Market Perspectives* provide a recap of the most recent period's global market results.
- The monthly <u>Favorite 15</u> shares our favorite 15 slides for the month.
- Stifel's Allocation Insights provides our dynamic asset allocation leanings quarterly.
- The <u>Stifel 2021 Outlook Report</u> and <u>Video</u>: provide our annual outlook and related articles.
- <u>Stifel's Approach to Asset Allocation</u> summarizes our asset allocation approach and provides a catalogue of various recommended asset mix models.
- The *Stifel Financial ID* <u>video series</u> provides an overview of our work in behavioral finance and the related *Stifel Financial ID* model.



Past performance is no guarantee of future results.

Index returns include the reinvestment of dividends but do not include adjustments for brokerage, custodian, and advisory fees.

Indices are unmanaged, do not reflect fees and expenses, and are not available for direct investment.

Past performance does not guarantee future results. Investing involves risk, including the possible loss of principal. Asset allocation and diversification do not ensure a profit or protection against loss.

Alternative Investments or Non-Traditional Assets – Alternative investments may include, but are not limited to: Real Estate Investment Trusts (REITs), Commodities, Futures, Hedge Funds, Venture Capital, Limited Partnerships, etc.

Real Estate – When investing in real estate companies, property values can fall due to environmental, economic, or other reasons, and changes in interest rates can negatively impact the performance.

Commodities and Futures — The risk of loss in trading commodities and futures can be substantial. You should therefore carefully consider whether such trading is suitable for you in light of your financial condition. The high degree of leverage that is often obtainable in commodity trading can work against you as well as for you. The use of leverage can lead to large losses as well as gains.

**Hedge Funds** – Investors should be aware that hedge funds often engage in leverage, short-selling, arbitrage, hedging, derivatives, and other speculative investment practices that may increase investment loss. Hedge funds can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, and often charge high fees that can erode performance. Additionally, they may involve complex tax structures and delays in distributing tax information. While hedge funds may appear similar to mutual funds, they are not necessarily subject to the same regulatory requirements as mutual funds.

**Venture Capital** – Venture capital investments involve substantial risks. The risks associated with investing in companies in the start-up or expansion stages of development are greater than those of companies in later stages, because the companies' business concepts generally are unproven and the companies have little or no track record.

Limited Partnerships — Generally, limited partnership investments are suitable only for a narrow class of relatively sophisticated investors. Limited partnership investments may be speculative in nature and be subject to resale restrictions or illiquidity. An investment is appropriate only for investors who have the capacity to absorb a loss of some or all of their investment.

Bonds – When investing in bonds, it is important to note that as interest rates rise, bond prices will fall. High-yield bonds have greater credit risk than higher quality bonds.

**Duration** – Duration is a measure of the sensitivity of the price -- the value of principal -- of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years.

**Standard Deviation** – Standard deviation is a measure of the dispersion of a set of data from its mean. It is calculated as the square root of variance by determining the variation between each data point relative to the mean. If the data points are further from the mean, there is higher deviation within the data set.

International and Emerging Markets – There are special considerations associated with international investing, including the risk of currency fluctuations and political and economic events. Investing in emerging markets may involve greater risk and volatility than investing in more developed countries.

**Private Equity** – Private equity funds are not appropriate for all investors. Investors should be aware that private equity funds may contain speculative investment practices that can lead to a loss of the entire investment. Private equity funds may invest in entities in which no secondary market exists and, as such, may be highly illiquid. The funds are not required to provide periodic pricing or valuation information to investors and often charge high fees that can erode performance. Additionally, they may involve complex tax structures and delays in distributing tax information.

Short Positions – The investor should note that when a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker will demand more collateral and the manager might have to close out that short position at an inopportune time to limit any further losses.

Small Company Securities – Small company securities are typically more volatile and carry additional risks, since smaller companies generally are not as well established as larger companies.

## Appendix: Index Descriptions

**Bloomberg U.S. Treasury Bills 1-3 Months Index** includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than three months and more than one month, are rated investment grade, and have \$250 million or more of outstanding face value.

Bloomberg U.S. Corporate IG Index is an unmanaged index considered representative of fixed-rate investment-grade taxable bond debt.

Bloomberg U.S. Aggregate Corporate Index is an unmanaged index considered representative of fixed-rate investment-grade taxable bond debt.

Bloomberg U.S. Corporate High Yield is an unmanaged index considered representative of fixed-rate, noninvestment-grade debt.

Bloomberg U.S. Government Bond Index is an unmanaged index considered representative of fixed-rate, investment-grade US Government debt.

Bloomberg Global Aggregate This index provides a broad-based measure of the global investment-grade, fixed-rate debt market.

**DXY Index** is a measure of the value of the U.S. dollar relative to the value of a basket of currencies of the majority of the U.S.'s most significant trading partners.

**S&P 500 Index** is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

Russell 1000 Index represents approximately 1,000 of the largest companies in the U.S. equity markets, the Russell 1000 is a subset of the Russell 3000 Index. The Russell 1000 (maintained by the Russell Investment Group) comprises over 90% of the total market capitalization of all listed U.S. stocks and is considered a bellwether index for large cap investing.

Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 index.

MSCI EAFE Index captures large and mid cap representation across Developed Markets countries around the world, excluding the U.S. and Canada. With 914 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets (EM) Index captures large and mid cap representation across 23 Emerging Markets (EM) countries. With 837 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

Morgan Stanley Market implied pace of hikes index (MSPOKE) is the number of Fed rate hikes in the 12 months following the first rate hike implied by the Eurodollar interest rate futures market.

The MSCI World Index is a free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of developed markets.

Wilshire 5000 Index is a market-capitalization-weighted index of the market value of all stocks actively traded in the United States.

VIX Index shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options.

## Appendix: Index Descriptions

**EURO STOXX 50** is a stock index of Eurozone stocks designed by STOXX, an index provider owned by Deutsche Börse Group. According to STOXX, its goal is "to provide a blue-chip representation of Supersector leaders in the Eurozone

Cash & Cash Eq. is represented by the Bloomberg Barclays U.S. Treasury 3-6 months Bill Index, comprised of treasury bills issued by the U.S. government with less than one year to maturity.

U.S. Gov't Bonds is represented by the Bloomberg Barclays U.S. Government Bond Index, comprised of the U.S. Treasury and U.S. Agency indexes.

U.S. Corp IG Bonds is represented by the Bloomberg Barclays U.S. Corporate Bond Index, comprised of the investment grade, fixed -rate, taxable corporate bond market.

High-Yield Bonds is represented by the Bloomberg Barclays U.S. Corporate High Yield Bond Index, comprised of U.S. Dollar denominated, high-yield, fixed- rate corporate bond market securities.

U.S. LC (Large Cap) equities is represented by Russell 1000 Index, comprised of 1,000 of the largest U.S. securities based on a combination of their market cap and current index membership.

**U.S. SC (Small Cap)** equities is represented by the Russell 2000 Index, comprised of 2,000 of the smallest U.S. securities based on a combination of their market cap and current index membership.

Dev Int'l Equities is represented by the MSCI EAFE Index, comprised of equity securities that belong to markets outside of the U.S. and Canada.

**EM Equities** is represented by the MSCI EM Index, comprised of equity securities that belong to emerging markets.

**Moderate Bench** stands for moderate benchmark portfolio return which is a blended portfolio of stocks (60% weight, represented by MSCI AC World Index) and bonds (40% weight, represented by Bloomberg Barclays U.S. Agg Gov/Credit).

MSCI AC World Index is comprised of equity securities belonging to 23 developed markets and 24 emerging markets countries.

Bloomberg U.S. Government/Credit Bond Index is comprised investment grade, dollar-denominated, fixed-rate Treasuries, government-related and corporate securities.

**KBW Restoration Index** is composed of 13 high-frequency economic indicators. These indicators include those with longer histories (initial jobless claims, MBA mortgage applications, and steel production) along with newly developed gauges tracking mobility, dining reservations, and airport traffic, among others. KBW set each of the 13 indicators to 100 as of the end of February 2020, the official end of the longest economic cycle in U.S. history, and update the Index each week.

Stifel, Nicolaus & Company, Incorporated | Member SIPC & NYSE | www.stifel.com 3 Bryant Park | 1095 Avenue of the Americas | New York, New York 10036

1021.3873664.1