



2022
Capital Markets Forecast

Syntrinsic Investment Committee

Syntrinsic Investment Counsel
3840 York Street, Suite 100
Denver, Colorado 80205
303.296.7100
www.Syntrinsic.com

CONTENTS

Executive Summary	3
Near-Term Sentiment Overview	4
Global Macroeconomic Themes	5
Theme: Inflation to Peak	6
Theme: Corporate Earnings Under Pressure but Resilient	8
Theme: High Quality Companies Remain the Focus	9
Theme: The Great Resignation Continues	10
Theme: Geopolitical Risks Persist	10
Theme: ESG Investing Mitigates Risk	11
Near-Term Sentiment	14
Global Equities Outlook	14
Global Real Estate Outlook	22
Commodities Outlook	23
Private Equity Outlook	24
Private Debt Outlook	25
Hedge Fund Strategies Outlook	26
Global Fixed Income Outlook	26
Long-Term Forecast	30
Global Equity Forecast	30
Listed Real Estate Forecast	34
Commodities Forecast	35
Private Investments Forecast	36
Hedge Fund Strategies Forecast	38
Global Fixed Income Forecast	39
Disclosures	43

Syntrinsic Investment Committee



Jennifer Leonard, CFA
Chief Investment Officer

Akasha Absher
President

Jim Brauer, CIMA, CFP
Director, Consulting & IR

Jared Hobson, CFA
Senior Research Analyst

Robin Meyer, CFA
Senior Research Analyst

LeVar Williams
Consultant

Jonalyn Denlinger
Director, Consulting

Ben Valore-Caplan
Chief Executive Officer

Executive Summary

“Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated.... It will appear that a measurable uncertainty, or “risk” proper.... is so far different from an unmeasurable one that it is not in effect an uncertainty at all.” – Frank Hyneman Knight – Risk, Uncertainty, and Profit

As we look out over the next decade, we anticipate that this economic cycle will look much different than previous cycles. The lingering effects of the pandemic, rising inflation, a new labor market, looser fiscal policy, and a transition to a low carbon economy will be the underlying macroeconomic themes that shape the economy. While previous economic cycles may provide some historical context, this new economic cycle is unique given the significant coordinated fiscal and monetary stimulus. On the face this uncertainty may seem like a risk, but we believe that this will present opportunities for investors to profit.

In the near-term, the economic outlook while moderating remains positive even with rising inflation and increasing interest rates. Consumer and corporate balance sheets are healthy and there is substantial liquidity from accommodative fiscal and monetary policy supporting growth. However, given the opportunities and potential risks it is imperative that investors remain broadly diversified while staying fully invested. We anticipate more volatility in the investment markets as investors navigate this new economic cycle and the continued restart of the economy after COVID-19.

Every year, Syntrinsic’s Investment Committee develops our Capital Markets Forecast which includes our long-term forecast and near-term sentiment. The long-term forecast serves as the underlying foundation for building strategic asset allocations that can endure through market cycles. Our approach provides a rational and measurable way to anticipate the returns available from equity, debt, real estate, commodities, hedge fund strategies, and private investments. We also realize that from time-to-time, economic and/or market conditions such as the market we currently find ourselves in, create opportunities to add value on the margins by modestly reducing or increasing asset class and segment allocations. As a result, we craft a near-term sentiment to complement our long-term forecast. Our near-term sentiment evaluates opportunities and measurable risks to adjust allocations with a three-year perspective in mind.

Building strategic asset allocations alongside solid manager selection is essential to short and long-term investing. Recognizing that each investor has unique investment objectives, we have developed this forecast as a guide to support you in building the appropriate asset allocation to meet your objectives.

Our Investment Committee looks forward to collaborating with you to achieve your investment goals in 2022 and beyond. Thank you for your continued confidence.

Sincerely,



Akasha Absher
President

Near-Term Sentiment Overview

Asset Class/Segment	1Q 2022 Near-Term Sentiment	3Q 2021 Near-Term Sentiment
Global Equities	Neutral/ Positive	Neutral/ Positive
US	Neutral/ Positive	Neutral/ Positive
Non-US Developed	Neutral	Neutral
Emerging Markets	Neutral	Neutral/ Positive
Global Fixed Income	Neutral/ Negative	Neutral/ Negative
Short-Term Bond	Neutral	Neutral
Core Bond	Negative	Neutral/ Negative
Core Plus Bond	Neutral/ Positive	Neutral/ Positive
Non-Developed US Bond	Negative	Negative
Emerging Markets Bond	Neutral	Neutral
Real Assets	Neutral/ Negative	Negative
Real Estate	Neutral	Neutral/ Negative
Commodities	Negative	Negative
Hedge Fund Strategies	Neutral	Neutral
Private Equity	Neutral/ Positive	Neutral/ Positive
Private Debt	Neutral/ Positive	Neutral/ Positive

The near-term sentiment remains largely aligned with the sentiment we published last year, with a few exceptions. We have upgraded our near-term sentiment on Real Estate to Neutral from Neutral/Negative, reflecting that an increase in global growth should be supportive of the real estate markets. We do, however, remain concerned that lingering uncertainties about future demand in certain real estate sectors could be a headwind for this segment, which keeps us from upgrading the asset class above the Neutral level. We have also downgraded our sentiment on Emerging Markets and Core Bonds. For Emerging Markets, slower growth and increased risks outweigh the attractive valuations within the segment. On a relative basis, rising government yields and investment grade credit spreads near historically low levels lead us to favor short duration bonds and allocation opportunities elsewhere in fixed income over more interest rate sensitive Core Bonds.

Global Macroeconomic Themes

Risk/Opportunity	SIC Thoughts	Allocation Effects
Inflation	We anticipate that inflation will peak in 2022, although we expect the long-term structural level of inflation to be higher than the 1.8% CPI seen in the decade leading up to the pandemic.	<ul style="list-style-type: none"> • Maintain quality basis within equities • Allocate to real assets with strong cash flows • Increase clean energy exposure
Rising Interest Rates	Syntrinsic expects more hawkish monetary policy to offset inflationary pressures leading to higher short-term rates in the near-term. We also anticipate that long-term interest rates will rise because of structurally higher inflation than pre-pandemic.	<ul style="list-style-type: none"> • Tactically lower duration • Add an allocation to floating rate debt in both public and private markets
Moderating Growth	While the economy is moderating, the economic recovery is still underway. Consumers are healthy, corporate balance sheets are strong, and there is substantial liquidity that will support growth even with rising interest rates. Investors need to stay invested through this cycle as earnings growth will normalize and create opportunities within asset classes and segments.	<ul style="list-style-type: none"> • Increase income driven returns • Maintain a quality bias within equities • Tactically allocate to alternative investments to diversify sources of risk and return, particularly in the private markets
Environmental, Social, and Governance	The emergence of more measurable data illustrating that evaluating ESG factors in investment decision-making adds value as well as mitigates risk has increased the opportunity set for investors. In addition, the transition to a low carbon economy has created opportunities for investment in new sectors and innovative technologies.	<ul style="list-style-type: none"> • Allocate to sustainable opportunities including resource and industrial efficiency, innovation, and clean energy

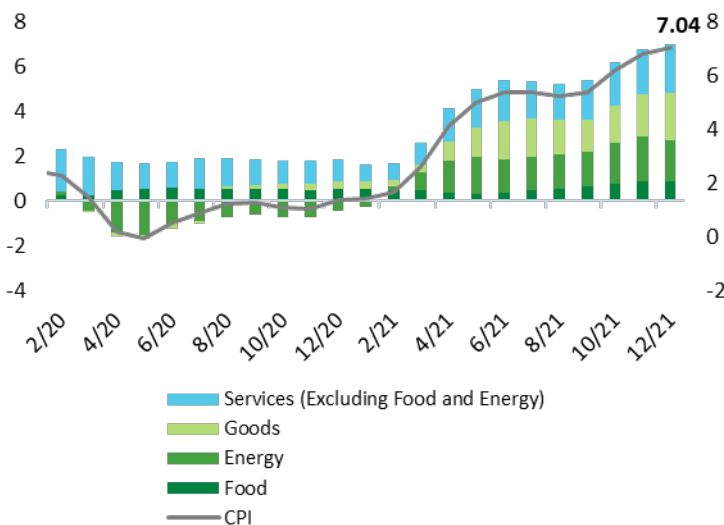
Theme: Inflation to Peak

While the focus in 2021 was on “transitory” inflation, the actual data proved to be more elevated and stickier than initially believed. The Consumer Price Index (CPI), which started the year rising just 1.4% year-over-year (y/y) in January, increased by 6.8% y/y in November, which was the highest y/y increase in 39 years. Several pandemic-related factors, including supply chain disruptions which drove up the cost of goods, labor issues which resulted in higher wage expenses, rent increases, and the “base effect” contributed to rising prices that proved more sustainable than we initially expected in 2021, see Exhibit 1, (a base effect can happen when inflation in the corresponding period of the previous year was either extremely low or high, which leads to even a small rise or decline in inflation creating an artificially significant year over year comparison.) The US Federal Reserve System (Fed) recently acknowledged that inflation is proving more consistent than they originally thought and has announced that it will reduce its bond buying to \$60 billion per month beginning in January, which is \$30 billion less than it had been buying in December. Further, Fed officials have indicated

We anticipate inflation to peak in 2022 although we expect the structural level of inflation could be higher than pre-pandemic. Maintain overweight to Global Equity with a quality bias.

that there could be as many as three rate increases coming in 2022, with a further two in 2023 (Exhibit 3).

Exhibit 1: CPI Components



Source: Bloomberg, Bureau of Labor Statistics

Looking towards 2022, we see the potential for stickiness in inflation related to wage and rent increases but see inflation in other sectors including food, energy, travel, and leisure abating as supply chain bottlenecks are resolved and the base effects neutralized.

(For a related discussion on the state of the employment market, please refer to the section below entitled “The Great Resignation”). We think rent increases are likely to continue in the short-term, as property owners look to make up for the stagnant or falling rents seen during the pandemic. One area we are watching is the energy sector, which has suffered from a significant base effect and was up 33% y/y in November, driving a good portion of the overall CPI increase (core

inflation, which excludes food and energy, rose 5.5 % y/y). While energy prices could decline as the base effect rolls off or due to the impact of the Omicron variant, we could continue to see pressure on energy prices if certain geopolitical events come to fruition, namely a conflict in Taiwan or an invasion of Ukraine.

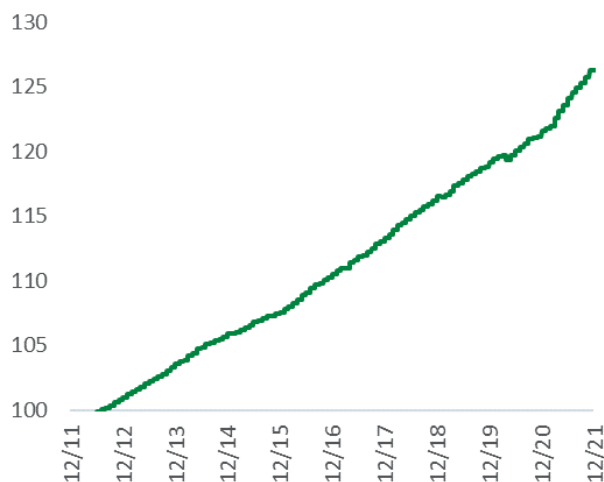
As a result of all these factors, we anticipate inflation to peak in 2022, although we do expect that the structural level of inflation could be higher than pre-pandemic, given the impact of higher wages and rents. Pre-pandemic, CPI averaged 1.8% over the last decade (2009-2019). The Fed maintains its stated policy of average inflation targeting at 2%, and we think the long-term outlook for inflation will coalesce around this level, although the implied rate hikes involved in the near-term could have negative repercussions on both the equity and fixed income markets.

Exhibit 2: US Inflation Measures

	12/31/21	9/30/21	6/30/21
CPI	7.0%	5.4%	5.4%
Core CPI	5.5%	4.0%	4.5%
PCE	5.7%	4.4%	4.0%
Core PCE	4.7%	3.7%	3.6%
10 Yr TIPS Breakeven	2.6%	2.4%	2.3%
Hourly Wage Growth	4.1%	4.5%	3.7%
Fed Wage Tracker	4.5%	4.2%	3.2%
Fed Wage Prime Age	4.9%	3.9%	3.7%
Employment Cost Idx	3.7%	2.9%	2.6%

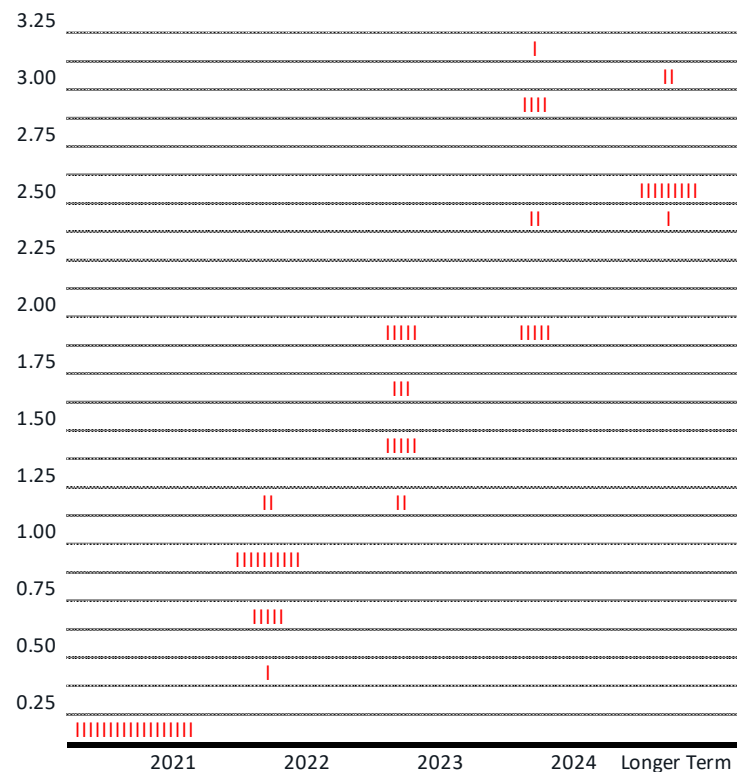
Source: Bloomberg

Exhibit 4: US Personal Consumption Expenditures (PCE): Services



Source: Bloomberg, US Bureau of Economic Analysis

Exhibit 3: FOMC Median of Longer Run Projections as of 12/15/21



Source: Bloomberg, Federal Reserve

Theme: Corporate Earnings Under Pressure but Resilient

We think 2022 earnings growth will have a more normalized trajectory after the 2020 COVID-19 shock and the subsequent 2021 recovery. As part of this, we think the US equity market could see forward P/E's declining slightly despite earnings growth.

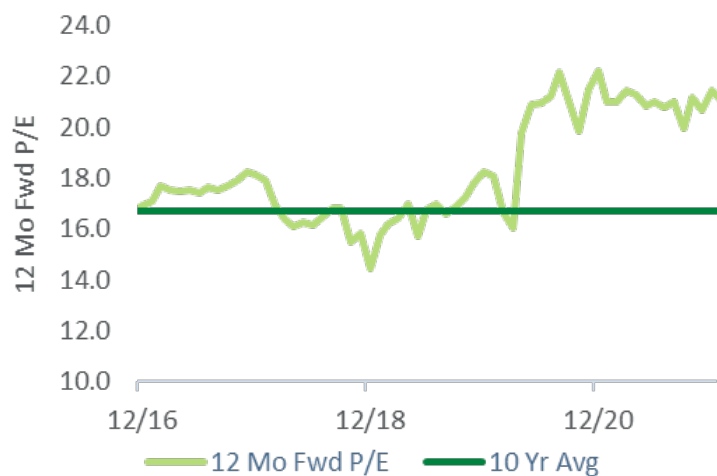
Despite inflation, corporations in 2021 managed to grow earnings significantly over 2020. For example, companies in the S&P 500 saw 2021 earnings rise by an estimated 37%¹ over 2020 due to the combination of the base effect and higher earnings for the year. Higher earnings can be attributed to higher consumer spending as result of pent-up demand for goods and services and excess savings and income from pandemic stimulus payments, as well as improving global growth. As of November 5, 3Q21 revenues were up more than 17%².

Are corporate earnings setting themselves up for a tough y/y comparable in 2022, and what will the impact be on the markets?

We think 2022 earnings growth will have a more normalized trajectory after the 2020 COVID-19 shock and the subsequent 2021 recovery. As part of this expectation, we think the US equity market could see

forward P/E's declining slightly (see Exhibit 5) despite earnings growth. The consensus 2021 EPS for the S&P 500 is forecasted to increase 17.7%³ y/y, but consensus estimates for 2022 EPS is for growth of 8.2%. This is a reduction of more than half implying a forward twelve-month P/E ratio of 21.1, vs. the current level of 21.4x.

Exhibit 5: S&P 500 Forward Price/Earnings (PE)



Source: Bloomberg

That said, we could still see above average US GDP growth in 2022, with consensus estimates at 3.9% vs. the 10-Year Rolling Average of 2.3%, which could drive revenue growth, and we could also see productivity improvements offset higher labor costs.

As discussed under the inflation section earlier in this report, we think companies will continue to see wage and input cost inflation in 2022. However, we think that this will be offset with productivity gains. Traditionally, companies have improved productivity through technological innovation and spending. The Bureau of Labor Statistics⁴ projects productivity to grow at an annual rate of 1.7% over the next 10 years. This rate is greater than the 1.1% growth rate seen in the last decade.

To analyze inflation in corporate earnings, we looked at both manufacturing industries and

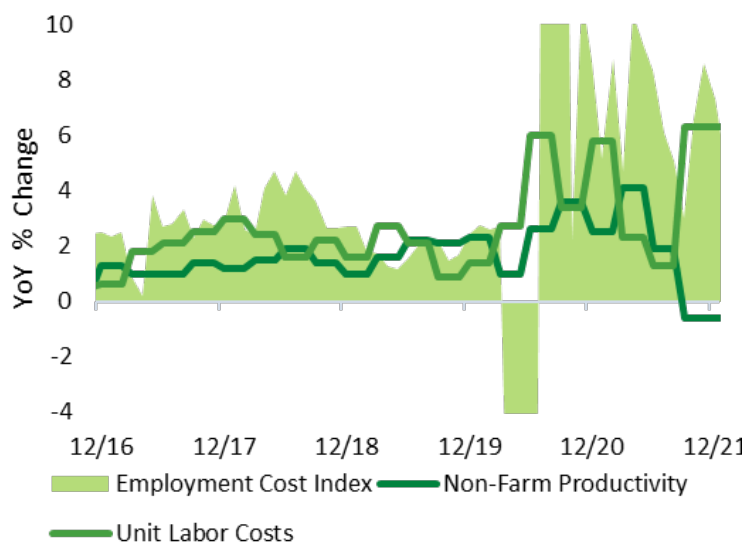
¹ Bloomberg

² FactSet

³ Bloomberg

⁴ October 2021, Bureau of Labor Statistics, Projections overview and highlights 2020-2020

Exhibit 6: US Non-Farm Productivity Annual Change
(10-Year Rolling Average)



Source: Bloomberg

services. In manufacturing, input cost inflation is set to moderate as supply chain disruptions abate, although we think that shipping costs and raw materials expenses will remain elevated. Capex intentions have increased as companies have recognized the need to make supply chains more resilient and add more slack. This is evident in the plans to build semiconductor plants in the US, as buyers focus on meeting their long-term supply chain needs. But all this new investment will eat into corporate profitability and free cash flow.

Services industries could face more pressure from ongoing wage increases, as labor is a much larger cost input for these firms. We think that elevated labor costs could be a headwind for profits for service industries in 2022.

Theme: High Quality Companies Remain the Focus

Given the inflationary pressure on margins, we believe focusing on high quality companies will be

essential to investing in 2022. High quality companies with strong balance sheets and high return on equity (ROE) are in a better position to navigate cost pressures, rising interest rates, and potentially moderating growth.

At the beginning of 2021, the economic recovery was well underway with another round of fiscal stimulus, extremely low interest rates, and improving growth. With that strong macroeconomic backdrop, investors were attracted to riskier names including some lower quality value and small cap names, some SPACs, meme stocks (GME, AMC), and COVID-19 recovery companies. However, in the second half of 2021 as the market realized that some of the inflation pressures were not transitory, monetary policy measures were posed to tighten, and COVID-19 fears resurfaced, the equity markets declined, and investors sold high-flying, unprofitable 2021 winners moving back towards quality (Exhibit 7).

What lies ahead for 2022?

As we enter 2022, we are again amid a market environment marked by fear and volatility due to the rapid spread of the Omicron variant of the virus. Given the uncertainty surrounding the future of COVID-19, we think investors are wise to focus on higher quality names once again with healthy balance sheets, compelling earnings growth, strong management, and a solid business plan.

Exhibit 7: ACWI Factor Performance

	Q4	CY 2021
ACWI	6.7%	18.5%
Value	6.3%	19.6%
Quality	9.2%	22.1%
Momentum	3.5%	8.1%
High Div Yld	6.5%	14.3%
Min Vol	6.3%	13.9%
Multi-Factor	7.3%	18.9%

Source: Morningstar

Theme: The Great Resignation Continues

A trend that emerged in 2021 was “the Great Resignation”, workers who either voluntarily left their jobs or were laid off during the pandemic choosing not to come back to work, or those who elected to switch jobs for higher pay or greater flexibility as the labor market improves. Unemployment has declined significantly from the height of the pandemic, but is still running at 3.9% as of December, which is above the 3.5% seen prior to the initial COVID-19 outbreak in the US. There are many factors impacting this trend: government aid which led to increased savings levels, the shortage of childcare during the pandemic, and general fear of returning to work related to virus transmission. While the bulk of the shortage was evident at the lower end of the pay scale, the most interesting demographic choosing to leave the job market was individuals over 55; it remains to be seen if they will return to the workforce as pandemic savings begin to wane. This phenomenon is leading to our forecast of structurally higher inflation over the next couple of years.

The “Great Resignation” phenomenon is leading to our forecast of structurally higher inflation over the next couple of years.

Exhibit 8: Job Openings and Labor Turnover Survey (JOLTS) Report

	12/31/2021	9/30/2021	6/30/2021	3/31/2021	12/31/2019
Job Openings (,000)	10,562	10,602	10,185	8,288	6,730
Job Openings Rate	6.6%	6.7%	6.5%	5.4%	4.2%
Hire Rate	4.5%	4.4%	4.7%	4.2%	3.9%
Layoff Rate	0.9%	1.0%	0.9%	0.8%	1.4%
Separations Rate	4.2%	4.2%	3.8%	3.8%	3.8%
Quit Rate	3.0%	3.0%	2.7%	2.5%	2.3%

Source: Bloomberg

Theme: Geopolitical Risks Persist

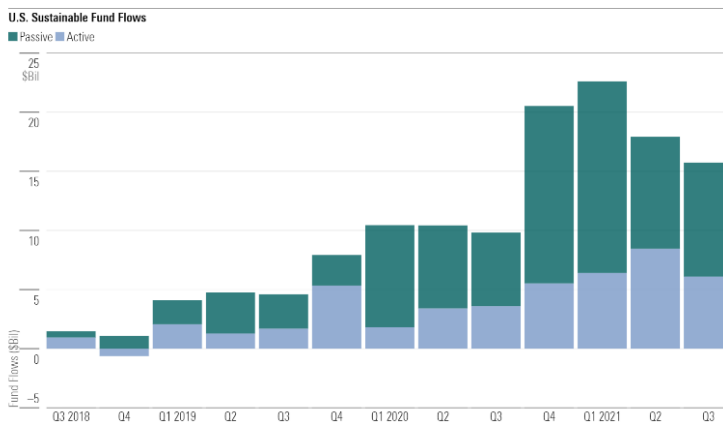
Several geopolitical situations look poised to impact markets in the coming year. First, relations between the US and China remain strained. This has manifested itself in many ways, the most recent of which is the US refusal to send diplomats to the upcoming Beijing Olympics to express concerns about human rights abuses, and the SEC’s move to delist Chinese companies that are not compliant with laws requiring inspection of their auditing processes from US exchanges beginning in 2024. Second, China has become more aggressive towards Taiwan, causing uncertainty over the potential for escalation in the coming year. A potential war with Taiwan could result in economic sanctions for China, which could negatively impact markets, as well as having a potentially outsized impact on

Geopolitical issues collectively could impact markets in the US, Europe, and Asia, with a potentially outsized impact on emerging countries and commodities markets in 2022.

oil prices. Third, Russia has amassed approximately 100,000 troops on the Ukraine border and looks poised to possibly invade. This could also roil oil and gas markets and lead to economic sanctions there. These three issues collectively could impact markets in the US, Europe, and Asia, with a potentially outsized impact on emerging countries and commodities markets. That being said, geopolitical risks are a constant risk for investment markets and broad diversification and a focus on quality stocks can potentially mitigate this risk.

Theme: ESG Investing Mitigates Risk

Exhibit 9: US Sustainable Fund Flows



Source: Morningstar Direct as of September 30, 2021

Environmental, social, or governance (ESG) investing continues to be at the forefront of conversations with managers and many investors. Managers across asset classes are rolling out ESG focused, sustainable, and/or impact investing products at a pace not matched in the past as investor demand for these types of vehicles expands. The market for ESG funds was estimated to be \$17.1 trillion in 2020, according to US SIF. This rapid growth (see Exhibit 9) has led to charges of greenwashing in some cases, but there are a lot of talented managers rolling out solid investment products.

One of the main reasons for this growth, in our view, is the emergence of more measurable data illustrating that ESG investing adds value, in

addition to mitigating risk, than investing without an ESG lens. This is partially due to the emergence of big data, which has facilitated studying these trends. For example, a recent study by JP Morgan⁵ examined the companies that scored in the top 20% of JP Morgan Asset Management ESG scores with the bottom scoring 20% and found that the best scoring companies outperformed the MSCI All-Country World Index (ACWI) by 2.5% annually since 2012, but that the bottom scoring companies underperformed the ACWI by 1.8% annually over the same period. Many studies⁶ have been completed by several research groups and have reached a similar conclusion. We also think that this trend is pushing more companies that did not view their business through an ESG lens to do so, as they, too, are seeing ESG as an alpha generator in addition to its role as a risk mitigator. This is increasing the overall ESG investment universe.

Transition to a low carbon economy

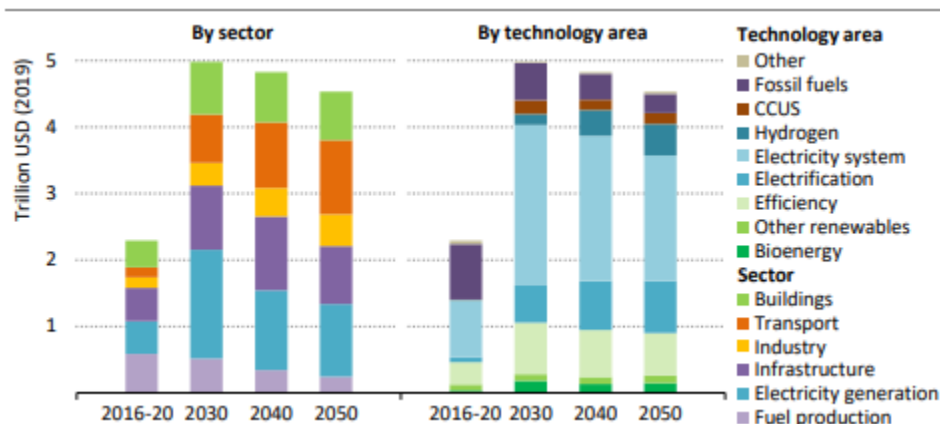
The drive to a low-carbon economy will continue to have a material effect on capital markets and propel continued investment into companies that are materially integrating ESG factors into their business models. For the capital markets, measures to affect climate change can have a direct and indirect effect on gross

⁵ JPMorgan, Doing good and doing well: ESG trade-offs in investing

⁶ Tensie Whelan, Ulrich Atz, Tracy Van Holt and Casey Clark, CFA, ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015 - 2020

domestic product (GDP) and inflation pressures causing investment risks but also opportunities for investment in new sectors and technologies.

Exhibit 10: IEA Annual Average Capital Investment in Net Zero 2050



Source: International Energy Agency

Glasgow Climate Pact called for a reduction in current emissions by 45% by 2030 which is a halving of emissions from current levels⁸. This will accelerate investments in renewables from fossil fuels for energy production and potentially lead to the phasedown and potential phase out of higher polluting fossil fuels such as coal power. In addition, the US and China, the world's two largest economies, announced a joint agreement to work together to do more to cut emissions this decade and will pursue efforts to limit the global average temperature increase to 1.5 degrees C⁹. Climate scientists anticipate major climate disasters if global warming temperatures exceed 1.5 degrees C.

Even before these pledges, we were seeing increased investment moving towards renewable energy. 2021 was a record year for renewable energy with 290 gigawatts of new renewable energy capacity, beating 2020. The International Energy Agency estimates that renewables will account for about 95% of growth in global power generation capacity up to the end of 2026. These investment dollars are not just a result of national pledges, it is a whole economy transition with more than 450 firms with \$120 trillion in assets joining the Glasgow Financial Alliance for Net Zero¹⁰ as well. Investors are also driving demand for the green transition, with global sustainable bonds seeing a record issuance in Jan - Sept 2021, up 57% from the prior year¹¹. As a result, for the first time since the Paris Agreement was signed in 2015, investment banks earned more fees arranging green-related bond sales and loans than they did helping fossil fuel companies raise money¹².

⁷ Impax Asset Management: Insights from COP26

⁸ Impax Asset Management: Insights from COP26

⁹ November 10, 2021, US Department of State - US-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s

¹⁰ Glasgow Financial Alliance for Net Zero

¹¹ Refinitiv

¹² January 6, 2022, Bloomberg ESG Daily: Banks Green Debt Fees Surpass Fossil-Fuel Revenue

We anticipate that the goal of reducing emissions and moving towards a Net Zero economy will support the alternative energy markets as well as create new investment opportunities in companies that focus on products or services that successfully mitigate climate change and help traditional companies, such as utilities, transition away from fossil fuel reliance towards a more regenerative world. Specifically, we see value in companies that focus on energy efficiency and pollution control, clean power and infrastructure, and natural resource efficiency.

Near-Term Sentiment

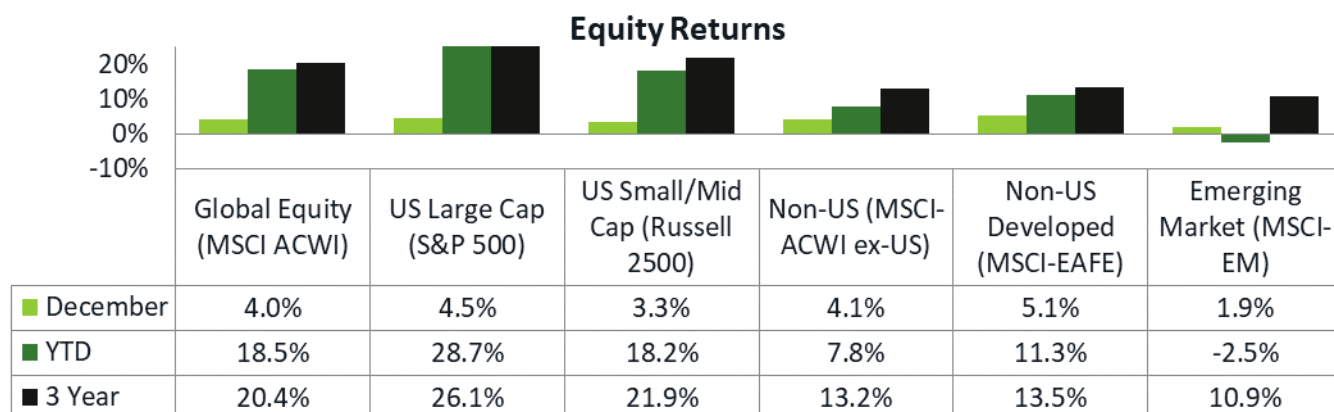
Global Equities Outlook

The global economy's recovery gathered steam in 2021, even with new COVID-19 variants, rising inflation, elevated supply chain issues, and labor constraints. However, individual countries growth trajectories have varied due to differing government COVID-19 responses, vaccination rates, and lockdown protocols. 2021 earnings growth by country shows wide dispersion based on these different responses, although we expect global earnings will grow across the board in 2021 by 49%¹³ amid continued economic recovery supporting growth.

While recent data points indicate a slowing global economic backdrop from the extreme rebound seen in 2021, we still anticipate above average growth in 2022, with OECD global growth forecasts of 4.5%. We anticipate that continued pent-up consumer demand, a substantial amount of liquidity in the system from fiscal and monetary stimulus, and excess savings will drive global growth. Though, unlike most of the 2000s global growth dynamics will differ because developed markets are estimated to grow at comparable rates to historically higher growth in emerging markets, leading us to favor certain regions within global equities.

From a valuation standpoint, although equity valuations remain high on an absolute basis, equities are still extremely attractive relative to traditional fixed income. As a result, our Global Equity sentiment remains **Neutral/Positive** with a continued positive bias to the US and a less favorable near-term outlook for emerging market equities.

Exhibit 11: Global Equity Returns as of December 31, 2021



Source: Morningstar

¹³ Bloomberg

Exhibit 12: Global Economic Indicators as of December 31, 2021

Purchasing Manager's Index (PMI)

	12/31/21	9/30/21	6/30/21	3/31/21	12/31/20	9/30/20	6/30/20	
US Composite	57.0	55.0	63.7	59.7	55.3	54.3	47.9	↑
DM Composite	54.8	53.8	59.3	55.9	52.0	51.9	46.9	↑
EM Composite	53.3	52.3	50.8	52.6	54.1	53.7	49.7	↑

Retail Sales, Annual % Change

	12/31/21	9/30/21	6/30/21	3/31/21	12/31/20	9/30/20	6/30/20	
US	16.9	14.2	18.9	29.7	2.3	5.9	2.0	↑
Eurozone	7.8	2.8	5.6	13.7	1.5	2.5	1.7	↑
China	1.7	4.4	12.1	34.2	4.6	3.3	-1.8	↓

Consumer Confidence

	12/31/21	9/30/21	6/30/21	3/31/21	12/31/20	9/30/20	6/30/20	
US	115.8	109.8	128.9	114.9	87.1	101.3	98.3	↑
Eurozone	-8.3	-4.0	-3.3	-10.8	-13.8	-13.6	-14.6	↓
China	119.5	121.2	122.8	122.2	122.1	120.5	112.6	↓

Unemployment Rate

	12/31/21	9/30/21	6/30/21	3/31/21	12/31/20	9/30/20	6/30/20	
US	3.9	4.7	5.9	6.0	6.7	7.9	11.0	↓
Eurozone	7.2	7.4	7.8	8.0	8.1	8.6	8.0	↓
China	3.9	3.9	3.9	3.9	4.2	4.2	3.8	=

US Financial Conditions

	12/31/21	9/30/21	6/30/21	3/31/21	12/31/20	9/30/20	6/30/20	
US Financial Conditions	1.1	0.9	1.3	0.9	0.6	0.1	-0.5	↑

Source: Bloomberg, Markit, US Census Bureau, Eurostat, National Bureau of Statistics China, US Conference Board, European Commission, and US Bureau of Labor

US Equity

Although the Omicron variant has added a new wrinkle to the 2022 outlook, the US should still deliver above-average real economic growth in 2022. With the massive fiscal and monetary stimulus, the US government and the Fed did their job in filling the economic gap created by the pandemic. With the Fed moving toward a less accommodative, but still loose, monetary policy and with less accommodative fiscal policy pre-pandemic in the rear-view mirror, the hope is for a more normalized US growth outlook over the next several years, balanced between strong consumer spending, and a resilient corporate America.

Exhibit 13: US Personal Savings (US \$ Billion)

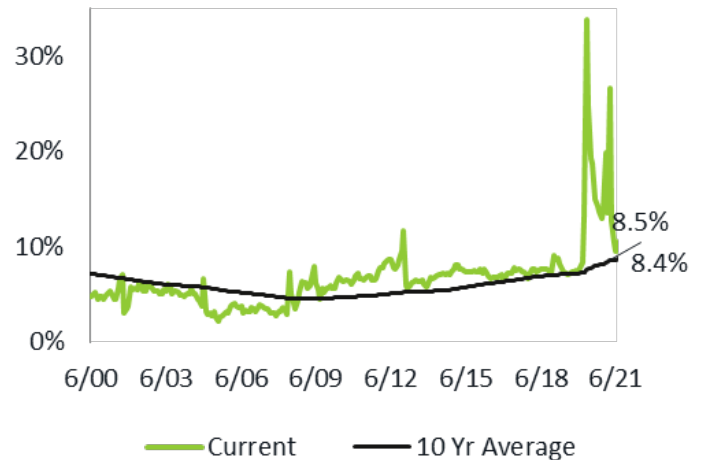
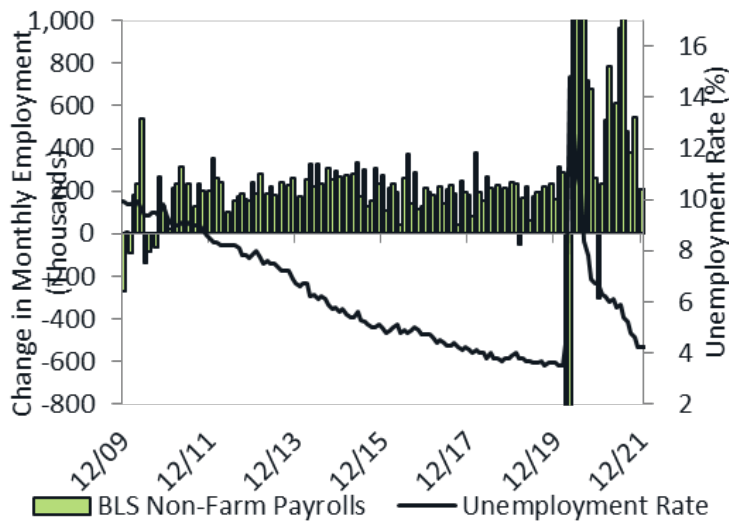


Exhibit 14: US Monthly Payroll Change & Unemployment Rate



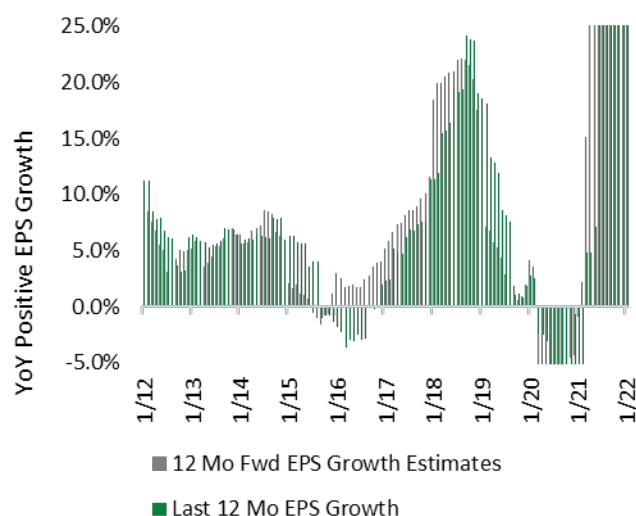
The U.S. consumer is healthy

Although inflation remains top-of-mind, most economic indicators are pointing in the right direction to support strong consumer spending in 2022. Savings rates have normalized exiting 2021 as fiscal stimulus winds down. But the unemployment rate continues to head lower after spiking to the mid-teens in April 2020, (see Exhibit 14). As noted earlier, the labor market is tight which should drive higher wages across the economy. Although wealth inequality remains an issue, recent data shows that wage growth has picked up for workers with lower education levels (see Exhibit 16). Of course, real wage growth is what matters, and lower income consumers are hurt more by high inflation. It is likely that higher wages and less stimulus will be enough to encourage workers to return in 2022.

Along with a strong labor market, record level household net worth aided by a strong housing and stock market support a healthy spending environment. Spending on goods is likely to moderate from the elevated levels reported the last few years which has led to inflation in many categories. Assuming a more normalized post COVID-19 environment in 2022, a demand shift from goods toward services would improve the inflation outlook.

U.S. corporations balancing solid demand with labor and product cost volatility

Exhibit 15: S&P 500 Trailing and Forward Estimated EPS



Source: Bloomberg

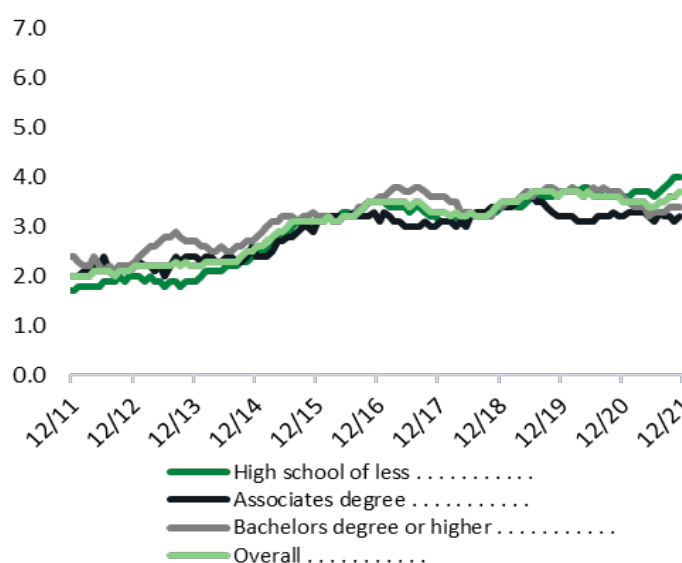
remains high, new order growth is moderating. But backlogs remain too high so a slower demand environment will be viewed favorably as backlog declines and inflation moderates. As we move past COVID-19, domestic services-related businesses will see increasing revenues although labor remains the wildcard for margins. We see this as a particular challenge for small businesses, and it is unclear whether those services companies can grow profits at a rate comparable to top line revenue growth if wage inflation is a cost headwind.

Overall, corporate balance sheets remain healthy and capex intentions have improved over the course of the year as companies need to re-invest in technology-related productivity programs as well as growth initiatives. We favor quality companies that are resilient, have stronger balance sheets, higher return on equity, and able to invest in innovative approaches to increase productivity.

In the aggregate, Corporate America has done a stellar job growing margins and earnings given the labor headwinds in addition to dealing with supply chain shortages and input cost inflation. Consensus estimates are for S&P 500 net profit margins to reach 12.6% in 2021 vs 10% in 2020 and margins to climb 0.2% to 12.8%¹⁴. Corporate profit growth is moderating versus the easier year-over-year comparisons brought about from the first half 2020 COVID-19 lockdown but still are quite strong. Q3 profits grew 20% compared to 45% growth in Q2¹⁵.

For manufacturing companies, 2022 will be a year of catch-up, as companies spent 2021 chasing demand after a stronger than expected recovery led to parts shortages and supply chain bottlenecks. Recent manufacturing data indicate that, although demand

Exhibit 16: US Wage Growth by Education



Source: Federal Reserve of Atlanta

¹⁴ FactSet

¹⁵ Bureau of Economic Analysis

Continue to overweight US equities relative to other markets

Although absolute valuations are high in the US, near-term US fundamentals are more favorable versus international equities. Consensus estimates are for S&P 500 earnings to grow 8.2%¹⁶ in 2022 driven by continued recovery in cyclical sectors such as industrials, consumer discretionary, energy, and technology. Inflation and related supply chain bottlenecks remain a wildcard, but, thus far, corporations have been able to effectively manage the situation and it appears the worst may be behind them. Excess consumer savings, healthy balances, and an improving labor market should support consumer spending and economic growth in the US.

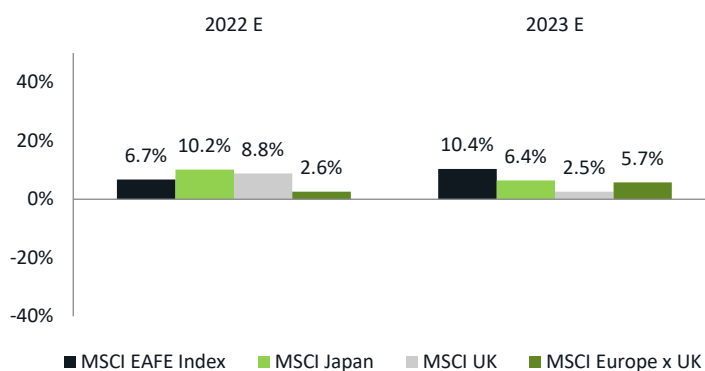
The 2021 US stock market came in like a lion with animal spirits elevated which drove wild speculation in meme stocks, SPACs, and small cap value stocks. The market ended 2021 like a lamb with investors rotating into large cap technology and defensive equities as fiscal policy moderates.

In fact, despite the S&P 500 climbing 29% in 2021, and closing the year just off its all-time high, the average Russell 3000 stock declined 36% from its all-time high¹⁷. A more normalized economic environment with less COVID-19 restrictions could lead to reduced intra-year equity factor (e.g., growth/value, small/large) volatility, despite the rising interest rate environment. With the weight of the top ten stocks in the S&P 500 reaching an all-time high of over 30% of the index, there is a case to be made for broader stock participation in driving near-term equity returns. Disciplined active equity managers with a longer-term lens focused on sustainable, resilient companies with solid underlying fundamentals should benefit under this scenario.

Non-US Developed Equity

Similar to the US, Non-US developed markets earnings came storming back in 2021 from depressed 2020 levels. Each region has been negatively impacted to various degrees based on the timing of COVID-19 related lockdowns during the year as well as the timing of stimulus programs. As a result, Europe and the U.K. are further along on their recovery paths than Japan. Europe has moved away from austerity and is moving ahead with a growth agenda that incentivizes countries to invest in green transition and digital transformation projects. Although Japan's recovery has been more muted due to a later lockdown removal, 2022 growth should re-accelerate driven by a rebound in domestic services. Although it is encouraging that these regions have recognized the need to be more aggressive in promoting economic expansion, demographics and other issues will likely keep growth rates

Exhibit 17: Foreign Developed Consensus EPS Growth



Source: Bloomberg

¹⁶ FactSet

¹⁷ Compound Advisors, 2021 the year in charts

below the US. So, despite valuations that remain attractive, we continue remain **Neutral** and prefer the US equity market.

Although Europe has been aggressive in its COVID-19 policy response, that response was smaller than the response in the US and more focused on preserving employment rather than subsidizing individuals. As a result, labor participation rates are above the US which has resulted in lower wage inflation as wages do not need to rise to attract people back to work. However, producer price inflation is a headwind and is more prevalent in manufacturing-based economies like Germany, where recent manufacturing data points have softened versus early 2021 (see Exhibit 12: Global Economic Indicators - PMI). The largest European countries have higher vaccination rates than the US which reduces lockdown risk to some extent. Exploding natural gas prices in the region are a headwind to both the consumer and industrial companies, as reduced gas flows from Russia and less supply from other energy sources has resulted in abnormally low gas storage levels during the winter months. Combined with the ECB entering its own tapering program in 2022, economic growth will moderate but will likely remain above long-term trends.

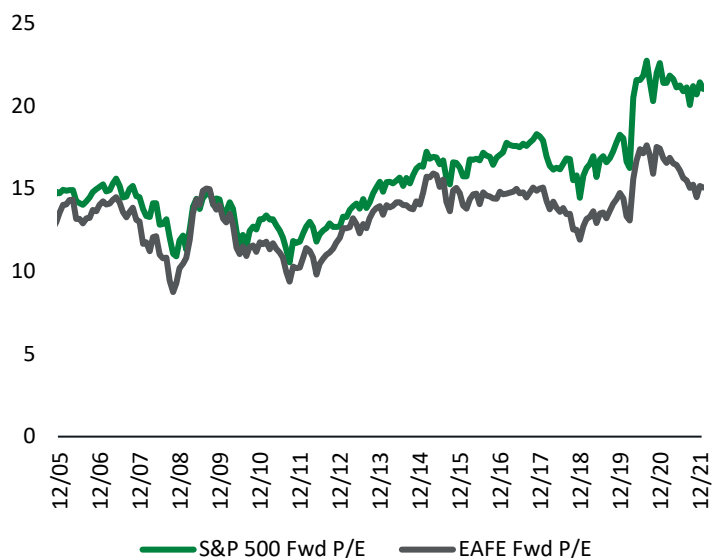
In the U.K., high vaccination rates and a mid-year re-opening of the economy has bolstered the consumer outlook. The U.K. consumer is sitting on excess savings that will aid 2022 economic growth. A miniscule 0.15% increase in interest rates by the Bank of England in December to 0.25% is unlikely to impact the U.K. recovery.

Economic recovery in Japan has lagged other developed economies as the Japanese COVID-19 lockdown was not lifted until the end of September. However, with domestic activity resuming in Q4, recent economic data is encouraging as services growth has picked up which bodes well for 2022. In fact, Japan is one of the few developed countries where GDP growth is set to accelerate, with current forecasts indicating 3%+ growth vs mid -2% in 2021. Although producer price inflation has increased like the rest of the world, total inflation is not a concern as wage growth continues to lag. Although the new Japanese prime minister is pushing corporations to raise pay as part of his growth agenda, years of deflation will keep wages sticky for the time being.

Valuations remain attractive but the U.S. remains more attractive from a growth outlook

Non-US developed market valuations remain well below US equity valuations on an absolute basis. The US market has significantly outperformed over the last decade which begs the question whether it is time for mean reversion. We are a bit torn as both Europe and Japan seem to be taking a more aggressive approach in improving their respective growth potential. However, secular headwinds remain. The small and mid-cap segment of these equity markets are fertile hunting grounds for generating outperformance and this is a

Exhibit 18: S&P 500 & EAFE Forward Price to Earnings



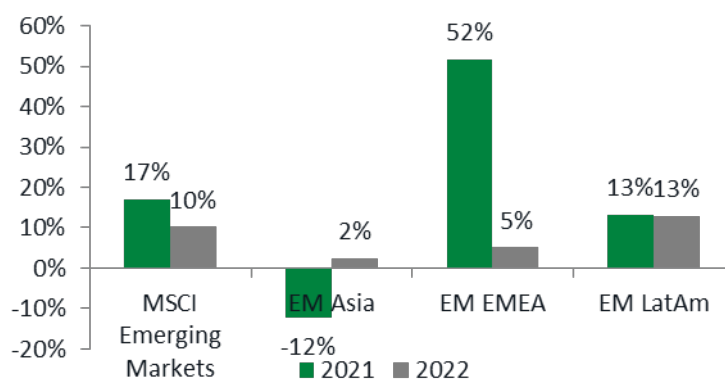
Source: Bloomberg

segment that is more appealing, as active managers with local knowledge can identify unique, competitively advantaged smaller companies at attractive valuations.

Emerging markets equity

EM equities significantly underperformed developed markets in 2021, primarily due to a self-inflicted second half economic slowdown in China. Outside China, most emerging market countries are behind developed markets in their respective economic recoveries. This is due to a combination of lower vaccination rates, less fiscal response, and higher inflation. Although recent policy loosening in China may mean economic growth has troughed, it is unlikely that 2022 will slow a sharp acceleration. Uncharacteristically, it is likely that 2022 EM GDP growth will lag developed markets driven by the slower China growth as well as Latin America. Although 2022 will see incremental improvement and equity valuations appear reasonable, the overall EM risk profile appears more elevated than normal relative to developed markets. As a result, we are lowering our EM equity sentiment to **Neutral** from Neutral/Positive.

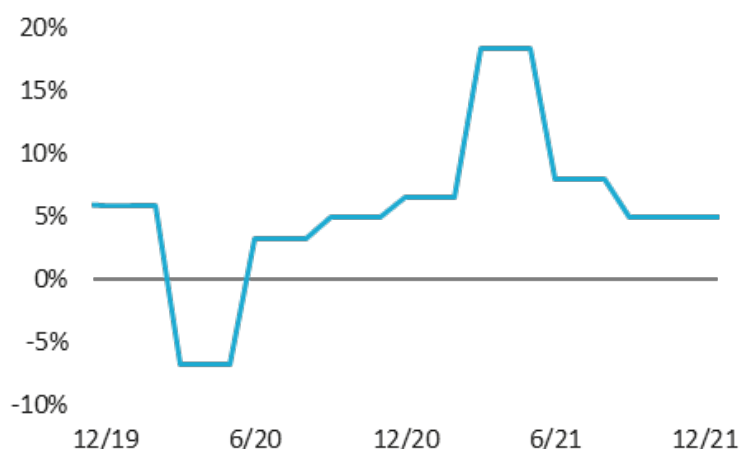
Exhibit 19: Consensus EM Earnings Growth by Region



Source: Bloomberg

China's mid-year surprise

Exhibit 20: China GDP y/y% Change



Source: Bloomberg, Natural Bureau of Statistics of China

The biggest incremental change in emerging markets during 2021 occurred in China due to broad tightening across its regulatory, monetary, and fiscal policies that led to weak stock performance. From a regulatory standpoint, large Chinese technology companies were under the microscope as the government felt these businesses had become too influential. Mid-year, China announced its commitment to 'common prosperity' to increase equality for its citizens which further negatively impacted these technology companies as well as important stock market sectors such as education. As one of the few countries to deliver economic growth in 2020, China became one of the first to tighten monetary and fiscal policy in early 2021 with an emphasis on slowing down infrastructure and property spending. This policy shift put the brakes on

domestic economic expansion and led to bankruptcy concerns for heavily indebted companies in these sectors. Most recently, the Chinese government cut the reserve requirement ratios, issued local bonds to drive infrastructure spend, and eased restrictions of property purchase to spur growth in the second half of 2021. As a result, China's GDP came in at 4.0% y/y versus estimates of 3.6%. These actions indicate that a policy easing cycle may be ahead which could re-accelerate growth in 2022 barring any further COVID-19 lockdowns. Current forecasts for China GDP growth is 5.2%, slightly above the 4.0% in Q4 2021 but well below the average of 6.93% over the last 10 years¹⁸.

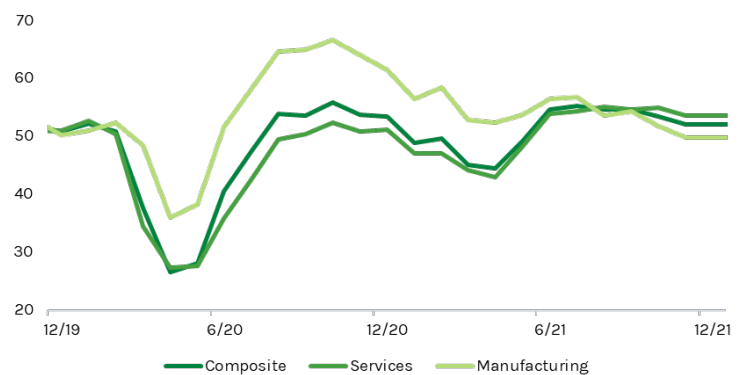
EM Asia ex-China pockets of opportunity

India's economy was hit especially hard by COVID-19, with a second lockdown in Spring 2021 temporarily halting the economic recovery. However, as vaccination rates improve and the government is committed to a strong fiscal response, the Indian economy should grow high single digits in 2022. With a vaccination rate above 80%, South Korea is positioned to deliver healthy domestic growth with an improving service economy to match its already strong export economy tied to semiconductor manufacturing. Taiwan also benefits from its best-in-class semiconductor industry, although risk around China remains top-of-mind. As many Asian countries are heavily reliant on trade with China, its slowdown will present an incremental risk.

Latin America headwinds remain

The economic backdrop in LatAm deteriorated over the course of 2021 as the region has experienced higher inflation than the rest of the world. As a result, interest rates have increased, especially in Brazil where the Selic target rates as of 12/31/21 were 9.25% versus 2.00% earlier at the beginning of 2021. This has held back a consumer recovery that had already been hampered by low vaccination rates. A strong demand environment for commodity exports has been negatively impacted by supply bottlenecks. Recent manufacturing data indicates a slowing environment, with Brazil one of the few countries with a contracting manufacturing backdrop as of December (see Exhibit 21). With these headwinds, the OECD projects Brazil's 2022 GDP growth to only be in the low-single digit range.

Exhibit 21: Brazil Purchasing Managers Index (PMI)



Source: Bloomberg, Markit

Slower growth and increased risks outweigh attractive valuations

Although equity valuations are not demanding, the fundamental deterioration and reduced growth rates in important emerging market countries make us less excited in the near-term. However, with wide divergence across EM countries, active managers that focus on global leaders not necessarily tied to their respective domestic economies have opportunities to add alpha.

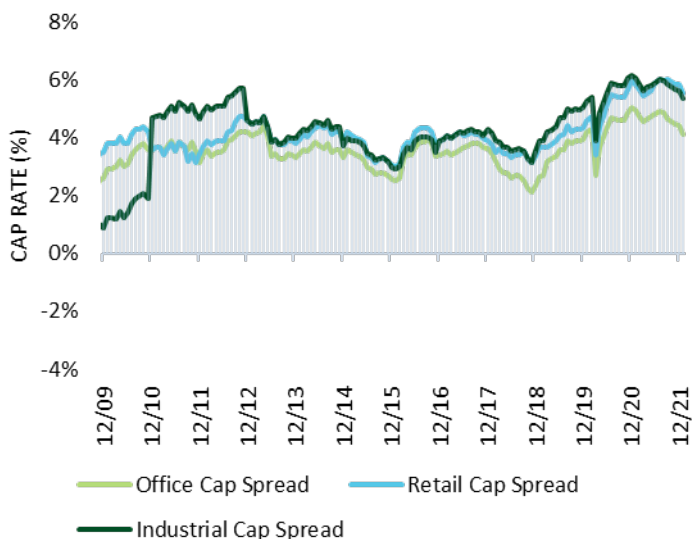
¹⁸ Bloomberg

Global Real Estate Outlook

We are upgrading our sentiment on real estate to **Neutral** from Neutral / Negative on the back of a strong residential, specialty, and industrial market that we think will continue in 2022, given real estate's near-term attractiveness as an inflation hedge in portfolios, as we think inflation could remain elevated in the near-term. While valuations have increased, we are not overly concerned as the growth rates in leases are matching valuation growth and vacancy rates in the industrial, multifamily, and specialty segments of the market remain low. If lease rates grow that will support current valuations.

Investing in real estate also offers portfolio diversification benefits, and typically has the added attraction of a solid current yield, both on the REIT and private real estate investment sides. In addition, private real estate funds often offer the benefit of better liquidity than other private investments, as they can be structured as interval funds offering quarterly liquidity. We think these factors make real estate a suitable alternative to low-yielding fixed income opportunities in the current market environment.

Exhibit 22: US Commercial Real Estate Cap Rates

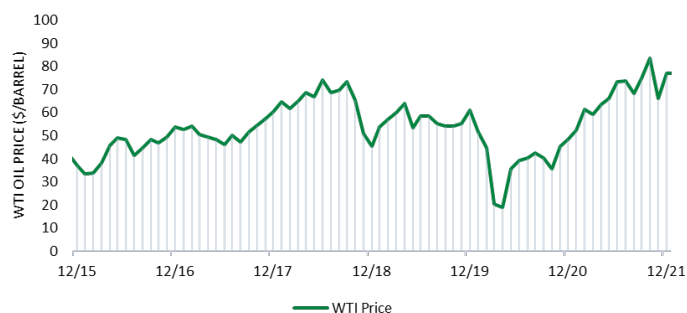


Source: Bloomberg

That said, the pandemic has created significant uncertainty around investments in the office, traditional retail, and hotel sectors, all of which have faced headwinds. While office and hotel have improved, evidenced by the declining capitalization (cap) rates, as people have started to return to the office and to travel, we think these are likely to remain challenged in 2022 as new variants of the COVID-19 virus present themselves, which will encourage the remote work trend and will still limit travel. Similarly, the ongoing trend towards online shopping could continue to limit the upside for the traditional retail sector, although pockets of opportunity in areas less impacted by the pandemic (ex: grocery, luxury malls) remain. Our concerns related to these sectors limit us from becoming more positive on real estate as a sector at the present time.

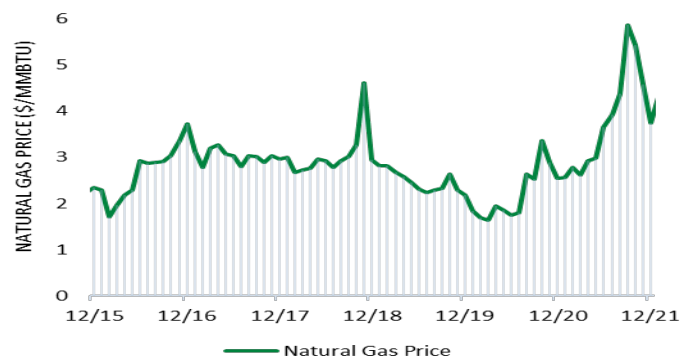
Commodities Outlook

Exhibit 23: WTI Crude Oil Price (US \$/Barrel)



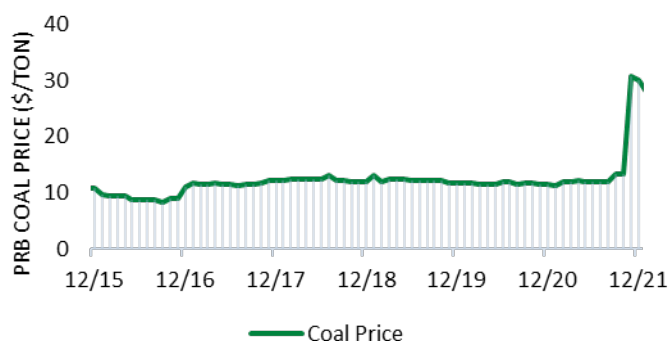
Source: Bloomberg

Exhibit 24: Natural Gas Price (US \$/MMBTU)



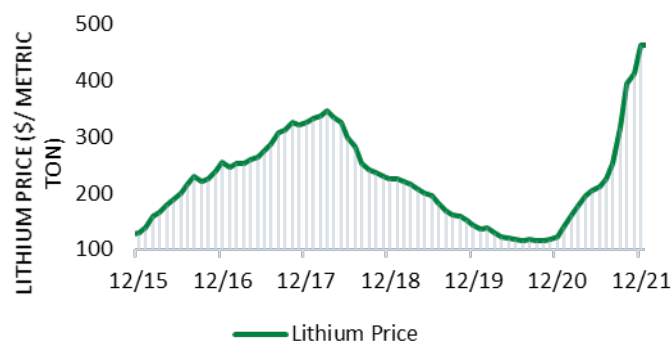
Source: Bloomberg

Exhibit 25: Powder River Basin Coal (US \$/Ton)



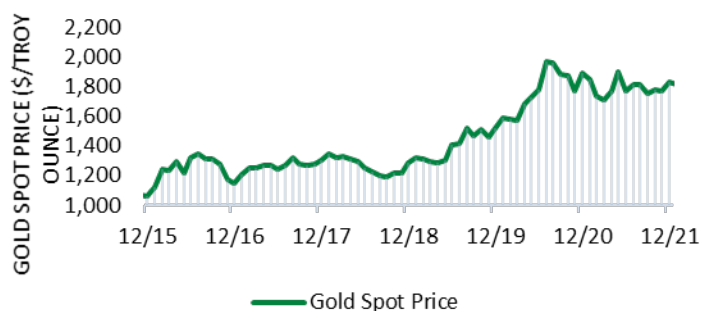
Source: Bloomberg

Exhibit 26: Lithium (US \$/Metric Ton)



Source: Bloomberg

Exhibit 27: Gold Spot Price (US \$/Troy Ounce)



Source: Bloomberg

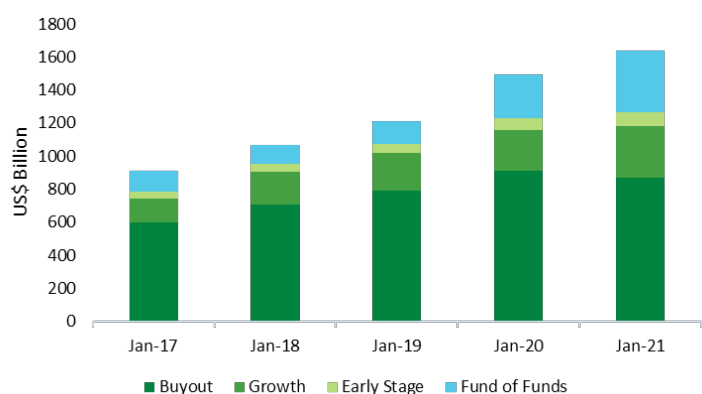
We are maintaining our **Negative** sentiment on commodities given our view that there is limited upside for the asset class overall, despite its potential role as an inflation hedge in the current market environment. This remains one of the most diversified segments in the market, encompassing energy, agriculture, metals, and minerals, with the bulk of many commodity indices being comprised of energy related names, most notably oil and gas. Gold which has typically served as an inflation hedge and a safe haven during volatile markets, declined -5% in 2021, despite elevated inflation and volatility levels. Oil prices seem to have peaked above \$80/barrel in October 2021 and have since retreated on concerns over the Omicron variant and the potential for increased travel restrictions. However, natural gas prices have fallen 33% since their peak in September (but was still up 46% in 2021) on the back of warmer weather forecasts that imply less of a need for heating. Further, our longer-term view on oil and gas is negative given our belief that renewable energy will account for a larger percentage of the energy markets post a transition to a low-carbon economy (See: Theme: ESG Investing Mitigates Risk). Given the dominant role that energy plays in most indices, we are estimating lower returns for the broader commodities sector overall.

Demographics and geopolitics could also have an outsized influence on commodities in 2022. Growth in China, which has been a significant source of demand for a wide range of commodities, has slowed. 2022 consensus estimates for GDP growth in China is 5.2% versus 2019 growth of 5.8% (we use 2019 numbers to control for the pandemic impact on GDP). This slowdown could be offset by possible geopolitical conflicts in Taiwan and Ukraine, which could raise the price for oil.

There are, however, some bright spots where investors could choose to invest within the commodity markets over the short-term. Lithium and coal, for example, are both in short supply and thus could see prices rise in the near-term, given the sustained push for lithium-ion batteries and the needs of existing utilities that have not yet fully converted to renewable energy sources. These pockets of opportunity are not enough to warrant an upgrade of the overall commodities sector, particularly given the recent national pledges to accelerate goals to move to Net Zero and phasedown and potentially phase out of higher polluting fossil fuels such as coal power.

Private Equity Outlook

Exhibit 28: Private Equity Dry Powder



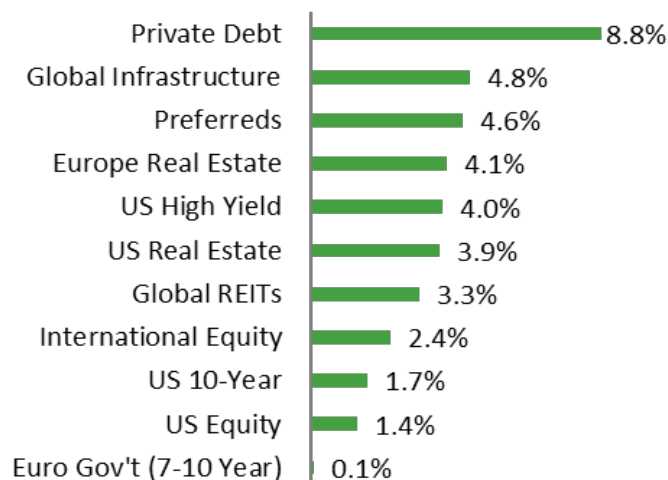
Source: Preqin

We are maintaining our **Neutral/Positive** sentiment on private equity, which is in line with our sentiment for the public equity markets. The private equity market has expanded, increasing the opportunity set of attractive strategies for investors. As a result, unprecedented amounts of capital have flowed into the private equity segment as investors look to enhance total portfolio returns on the back of elevated public equity valuations and low public fixed income yields. As of October 2021, there was \$920 billion in dry powder sitting on the private equity sidelines, which was an all-time high, and deal volume was

up 48% on a YTD basis¹⁹. Investors allocated 27% of their portfolios to private equity in 2021, up from 26% in 2019 and 2020 and 18%²⁰ in 2018.

Investors seem willing to tolerate the reduced liquidity associated with private equity given the opportunity for return enhancement and the chance to access unique investments that are not found in the public markets. Further, the illiquid nature of private equity investments means they are valued less often, thus reducing the volatility when compared to public market investments, although we concede that the illiquidity also detracts from private equity's attractiveness. *So why are we not more positive on this asset segment?* Given the additional capital flowing into the market, we are somewhat concerned that competition for deals could be increasing and with that, entry valuations could also rise, thereby pressuring the ultimate investment return.

Exhibit 29: Asset Class Yields

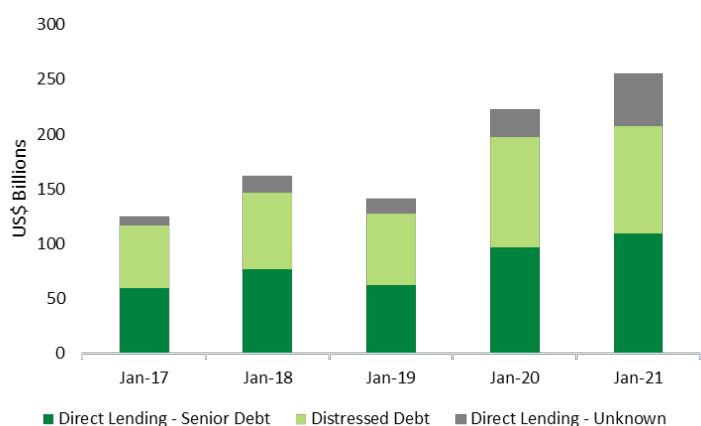


Source: J.P. Morgan Asset Management

Private Debt Outlook

Our near-term sentiment on private debt remains **Neutral / Positive**, which is more positive than our public fixed income sentiment of Negative and in line with our sentiment for private equity. As public fixed income yields remain low, investors have looked to private debt markets to augment their return using an asset offering current yield and, in some cases, quarterly liquidity, which can be more attractive than the private equity profile. Private debt investment opportunities have expanded over the past year as companies, notably those in the middle market, continued to find private markets more willing and able than traditional banking channels to provide debt capital. Direct lending remains the most popular form of private debt, and at the end of 2020, the direct lending market had reached \$412 billion with nearly \$150 billion in dry powder available.

Exhibit 30: Private Debt Dry Powder



Source: S&P Global

¹⁹ PWC

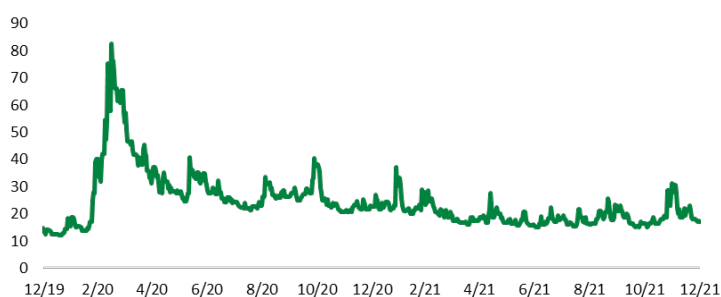
²⁰ Forbes

credit and liquidity risk and provide increased diversification and return potential. Please see our [Private Debt whitepaper](#) for more information.

Hedge Fund Strategies Outlook

We maintain our **Neutral** sentiment on hedge fund strategies, consistent with our view in January 2021. Volatility remains elevated when compared to pre-pandemic levels, with the VIX Volatility Index currently at 17 as of yearend 2021 compared to 14 in February 2020, an increase of 21%. This environment typically is positive for hedge funds, as the volatility creates opportunities for alpha generation given increased levels of asset dispersion.

Exhibit 31: CBOE Volatility Index (VIX)



Source: Bloomberg

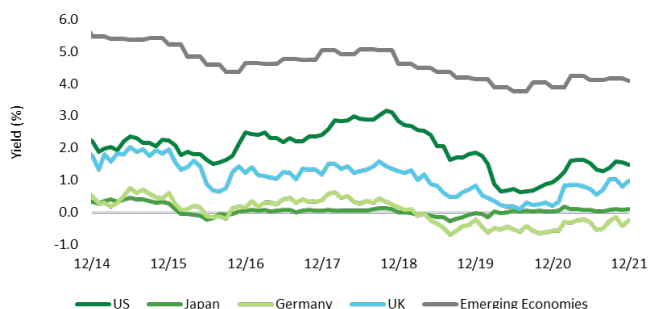
Returns in this asset segment have been solid recently: the HFRI Hedge FoF Index is up 6.53% CY21, while the HFRI Equity Hedged Index has increased 11.96% over the same period. Hedge funds also provide a valuable source of portfolio diversification and potential downside protection. While volatility in the equity markets looks poised to continue in the near-term, which should provide a continued strong environment for hedge funds, the high fees associated with many of these strategies keeps us from becoming more positive.

Global Fixed Income Outlook

Yields and Real Return Expectations

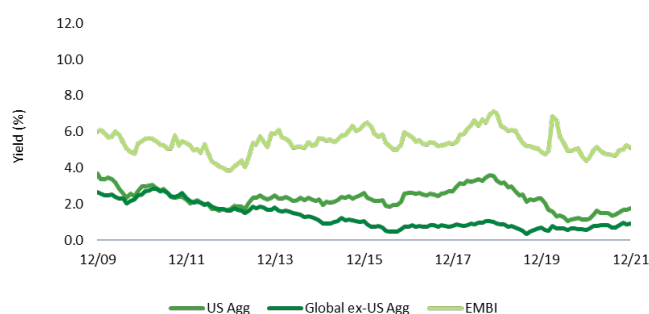
On a global basis, yields have risen year-to-date in 2021 alongside an improving global vaccine effort and as more global economies reopened. While the upward path has been detrimental to fixed income total returns, a now steeper US yield curve offers more attractive reinvestment rates and the opportunity to earn roll-down returns. US yields continue to look the most attractive among those of developed markets. While heightened inflation is challenging realized real returns, this may be limited to the short-term as inflationary pressures

Exhibit 32: Select 10 Year Sovereign Yields



Source: Bloomberg

Exhibit 33: US Bond Yields vs Foreign Yields



Source: Bloomberg

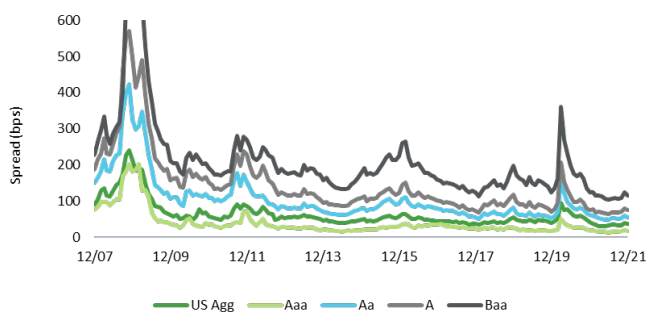
abate in 2022, as the Fed predicts. Lower quality

segments of the fixed income market and riskier regions offer higher relative yields, but associated higher risks remain.

Credit Spread Opportunity and Risk

Most major credit segments have seen spread compression year-to-date 2021, and some segments have now matched (or exceeded) their all-time lows in spread levels. Fundamentals of US corporate balance sheets remain positive, and both realized and expected default rates are remarkably low. While scenarios resulting in spread widening are not abundant, it remains hard to argue for even tighter spreads in areas that are nearly priced to perfection. Active managers with strong credit research and an emphasis on quality continue to represent the best exposures to credit-oriented allocations.

Exhibit 34: US Investment Grade Corporate (OAS)



Source: Bloomberg

Exhibit 35: US High Yield Corporate Spreads (OAS)

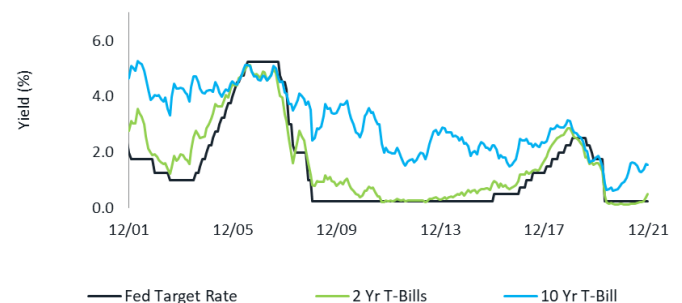


Source: Bloomberg

Short-Term Bond

Short-term rates have remained low considering the Fed's anchoring of policy rates at zero. A steepening of the US yield curve has reduced the relative attractiveness of short-term bonds keeping our sentiment at **Neutral**. But the trend toward higher Treasury rates still gives short-term securities an advantage from a duration perspective. Short-term bond funds should be better suited to weather rising rates with a lower duration and faster reinvestment at higher rates. While the short-term bond segment does not offer compelling total return potential, we continue to believe low interest rate sensitivity and overall safety may benefit diversified portfolios.

Exhibit 36: Fed Funds Rate and 2&10 Year T-Bill



Source: Bloomberg

US Core Bond

Investment grade credit spreads remain near historically low tightness as the pandemic recovery gained traction. Corporations have taken advantage of high demand and low market rates to either refinance existing debt at more favorable terms, or issue additional debt for a variety of strategic reasons. Corporate balance sheets are healthy due to lower debt service and rebounding earnings. However, this wave of debt

Exhibit 37: Term Premium US Agg over 1-5 Year Gov/Credit



Source: Bloomberg

issuance has resulted in extended maturity profiles across corporate bonds. While corporate debt yields still offer a premium over governments bonds, that premium has compressed during 2021. Duration risk abounds within government and corporate bonds and represents an elevated risk given the Fed's intention of increasing policy rates during 2022. In an environment featuring low absolute yields and exceptionally low credit spreads over Treasury debt, duration is positioned to have a greater potential impact on total returns from fixed income exposures. We are **Negative** on traditional US core bond exposure, in favor of shorter duration and allocation opportunities elsewhere among global fixed income.

US Core Plus Bond

Spreads on nearly all investment grade and high yield corporate credit securities have recovered to historically tight levels. US high yield continues to offer an attractive profile of lower structural duration and higher relative yields despite tight spreads levels. Floating rate bond opportunities also remain attractive given the negligible duration risk and the positive performance during rising interest rate environments. Positive economic and corporate fundamentals lead us to remain **Neutral/Positive** in our core plus sentiment. We continue to prefer managers with flexibility in allocations and expertise in evaluating the relative opportunity set given the dynamic market environment.

Non-US Developed Bond

International yields continue to be extremely low and negative within many short and intermediate parts of the curve. As the pandemic has progressed, foreign central banks have become less in-sync in their approaches to phasing-out or removing accommodation, and similarly less in-sync regarding the movement of policy interest rates. Pre-pandemic, most central banks had explicitly tied monetary policy to inflation targets which remained out of reach. Now, the massive stimulus programs introduced during the pandemic will need to be phased out, giving the market a looming potential for taper tantrum. Most recently, the ECB's December meeting indicated unchanged policy rates through 2022 and a maintenance of PEPP purchases into 1Q of 2022. We expect central bank policy rates and foreign developed bond yields to remain low to negative for the near future leading us to maintain our **Negative** sentiment. We expect total returns from foreign developed fixed income investments to be low (or negative) on both a relative and an absolute basis, as well as on a real return basis.

Emerging Market Bond

Emerging Market debt saw substantial spread widening during the onset of the COVID-19 pandemic and was among the last credit segments to see spread and price recovery over subsequent months. As a number of emerging economies struggle with new COVID-19 variants, emerging market debt spreads have widened in 2021 and are above their post-Global Financial Crisis averages. Yields of debt issues by companies and

governments across the emerging economies are also below their long-term averages. Risk in the emerging market debt segment is highly idiosyncratic and while a strong active manager can find compelling opportunities, the overall opportunity set remains **Neutral**. We prefer to delegate the pursuit of emerging market debt opportunities to those managers that have flexibility in portfolio allocations.

Long-Term Forecast

Global Equity Forecast

Across global equities, Syntrinsic has modestly decreased our equity projections for Non-US Large Cap and Emerging Markets Equity from the 2021 forecast. Lower projections for growth and dividend yields in those regions are the primary reason for lower returns.

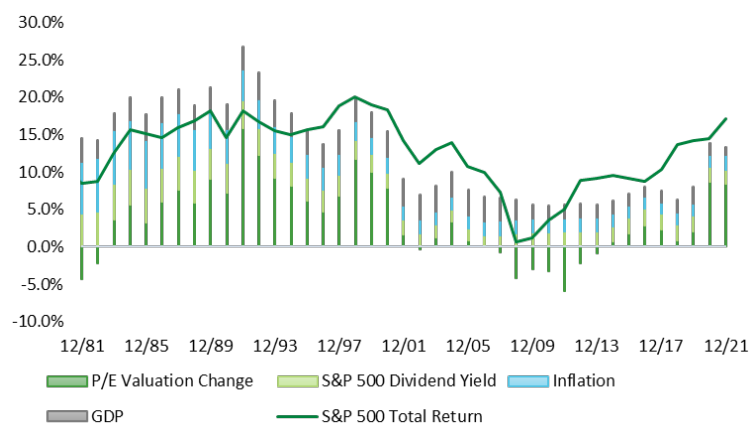
Exhibit 38: Syntrinsic Global Equity Forecast

Asset Class	Index	2022 Ten-Year Forecast	2021 Ten-Year Forecast	Change
Global Equity	MSCI ACWI	6.30%	6.35%	-0.05%
US Large Cap	S&P 500	5.90%	5.80%	0.10%
US SMID Cap	Russell 2500	6.25%	6.20%	0.05%
Non-US Dev Large Cap	MSCI EAFE	6.05%	6.15%	-0.10%
Non-US SMID Cap	MSCI ACWI ex-US SMID	7.60%	7.25%	0.35%
Emerging Markets Equity	MSCI EM	8.65%	9.20%	-0.55%

Forecasting Global Equities



Exhibit 39: US Equity Forecast versus Actual - 10 Year Rolling Average Back test



Source: Bloomberg

Syntrinsic's public market large-cap equity forecasts are based on expectations for real economic growth, inflation, and yield, with adjustments made for trade and market capitalization.

Our research and experience indicate that these factors have been highly correlated to actual returns, particularly in US equity markets. Exhibit 39 illustrates how the growth of US Gross Domestic Product, plus inflation, plus the dividend yield of the US equity market have trended on a rolling ten-year basis. The solid light green line indicates the annual total return of the Standard & Poor's 500, a reliable proxy for the US large cap equity market.

As our analysis indicates, cyclical factors such as changes in price-to-earnings (P/E) ratio can influence returns over long sweeps of time. Given that such factors can be much more difficult to anticipate, we account for such trends in our near-term (three-year) sentiment.

Forecasting real growth in Gross Domestic Product (GDP)

Exhibit 40: Ten-Year Real Economic Growth

Region	2022	2021	Change
	Ten-Year Forecast	Ten-Year Forecast	
United States	1.71%	1.62%	0.09%
Non-US Developed	0.99%	1.01%	-0.02%
Emerging Markets	3.23%	3.82%	-0.59%

Growth in Gross Domestic Product (GDP) should manifest in the public equity markets as companies derive additional earnings, buy materials, make capital investments, and pay employees, contractors, and vendors.

Syntrinsic takes a two-pronged approach to forecasting real growth in GDP. We rely, in part, on forecasts from key governmental and quasi-governmental sources such as the International

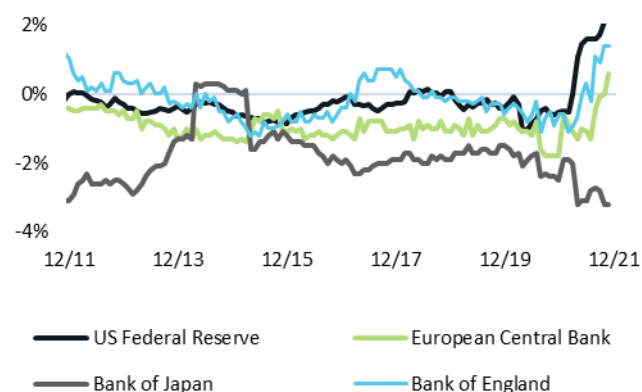
Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), and the US Congressional Budget Office (CBO). In addition to these forecasts, we incorporate Bloomberg consensus estimates into our analysis. The Bloomberg consensus estimates are timely, incorporate a diverse set of assumptions and expectations, and provide complimentary insights. We have used this data to check our internal research efforts. After careful review, we use the Bloomberg Consensus estimates to establish a three-year GDP growth picture, then incorporate our previous estimates for long-term growth and the shape of the recovery to develop a ten-year growth forecast.

Forecasting inflation

Syntrinsic relies upon global central bank target rates of inflation as a starting point for our inflation assumptions, as do many other analysts. Indeed, long-term inflation forecasts from the IMF, OECD and CBO closely match the central bank stated targets for most countries. However, Syntrinsic has noted that pre-pandemic, many developed world central banks—in particular, the US Federal Reserve, European Central Bank, and the Bank of Japan—have failed to achieve their inflation targets. Despite the potential for an uptick in inflation, we believe changing demographics, ongoing technological innovation, will anchor inflation on a secular basis at or slightly above the central banks' long-term inflation targets.

For our 2022 long-term forecast, our inflation assumptions anticipate that the consistent inability of developed countries' central banks to reach their stated inflation targets over the past decade will persist over the next decade apart from the US. As such, Syntrinsic applies a discount based on the degree central banks in developed regions have missed inflation targets over a trailing ten-year period.

Exhibit 41: Central Bank Target versus Actual



Source: Bloomberg

Exhibit 42: Syntrinsic Ten-Year Inflation Forecast

Central Bank	Inflation Target	10 Yr. Spread
US		
US Federal Reserve (Fed)*	2.00%	-0.23%
US Inflation Assumption		2.08%
Non-US Developed		
European Central Bank (ECB):	2.00%	-0.95%
Bank of Japan (BoJ):	2.00%	-1.79%
Bank of England (BoE):	2.00%	-0.17%
Bank of Canada	2.50%	-0.32%
Bank of Australia	2.50%	-0.56%
Non-US Dev. Inflation Assumption		1.08%
Emerging Markets		
Central Bank of Brazil	3.75%	...
People's Bank of China	3.00%	...
Reserve Bank of India	4.00%	...
Bank Indonesia	3.00%	...
Bank of Russia	4.00%	...
South African Reserve Bank	4.50%	...
EM Inflation Assumption		3.36%

Given that the emerging markets are represented by a much more diverse array of central banks and that there are significant limits on the reliability of data regarding actual inflation rates, Syntrinsic has not applied a similar discount to forward-looking emerging market inflation.

Source: Syntrinsic, Bloomberg

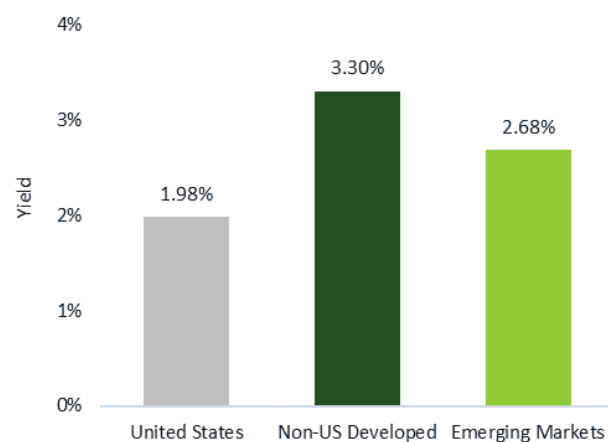
**The US Federal Reserve uses the Personal Consumption Expenditures (PCE) price index to set its inflation target. Most US investors use the Consumer Price Index (CPI) to measure inflation, which on average tracks 0.30% above PCE. Syntrinsic has adjusted our inflation forecast similarly.*

Forecasting equity dividend yield

Equity yields over the past decade have been stable across regions. We expect dividend yields to follow current trends going forward as we do not see a meaningful catalyst that would propel yields of the major indexes positively or negatively. Our expectations for equity dividend yields are based on the ten-year rolling average as we believe it is more indicative of an economic cycle and better reflects the potential trajectory for yields coming out of this crisis.

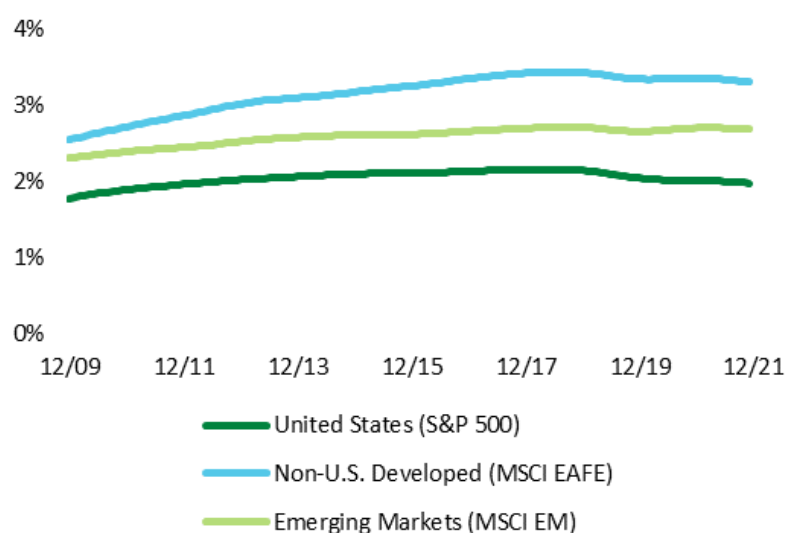
US yield changes have been muted more recently, with S&P 500 yields holding close to 2.0% as seen in Exhibit 44. The emerging market and Non-US developed dividend yields

Exhibit 44: Ten-Year Dividend Yield



Source: Syntrinsic

Exhibit 43: Global Equity Dividend Yields



Source: Bloomberg

have been on a downward trend resulting in a slightly lower yield assumption from our 2021 forecast update. Yield is a particularly important part of equity return in Non-US developed markets, with dividend yields representing just over half of anticipated equity total return.

Forecasting adjustments due to international trade

While growth forecasts across regions directly impact the anticipated earnings of equity markets in those regions, Syntrinsic considers it essential to account for where companies are securing their revenues. For example, a company that is dependent on revenues from a developed economy such as the US or France will be operating in slower growth economies than a competing company that may be growing its revenues in China or India where economic growth rates are likely to be higher.

To account for the impact of trade on anticipated economic growth, Syntrinsic incorporates regional revenue sources for the MSCI All-Country World Index. As indicated in Exhibit 45, S&P 500 companies have recently derived 60% of revenues from US sales, with 22% coming from trade with Non-US Developed markets and 18% from emerging markets. These Non-US revenue sources end up adding an additional 0.12% per year in anticipated growth for the U.S. equity market.

Exhibit 45: Equity Index Revenue Exposure by Region

Index	United States	Non-US Developed	Emerging Markets	Trade Effects
S&P 500	60%	22%	18%	0.12%
MSCI EAFE	19%	57%	24%	0.67%
MSCI EM	11%	19%	69%	-0.61%

Source: Morningstar (11/30/2021)

Similar exercises for Non-US Developed and emerging market indices result in a +0.67% for Non-US Developed companies while companies based in the emerging markets subtract 0.61% from projected growth due to revenues derived from slower growing developed economies.

Forecasts for large cap equities by region

By summing the forecasts for real economic growth, inflation, dividend yield, and then adjusting for trade effects, Syntrinsic calculates the baseline results for large cap equities in each region.

Exhibit 46: Syntrinsic Large Cap Equity Forecasts by Region*

Assumption		United States			Non-US Developed			Emerging Markets	
		1Q 2022	1Q 2021		1Q 2022	1Q 2021		1Q 2022	1Q 2021
Real Growth	↑	1.71%	1.62%	↓	0.99%	1.01%	↓	3.23%	3.82%
Inflation	↑	2.08%	1.91%	↑	1.08%	1.06%	↓	3.36%	3.39%
Yield	↓	1.98%	2.01%	↓	3.30%	3.35%	↓	2.68%	2.69%
Trade Effect	↓	0.12%	0.25%	↓	0.67%	0.75%	↓	-0.61%	-0.72%
Large Cap Equity Return Forecast	↑	5.90%	5.80%	↓	6.05%	6.15%	↓	8.65%	9.20%

Source: Syntrinsic

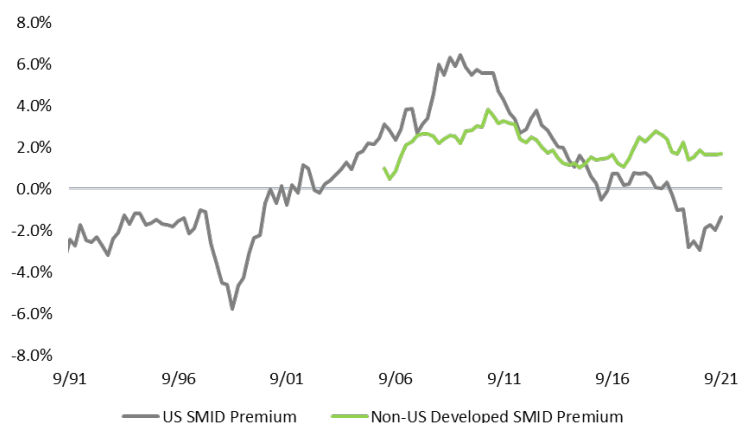
*Red arrows indicate a decline from 2021 to 2022, while green indicates an increase. “-” represents no change in forecast.

Forecasts for Small/Mid (SMID) Cap Equities by Region

Syntrinsic recognizes that SMID cap equities have tended to earn an equity risk premium relative to large cap equities. Our research confirms that the SMID cap premium has approximated 0.35% per year for US equity markets. By adding 0.35% to the 5.90% US large cap equity forecast, we anticipate 6.25% for SMID cap US equity over the decade ahead.

Recognizing that most Non-US SMID managers invest in both Non-US developed and emerging market equity, we used the SMID cap premium to the MSCI-ACWI ex US index of 1.55% (see Exhibit 47) premium and added that to the forecast returns of the Non-US Large Cap equity markets, bringing the forecast return to 7.60%.

Exhibit 47: Small and Mid-Capitalization (SMID) Premiums by Region (10 Year Rolling Average)



Source: Bloomberg

Listed Real Estate Forecast

Exhibit 48: Listed Real Estate Forecast

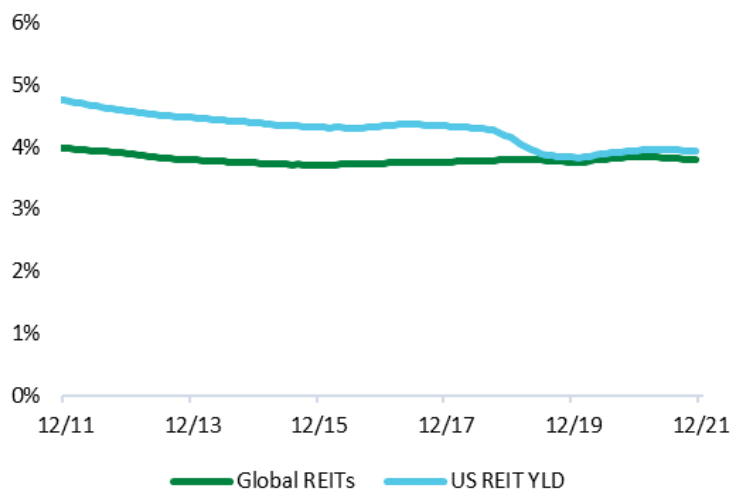
Asset Class	Index	2022	2021	Change
		Ten-Year Forecast	Ten-Year Forecast	
Global Listed Real Estate	FTSE NAREIT/EPRA Global	5.60%	5.55%	0.05%
US Listed Real Estate	FTSE NAREIT/EPRA United States	6.00%	5.80%	0.20%
Global ex -US Listed Real Estate	FTSE NAREIT/EPRA Global ex-US	5.20%	5.20%	0.00%

Real estate as an asset class is highly idiosyncratic, with tremendous variation across types of exposures, particularly in private real estate. For forecasting purposes, Syntrinsic uses different methodologies for private real estate (See Private Investments) and real estate accessed through securities listed on public market exchanges, what is known as listed real estate.

Forecasting listed real estate

Investors that gain exposure to real estate through public markets generally invest in Real Estate Investment Trusts (REITs) and Real Estate Operating Companies (REOCs). While trading like equities, the structural differences, and historic correlations of these securities result in Syntrinsic treating listed real estate as an asset class distinct from other equity sectors.

**Exhibit 49: Global REIT Yields
(10-Year Rolling Average)**



Source: Bloomberg

Exhibit 50: Listed Real Estate Forecast by Region

	United States	Non-US Developed	Global
Yields	3.92%	3.67%	3.79%
Inflation*	2.08%	1.54%	1.81%
Spread: NOI less inflation	0.00%	0.00%	0.00%
Real Estate Forecast Return	6.00%	5.20%	5.59%

Source: Syntrinsic

*While Syntrinsic forecasts global inflation at 2.2%, for REIT markets we weight inflation based on REIT market exposures.

To forecast listed real estate returns, we start with current REIT yields. Current global yields of 3.79% are in-line with 2021 yields. We then add a return component to account for anticipated growth in Net Operating Income (NOI), the “earnings” of a REIT. We estimate this premium to be zero globally due to downward pressure on Real Estate demand.

We apply that spread to listed real estate in each region and then proportionately calculate the global listed real estate forecast.

Commodities Forecast

While commodity-related investments manifest within equity and debt markets—and some hedge fund strategies—Syntrinsic views commodities as a distinctive asset class that might be worth dedicated investment depending on market conditions and investment objectives. Commodities include industrial metals (e.g., iron, copper, etc.), precious metals (e.g., gold, platinum, etc.), energy (e.g., oil, natural gas, etc.) agricultural products (e.g., wheat, soybeans, etc.), and softs (e.g., coffee, cotton, etc.)

Syntrinsic assumes that commodity returns will closely match global inflation. Given our regional inflation forecasts, we anticipate global inflation of 2.2% over the coming decade. We recognize that near-term environmental and geopolitical events can trigger price spikes or dips in certain commodities; however, we do not see such events as driving long-term fundamentals.

Exhibit 51: Commodity Forecast

Commodity Return Expectations	
Global Inflation Forecast	2.18%
Premium/Discount	0.00%
Commodity Return Forecast	2.18%

We discount or add to global inflation based on supply/demand dynamics and current demand trends for commodities. We use the historic 10 year rolling average spot premium over inflation, as a proxy for this premium or discount.

Private Investments Forecast

Exhibit 52: Private Investments Forecast

Asset Class	Index	2022	2021	Change
		Ten-Year Forecast	Ten-Year Forecast	
Private Equity	Cambridge US Private Equity	9.85%	6.95%	2.90%
Private Debt	Cliffwater Direct Lending	7.10%	5.65%	1.45%
Private Core Real Estate	NCREIF ODCE	6.00%	5.80%	0.20%
Private Core Plus Real Estate	NCREIF ODCE + Premium	6.70%	7.60%	-0.90%

Syntrinsic's forecast enables investors to model reasonable long-term return expectations; however, private equity, debt, and real estate investments exhibit so much dispersion in terms of strategy, style, sector, leverage, and other factors, that investors must strive to understand how specific investments might compare to the broad universe to a much greater degree than in traditional public market equity and debt investments.

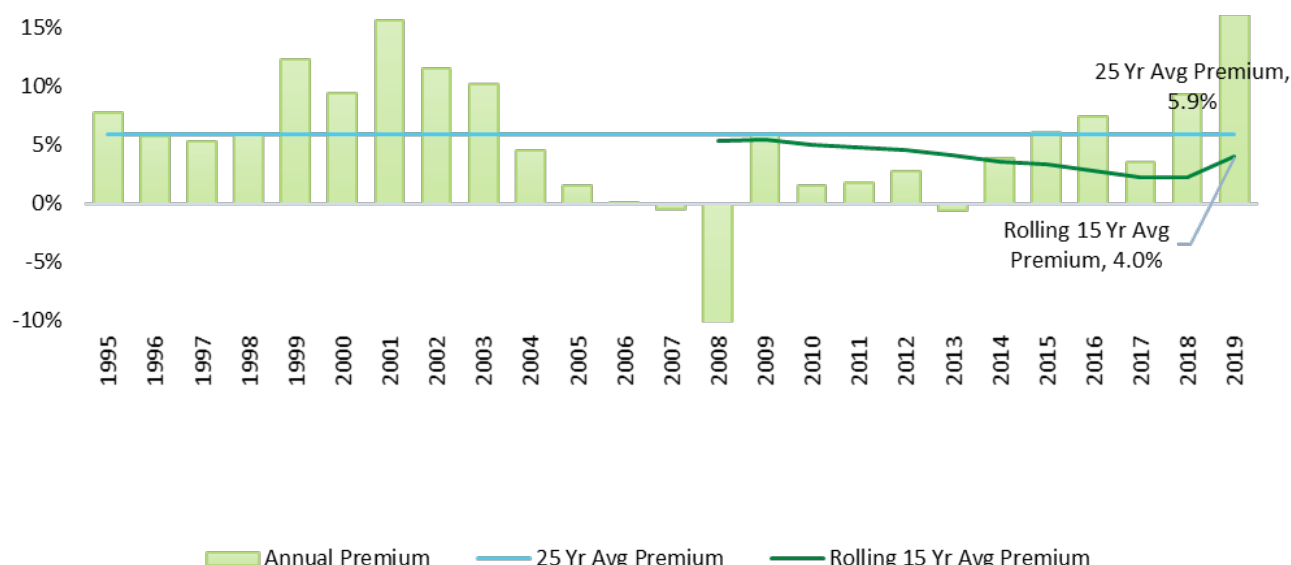
Forecasting private equity

Investors typically access private equity markets over public equity markets to earn a return premium in exchange for the additional risks inherent in private equity, including liquidity. As such, Syntrinsic forecasts private equity returns by analyzing the historic risk premium over the Standard & Poor's Public Market Equivalents (PME) Index. The PME index represents a method of simulating actual S&P 500 returns in a manner that reflects the distinctive cash flow and internal rate of return characteristics of the private equity industry.

Exhibit 53: Private Equity Forecast

Private Equity Return Expectations	
US Large Cap Equity Forecast	5.90%
Premium over US Large Cap Equity	4.00%
Private Equity Forecast Return	9.90%

Exhibit 54: Private Equity Return Premium over S&P 500 PME by Vintage Year



Source: Cambridge US P/E pooled returns relative to S&P PME by vintage year

Forecasting Private Debt

Private debt investment funds represent a pool of loans made to companies. Specific funds will vary in terms of sector, credit quality, and use of leverage, thus creating great dispersion across the asset class. Recognizing this, Syntrinsic's private debt forecast relies on the historical weighted average direct lending spread of the Cliffwater Direct Lending Index over our forecast for cash (US 3 Month-T-bills). The Cliffwater index represents a broad array of private debt strategies and is recognized as a proxy for the asset class. In addition, we factor in credit costs with assumed defaults and losses net of recoveries based on the Cliffwater Direct Lending Index. This is an unlevered return; we do not factor in leverage which can potentially enhance long-term returns. (Please note change in methodology from previous years).

Exhibit 55: Private Debt Forecast Calculation

Private Debt Return Expectations	
Cash Return Forecast	0.75%
Weighted Average Direct Lending Spread	7.65%
Credit Cost	-1.31%
Private Debt Forecast Return	7.10%

Forecasting private real estate

Syntrinsic organizes private real estate most broadly into two categories, core, and core plus. In this context, core private real estate represents diversified pools of high quality, mature U.S. real estate properties diversified across sectors and geography. Returns are driven primarily by cash flows of those properties and some return due to realized gains. Core plus private real estate includes core properties as well as some more aggressive properties that strive to add value through improvements, resale, and other activities.

For core private real estate, Syntrinsic relies on the historical risk premium over listed US real estate. Surprising to some, the historic premium of core private real estate over listed real estate has been negligible over the long term, despite core private real estate having less volatility due to the timing of valuations. This may be due in part to the high fees on most core private real estate funds, which could be consuming any added value that a private vehicle would have generated over public markets.

Meanwhile, core plus private real estate strategies have a historical premium of 0.70% over the FTSE NAREIT All Equity Index, an index of US REITs. While there may be times when investing in core private real estate makes sense, we recommend that investors in private real estate focus their efforts on core plus investments that could add value.

Exhibit 56: Private Core and Core Plus Real Estate

Private US Real Estate Expectations		
	US Core	US Core Plus
US Listed Real Estate Return	6.00%	6.00%
Private Real Estate Premium	0.00%	0.70%
Private Real Estate Forecast Return	6.00%	6.70%

Hedge Fund Strategies Forecast

Exhibit 57: Hedge Fund Strategies Forecast

Asset Class	Index	2022	2021	Change
		Ten-Year Forecast	Ten-Year Forecast	
Hedge Fund Strategies	HFRI FoF Composite	2.20%	2.10%	0.10%
Hedge Fund Strategies	HFRI FoF Composite	2.20%	2.10%	0.10%
Equity Hedge	HFRI Equity Hedged	3.50%	3.45%	0.05%

Hedge fund strategies encompass myriad trading methodologies across multiple asset classes and with different investment and risk management objectives. Syntrinsic draws upon industry practices in concentrating our forecast on equity and fixed income beta with additional support from cash returns.

The equity and fixed income beta components recognize that while hedge funds represent a highly diverse universe, historically their bottom-line results as an asset class have had consistent correlation with equity and fixed income markets. To determine the appropriate beta for the different hedge fund strategies, we analyze the historic beta and correlations to global equity markets, fixed income markets, and the Hedge Fund of Fund universe. We then apply those beta estimates to our long-term return forecasts for equity and fixed income to establish a return forecast for different hedge fund strategies.

The cash component of our forecast considers the elements of hedge fund return attributable to short rebates and interest earned on cash being held as an investment or as collateral for leverage. Even lower short-term rates have acted to suppress this component of return; as a result, our ten-year cash forecast has declined from 1.20% in 2021 to 0.75% in 2022.

Forecasting hedge fund of fund

Exhibit 58: Hedge Strategies Forecast Calculation

Hedge Fund Strategies Return Expectations	
Equity Beta	0.26
Equity Beta Contribution to Return	1.44%
Fixed Income Beta	(0.02)
Fixed Income Beta Contribution to Return	-0.01%
Equity + Fixed Income Beta Return	1.43%
Cash Return	0.75%
Hedge Fund Strategies Forecast Return	2.20%

Hedge fund of fund expected return speaks to strategies that represent multiple hedge fund methodologies such as equity hedge, global macro, relative value, and fixed income arbitrage. In practice, some such strategies are developed by a single firm that incorporates multiple third-party managers, while other times a single manager will apply multiple strategies within a single investment fund.

Forecasting equity hedge

Approximately half of the hedge fund universe is represented by equity hedge strategies. Even within that more limited segment, strategies vary in terms of long, short, and gross positioning, concentration risk, regional exposure, use of leverage, sector exposure and other factors. Nonetheless, equity hedge strategies on the whole have expressed a beta to the equity markets of 0.50 providing a useful reference point for forecasting the market segment.

Exhibit 59: Equity Hedge Forecast Calculation

Equity Hedge Return Expectations	
Equity Beta	0.50
Equity Beta Contribution to Return	2.75%
Fixed Income Beta	(0.11)
Fixed Income Beta Contribution to Return	-0.03%
Equity + Fixed Income Beta Return	2.72%
Cash Return	0.75%
Hedge Fund Strategies Forecast Return	3.45%

Global Fixed Income Forecast

Exhibit 60: Global Fixed Income Forecast

Asset Class	Index	2022 Ten-Year Forecast	2021 Ten-Year Forecast	Change
Global Fixed Income	Barclays Global Agg	1.05%	0.35%	0.70%
Short-Term Bond	Barclays G/C 1-5 Yr	1.15%	0.80%	0.35%
US Core Bond	Barclays U.S. Agg	1.70%	0.80%	0.90%
US Core Plus Bond	Barclays 80% U.S. Agg/ 20% HY	2.10%	1.45%	0.65%
High Yield bond	Barclays U.S. High Yield Corporate	3.85%	4.15%	-0.30%
Non-US Developed Bond	FTSE WGI ex-US	0.65%	0.05%	0.60%
Emerging Markets Bond	JPM EMBI	4.75%	4.10%	0.65%

Syntrinsic recognizes that ten-year fixed income returns will be closely aligned with the average yield received over that ten-year period. While our forecasting process does allow for modest adjustments to current yields, we account for cyclical factors such as potential credit spread tightening, timing of interest

rate increases, and/or expansion in our near-term sentiment. Since the beginning of 2020, global bond yields have moved even lower from already historically low levels because of extreme central bank intervention to stabilize the economy from the shock of the health crisis. This decline has negatively impacted the long-term return outlook for fixed income from the previous year.

To anchor our scenarios with reasonable assumptions, we consider long-term structural drivers of interest rates (growth and inflation), the path of the Fed Funds rate, and the term premium of interest rates. Over the last decade, other factors such as supply/demand dynamics that are a result of Fed intervention, structural changes in the economy, fiscal stimulus, and the relative attractiveness of US debt have influenced the level of long-term interest rates. As a result, we updated our forecast for US long-term the risk-free rate using the Fed projections for short term Fed Funds rates as a baseline and adding in the term premium. This premium reflects the amount investors expect to be compensated in yield for lending for longer periods.

The current projections for the mid-point of the long run Federal Funds Rate is 2.50% (as of 9/21). Adding in the historical term premium for the last 10 years of 0.58%, we anticipate long-term risk-free rate at approximately 3.08%. The risk-free rate in this case is represented by the ten-year U.S. Treasury Bond.



Forecasting US core bond

US core bonds are represented by the Bloomberg Barclays US Aggregate Bond Index, which includes approximately 80% to US Government bonds and 20% to investment grade US corporate bonds. Thus, to forecast reasonable returns for US core bonds, it is important to understand the premium (spread) of the US Aggregate over the risk-free rate, as well as likely scenarios for the movement of ten-year yields from where they are today to the expectations for the Fed Funds Rate and movement of the term premium.

Exhibit 61: Core Bond Forecast Calculation

US Core Bond Return Forecast	
10 Year U.S. Treasury Yield Expectation	3.08%
US Aggregate Expected Yield	0.22%
US Core Bond Expected Yield	3.29%
Current US Core Bond Yield	1.61%
US Core Bond Forecast Return	1.70%

Given our expectation that US Treasury yields should be approximately 3.08% ten years from now and adding the historic 0.22% spread of the US Aggregate over US Treasury yields, it is reasonable to expect that US core bonds will yield 3.29% ten years from now. With yields currently at about 1.61%, our forecast would require interest rates to rise over the decade. We estimate that there will be a quick increase in interest rates over the next 10 years. We expect that the extreme economic stimulus will drive growth over time, and inflation pressures will drive central banks to increase interest rates quicker than anticipated. While rising interest rates will create opportunities for higher yield, rising rates also adversely impact bond values, particularly in the next five years, leading to an annualized forecast that is in line with the current yield on US core bonds.

Forecasting US high yield bonds

US high yield bonds follow a similar pattern except that the spread between high yield bonds and the US Treasury Bond is higher to account for the additional risk inherent in below investment grade bonds.

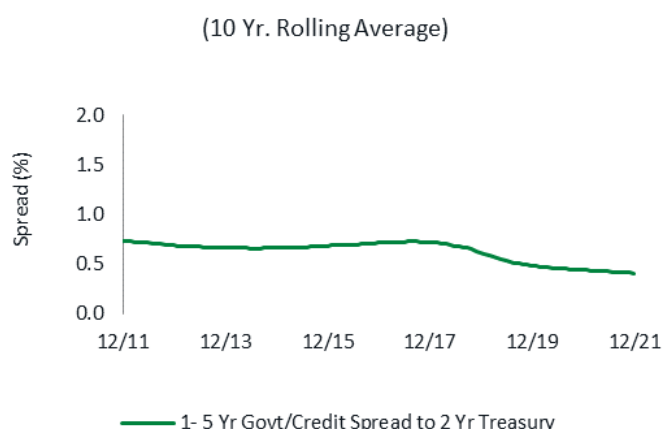
Forecasting US core plus bonds

In practice, many active fixed income managers strive to add value through incorporating more aggressive, higher yielding bonds into a portfolio of primarily investment grade securities. Syntrinsic considers such an approach to be “core plus” with the “plus” acknowledging the additional risk and potential return of such a strategy. While every fixed income manager is unique, we find that US core plus can be represented by 80% US core bond and 20% US high yield bond. Given the forecasts outlined above and the 80/20 weighting, Syntrinsic forecasts 2.10% total return per year for US core plus bond.

Forecasting US short-term bonds and cash alternatives

Creating a ten-year forecast for short-term bonds and cash is inherently challenging due to the mismatch in time horizon. Nonetheless, it is important for investors using short-term bonds and cash to have guidance regarding reasonable return expectations for an asset class often used to keep pace with inflation.

Exhibit 64: US Short-Term Bond Premium to Two-year US Treasuries



Source: Bloomberg

Exhibit 62: High Yield Forecast Calculation

US High Yield Bond Return Forecast	
10 Year U.S. Treasury Yield Expectation	3.08%
US Aggregate Spread	5.05%
US High Yield Expected Yield	8.12%
Current US Core Bond Yield	4.15%
US High Yield Forecast Return	3.85%

Exhibit 63: Cash Yield Forecast Calculation

US Treasury Yield and Spread Expectations	
10 Year Yield Expectation	3.08%
10 Yr-2 Yr. Spread	-1.54%
2 Year Yield Expectation	1.54%
2 -Yr. - Fed Funds Rate Spread	-0.22%
Fed Funds Rate Expectation	1.32%
Fed Rate - 3 Mo T-Bill	-0.21%
Expected Cash Yield	1.10%

To anchor our approach, Syntrinsic relies on historic spread relationships between the 10-year US Treasury Bond, 2-year US Treasury Note, Fed Funds Target Rate, and 3-month US Treasury Bill. While these relationships are not set-in stone and can vary over the short-term, they provide reasonable guidance for longer-term planning.

Syntrinsic short-term bond yield expectations extend spread analysis from above to include credit.

Exhibit 64: Cash Forecast Return

Cash Forecast Return	
3 Month T-Bill Expected Yield	1.10%
Current Cash Yield	0.04%
Cash Forecast Return	0.75%

Forecasting Non-US. Developed and emerging market bonds

Syntrinsic develops forecasts for Non-US Developed bonds starting with components of expected inflation and real GDP growth of Non-US Developed nations. We apply the same discount to expected yields due to yield suppression seen across the developed world for our expected long-term yield. While we recognize that extraordinary central bank intervention across Non-US Developed countries affects interest rates, we expect current yields to move towards our long-term expected yields over the next five years.

Exhibit 65: Non-US Developed Bond Forecast

Non-US Developed Bond	
Non-US Developed Expected Growth	0.99%
Non-US Developed Expected Inflation	1.08%
Non-US Developed Expected Yield	2.07%
Current Non-US Developed Bond Yield	0.86%
Non-US Developed Bond Forecast Return	0.65%

Bonds have become an increasingly useful tool in the emerging markets and represent many diverse economies and currencies. As such, the calculus for anticipating return requires a different approach. For our emerging market bond forecast, we utilize the long-term historical spread of emerging market debt to the 10-Year US Treasury Bond. Based on Syntrinsic's expectations for emerging market debt yields to move from current levels to our expected yield over the next five years, we anticipate ten-year returns of 4.75% per year, below the current yield on the emerging market bond market.

Exhibit 66: Emerging Market Bond Forecast

Emerging Market Bond	
10-Year US Treasury Yield Expectation	3.08%
EM Bond Spread to 10-Year Treasury	3.37%
Emerging Market Bond Expected Yield	6.44%
Current Emerging Market Bond Yield	4.96%
Emerging Market Bond Forecast Return	4.75%

Disclosures

The information in this document is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. The opinions expressed in this document are the combined work of Syntrinsic's Investment Committee. Our research comes from a multitude of sources, but any opinions expressed are our own.

Given the complex nature of risk-reward trade-offs involved in portfolio construction, we advise clients to consult with financial professionals on specific investment-related decisions. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. In addition, past performance is not a guarantee of future results.

Assumptions, opinions, and estimates are provided for illustrative purposes only and are subject to significant limitations. Expected return estimates are subject to uncertainty and error. Expected returns for each asset class can be conditional on economic scenarios to which actual returns could be significantly higher or lower than forecasted. They should not be solely relied upon as recommendations to buy or sell securities.

Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness.

This material has been prepared for information purposes only and is not intended to provide, and should not be relied on for, accounting, legal, or tax advice.