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What is the outlook on interest rates?

Central bank policy will remain highly accommodative over the next two years. Policy rates in major developed market economies are unlikely to be changed over this period. Central banks are also likely to continue with large-scale asset purchases, helping to suppress the longer-dated bond yields. However, the combination of rising inflation expectations and elevated debt issuance, particularly in the US (estimated at c. $4.4T over 2021 and 2022), may lead to rises in bond yields beyond what is priced in the market forward rates -- although not likely to take place in an uncontrolled fashion. If the Fed deems any such yield rises as excessive, i.e., likely to imperil economic stability, it has the ability and will to actively intervene via asset purchases to limit increases as its overall treasury holdings. Moreover, private investors will look to take advantage of the rising yield differential between US treasuries and other DM government bonds. A potentially bigger risk than excess debt supply is if inflation levels were to exceed 2.5-3.0% for extended periods. In such a situation, the Fed may attempt to cool the economy and lower inflation by not purchasing excess debt supply and instead allowing longer-maturity interest rates to rise. This has the potential to unsettle financial asset prices, which have largely priced-in low bond yields. As noted in our earlier inflation discussion, this concern is less relevant for 2021 but could apply to 2022 and beyond. In the meantime, a moderate rise in yields in the context of rising growth is a sign of economic health and should not imperil broad equity valuations but may favour Value stocks over Growth stocks.

Outlook for monetary policy

Central banks will keep interest rates low

In response to the COVID-19 pandemic, the US Federal Reserve and Bank of England (BoE) reduced short-term interest rates to virtually zero. The European Central Bank (ECB) has run a negative interest rate policy since 2014 and opted to leave their main policy rate at -0.5%. As shown in Exhibit 1, forward markets are pricing in only a very gradual increase in interest rates from these record low levels.

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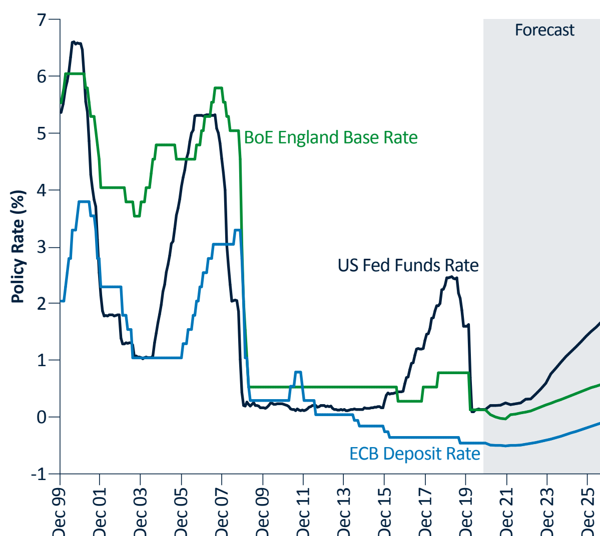
Exhibit 1

DM policy rates are close to zero and expected to rise very gradually over the next 5 years



Source: *Bloomberg*

Forward guidance from central banks is that policy rates will not be lifted for 2-3 years.

US Federal Reserve: The Federal Reserve concluded its new policy framework review last August with the adoption of flexible average inflation targeting (AIT). Going forward, the Federal Open Market Committee (FOMC) will aim for inflation moderately above 2% following periods when inflation has run persistently below 2% in order to average 2% over time. Experts interpret this as temporarily raising the inflation target in the policy rule to 2¼-2½%, when average inflation over some trailing window falls short of 2%. In practise, it will result in low real rates and higher economic growth.

The Fed's "dot plot" shows each member of the committees' expected progression of policy rates over time. As of December 2020, all bar one member of the 17-person committee expected rates to be left unchanged in 2022, with the lone dissenting vote expecting an increase of 25 bps. Only five members expect rates to be higher by the end of 2023, with the remaining 12 expecting no change. In June last year Chair Powell said, "we're not even thinking about thinking about raising rates". There have been no comments recently to suggest any thinking on this matter has started.

European Central Bank: The fact that the ECB did not cut rates in 2020 suggests that -0.5% may be the limit of how far they are willing to push negative interest rate policy (NIRP). Although banks can access some funding at negative rates using LTRO facilities, they are generally reluctant to pass on negative rates to their retail clients. This impacts bank interest margins and hence profitability.

A research paper commissioned by the ECB in May last year found that the benefits of NIRP in terms of financial and debt stabilisation had exceeded the side effects of low growth and inflation, but acknowledged that the longer negative rates lasted, the more they risked becoming counterproductive. However, with economic growth estimated to be about 5% below potential, unemployment of 8.6% and negative inflation in 2020, economic conditions in Europe will necessitate very low interest rates for the foreseeable future.

The ECB is in the process of reviewing its monetary policy strategy. The review was due at the end of 2020 but was postponed to mid-2021 because of the pandemic. The review will consider whether the ECB's inflation aim should be reformulated and over which time horizon prices should be stabilised, among other questions. In its previous review of 2003, the ECB interpreted its price stability goal as aiming for inflation "below, but close to, 2% over the medium-term". There is a growing expectation that the ECB will follow the Fed's lead and adopt average inflation targeting, with ECB President Christine Lagarde saying that "to underpin inflation expectations, we need to ensure that our aim is perceived to be symmetric by the public." Again this points to low yields for the next few years.

Bank of England: At the February meeting of the Monetary Policy Committee (MPC), Governor Bailey stressed that it was not the intention of the MPC to signal that the UK base rate will be made negative in the future, but that preparations for negative interest rates should be undertaken over the next 6-months in case further rate cuts turned out to be necessary. There are three implications from this communication. First, the MPC agreed that negative rates are, in principle, feasible in the UK. Second, the current focus of the MPC is how to ease monetary policy further. Third, the hurdle for a cut in bank rate over the next six months appears high. Taken together, this makes it very unlikely there will any change to UK rates in 2021.

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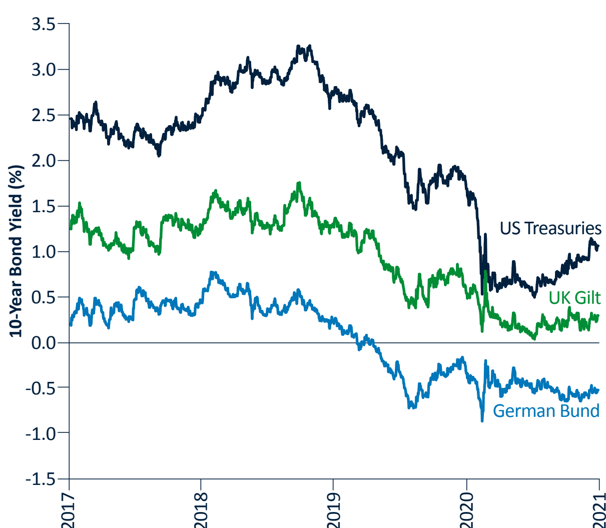
Central bank asset purchases are a key policy tool in manging yield levels

Bond yields dropped sharply in the wake of the COVID-19 pandemic. The benchmark yield on the 10-year bonds of US, UK and Germany hit respective lows of 0.51%, 0.08% and -0.86% in 2020. Despite the increase in growth and inflation forecasts, yields remain well below pre-pandemic levels (Exhibit 2).

Exhibit 2

Bond yields remain low



Source: *Bloomberg*

Helping to keep yields low has been the significant increase in central bank purchases via quantitative easing. As shown in Exhibit 3, the central banks of the US, Europe, UK and Japan collectively added over $8 trillion to their balance sheets in 2020, or roughly 19% of their collective 2019 GDP. In this regard the Bank of Japan has gone the furthest, holding assets on its balance sheet worth nearly 130% of the country's GDP. The ECB holds assets valued at roughly 58% of the bloc's GDP, while the US Fed and UK's BoE hold assets worth c. 35% of their respective GDP.

Forward guidance from central banks signals a continuation of large-scale asset purchases throughout 2021. Most recently, the US Federal Reserve explicitly committed to purchasing at least $80 billion per month of Treasuries and agency mortgage-backed securities until the committee feels "substantial further progress" has been made towards its inflation and employment goals. The European Central Bank indicated in December that, amongst other measures, it will continue to purchase approximately €20 billion per month until March 2022. The Bank of Japan has committed to continuing its policy of yield curve control, buying as many bonds as necessary to keep 10-year Japanese government bond yields capped at close to 0%, and in November the Bank of England announced it would steadily expand its balance sheet to target a level of £895 billion from c. £780 billion as of January 2021.

Key to the outlook for longer-dated bond yields will be the timing of tapering by central banks, most likely led by the Fed. Some Fed officials (Evans, Harker, Kaplan and Bostic) have recently indicated an openness to tapering asset purchases in 2021. However, comments by Chair Powell in the January FOMC statement called a focus on tapering "premature", and emphasised the lessons of past Fed tapering experiences, suggesting the Fed will take a very slow and cautious approach to reducing asset purchases.

Exhibit 3

The central banks of US, Europe, UK and Japan added c. $8.3T to the size of their balance sheets in the 13 months to Jan 2021, or c. 19% of their collective 2019 GDP

	Metric	US Fed	ECB	BoE	BoJ	Total
Size of balance sheet as of Jan 2021	USD Trillion	$7.4T	$8.5T	$1.1T	$6.7T	**$23.7T**
	% of 2019 GDP	34.5%	58.1%	35.0%	128.3%	53.3%
Size of balance sheet as Dec 2019	USD Trillion	$4.2T	$5.3T	$0.6T	$5.3T	**$15.3T**
	% of 2019 GDP	19.4%	35.9%	20.7%	101.1%	34.5%
Increase in last 13 -months to Jan 2021	USD Trillion	$3.2T	$3.3T	$0.4T	$1.4T	**$8.3T**
	% of 2019 GDP	15.1%	22.2%	14.3%	27.2%	18.8%

Source: *Bloomberg*

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Increased debt issuance may put modest upward pressure on yields, but central banks have scope for further asset purchases to limit any such yield rises

Large budget deficits across most of the developed world will lead to a surge in government bond issuance, particularly in the US in 2021. As shown in Exhibit 4, JP Morgan estimate that there will be c.$2.8T in net issuance of longer-dated US Treasuries in 2021, of which at least $960B will be purchased by the Fed, leaving c. $1.8T to be absorbed by public markets. Between 2014 and 2019 the average annual net issuance absorbed by the market was $704B, so 2021 is likely to be 2.6x that, which could lead to some indigestion and higher yields.

Exhibit 5a & 5b show how the recent surge in Treasury debt issuance was absorbed. In the 12-months to November 2020, $4.4T of US treasury debt was issued. The largest buyer of US treasury debt was the Fed, who absorbed c. $2.3T or just over half of the total. (Note this $2.3T is smaller

Exhibit 4

2021 US Treasury Bond issuance into public markets is expected to be c. $1.8T (net of Fed purchases which is 2.6x larger than the recent average annual issuance

	Net Borrowing		Fed Purchases (actual or announced)		Net Borrowing ex-Fed actual/ announced purchases	
Year	T-Bills	Bonds	T-Bills	Bonds	T-Bills	Bonds
2014	-134	785	0	250	-134	535
2015	54	631	0	0	54	631
2016	305	410	0	0	305	410
2017	137	433	0	0	137	433
2018	387	989	0	0	387	989
2019	77	1,133	169	77	-92	1,056
2020	2,547	1,752	160	2,180	2,387	-428
2021	**269**	**2,787**	**0**	**960**	**269**	**1,827**
Average 2014-2019	**192**	**719**	**34**	**15**	**158**	**704**

Source: *J.P. Morgan US Treasury, Federal Reserve Bank of New York*

Exhibit 5a

The Fed and US investors have purchased almost all of the $4.4T new net debt issued in the 12-months to November 2020

Foreign Holders	Nov 2019		Nov 2020		Change (est. net 2020 purchases)	
	US$ Billions	Portion of Total Debt	US$ Billions	Portion of Total Debt	US$ Billions	Portion of Total Debt
Intragovernmental holdings	5,971	25.9%	6,097	22.2%	126	-3.7%
Fed holdings of Treasuries	2,206	9.6%	4,546	16.6%	2,340	7.0%
Foreign Investors	6,902	29.9%	7,054	25.7%	152	-4.2%
US Investors	7,997	34.7%	9,750	35.5%	1,753	0.9%
US Total Debt	**23,076**	**100%**	**27,446**	**100%**	**4,370**	**0**

Source: *US Treasury*

Exhibit 5b

Foreign investors only marginally increased their holdings of Treasuries

Foreign Holders	Nov 2019		Nov 2020		Change (est. net 2020 purchases)	
	US$ Billions	Portion of Total Debt	US$ Billions	Portion of Total Debt	US$ Billions	Portion of Total Debt
Japan	1,161	5.0%	1,261	4.6%	100	-0.4%
China	1,089	4.7%	1,063	3.9%	-26	-0.8%
UK	401	1.7%	420	1.5%	19	-0.2%
Ireland	290	1.3%	314	1.1%	24	-0.1%
Luxembourg	262	1.1%	268	1.0%	6	-0.2%
Other	3,699	16.0%	3,729	13.6%	30	-2.4%
Total	**6,902**	**29.9%**	**7,055**	**25.7%**	**153**	**-4.2%**

Source: *US Treasury*

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than the $3.2T figure quoted in Exhibit 3 above as the latter also includes non-Treasury debt, e.g., mortgage-backed securities.) US investors absorbed $1.7T, or 40% of the treasury issuance. Of this, US money market mutual funds were the biggest purchasers, adding c. $1.2T year-on-year. Demand from foreign investors was muted in 2020, with net purchases of just $152B over the 12-months to November 2020. As a result, the percent of US debt held by foreign owners declined from 30% to 25.7%. This partly reflects heavy net selling in the first quarter as countries liquidated reserves to fund their own COVID-19 responses.

US Mutual Funds are expected to shift to net sellers in 2021 as an improvement in risk appetite translates into reduced money fund AUM. In the place of money funds, there is potential for the foreign sector to increase purchases of US Treasuries as the higher yield pick-up relative to other "risk-free bond markets" should entice more buying. This would be supported by a weaker US Dollar, as foreign central banks typically increase interventions if Dollar depreciation is substantial.

If public markets are unable to absorb the increase in supply, then the Fed may increase its purchases to prevent yields from rising more than they consider to be desirable. Exhibit 6 below models deficit projections for the next 5 years using the latest CBO projections and adding supplemental spending and revenue as per the Biden administration longer-term recovery plan (which is not yet approved by Congress). Using these assumptions, the Treasury would run a deficit of c. $3.1T in 2021, with subsequent years deficit converging back to the c. $1T/year level seen in 2019 (prior to the pandemic).

While discretionary demand for Treasuries will be a function of yield levels and many other factors (inflation, net carry, risk aversion, etc), we can simplistically model purchases of various buyer groups to grow at the same CAGR of the previous 5 years for each group, it can be seen that the only year that results in excess issuance is 2021, with c. $1.4T of net new Treasury issuance that would need to be purchased by the Fed. This should be easily absorbable, as it would take the total Fed balance sheet to roughly $9.7T (all assets, including Treasuries, MBS, etc.), or c. 45% of the GDP. Relative to size of the economy, this is still a smaller holding of assets than that of the ECB and BoJ. As of 31 Jan, the ECB owned assets equivalent in size to 58% of the European economy, while the BOJ owned assets worth 128% of Japan's GDP. This suggests the Fed does have room to ramp up asset purchases if needed.

Exhibit 6

5-year modeling of US Treasury issuance suggests there is the capacity to absorb excess issuance (all figures are $B unless noted as %GDP

	2021	2022	2023	2024	2025
Congressional Budget Office Forecasts					
Revenues	3,506	3,995	4,202	4,352	4,507
Outlays	5,764	5,050	5,165	5,258	5,544
Deficit	-2,258	-1,056	-963	-905	-1,037
Deficit as % of GDP	**-10.3**	**-4.6**	**-4.0**	**-3.6**	**-4.0**
Nominal GDP ($)	21,951	23,082	24,066	25,127	26,249
Net Debt as % of GDP	102.3	102.0	102.0	101.4	101.2
Potential Incremental increase in deficit due to Biden policy (see Q3 on fiscal policy)					
Incremental Taxes	-49	-20	40	66	118
Incremental Spending	749	283	330	378	227
Net Incremental Impact on Deficit	**-798**	**-303**	**-290**	**-312**	**-109**
Total Net Debt Issuance Required	**-3,056**	**-1,359**	**-1,253**	**-1,217**	**-1,146**
Potential Incremental Purchases of Debt (assumes growth in line with 5yr CAGR)					
Intragovernmental (CAGR of 3.2%)	195	201	208	214	221
Foreign Investors (CAGR of 2.8%)	198	203	209	215	221
US Investors[1] (Assumed CAGR of 3.0%)	293	301	310	320	329
US Fed, current policy	960	960	960	960	960
Total Baseline Purchases	**1,645**	**1,666**	**1,687**	**1,709**	**1,731**
Potential shortfall in demand for Treasuries	**-1,411**	**307**	**434**	**491**	**585**
Resulting Size of Fed Balance Sheet ($)	9,771	10,731	11,691	12,651	13,611
Resulting Size of Fed Balance Sheet (% of GDP)	**45%**	**46%**	**49%**	**50%**	**52%**

Notes:

1. *Actual CAGR of US investors' acquisitions of Treasuries over the period was 7% p.a., but this is assumed to slow to 3%.*

Source: *US Treasury, Bloomberg, US Federal Reserve, Partners Capital Analysis*

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A potentially bigger risk than excess debt supply is if inflation levels were to exceed 2.5-3.0% for extended periods. In such a scenario, the Fed would have to abandon its low-for-long interest rate policy. In such a situation, the Fed may attempt to cool the economy and lower inflation by not purchasing excess debt supply and instead allowing longer-maturity interest rates to rise. This has the potential to unsettle financial asset prices, which have largely priced-in low bond yields. As noted in our earlier inflation discussion, this concern is less relevant for 2021 but could apply to 2022 and beyond.

The surge in debt issuance is not unique to the US. As shown in Exhibit 7, the EU, UK and Japan are all expected to run higher than usual deficits in 2021, before reverting back towards the long-term average over the next few years. This suggests that issuance will run above average for the foreseeable future, with central bank asset purchase programmes continuing to ensure a controlled rise in yields.

Exhibit 7

Budget deficits are expected to revert back towards their recent average (IMF forecasts

	Average 2015-2019	2020	2021	2022	2023	2024	2025
EU	-1.1%	-8.4	-5.9	-2.7	-2.1	-1.8	-1.8
UK	-3.0%	-14.5	-10.6	-7.1	-5.8	-5.1	-4.4
Japan	-3.3%	-13.8	-8.6	-3.2	-2.8	-2.7	-2.7

Source: *IMF*

Forward rates are discounting very low bond yields over the next 10 years

In terms of aggregate market expectations, forward rates are discounting only a very gradual increase in bond yields over time. In the US, the 10-year Treasury yield is expected to rise from the 1.1% at the end of January 2021 to 2.9% in 2031. This 10-year forward rate was 2.3% as recently as May 2019. Yields are also expected to remain very low in the UK and Europe, with 10-year Gilt and Bund yields only forecast to reach 1.8% and +0.1% in 10-years' time (Exhibit 8).

Low interest rates are being discounted across all asset classes

Interest rate assumptions underpin all financial asset valuations. The present value of any stream of future cash flows depends on the discount rate applied. For example, a conventional dividend discount model can be rearranged to show that the justified forward P/E multiple of an equity index is determined as: [dividend retention rate x (1-growth] / (discount rate – growth. Exhibit 9 shows the justified forward P/E ratio of the S&P 500 holding all variables constant at current levels and only changing the underlying interest rate assumption in the discount rate, demonstrating the significant magnifying effect low interest rates can have on equity valuations.

In reality, changes in interest rates are typically associated with changes in growth assumptions and risk premia, which may dampen the sensitivity of equity multiples to changes in interest rates. However, as detailed in the public equities section of this publication, today's high equity valuations

Exhibit 8

Forward markets expect bond yields to remain low

Source: *Bloomberg*

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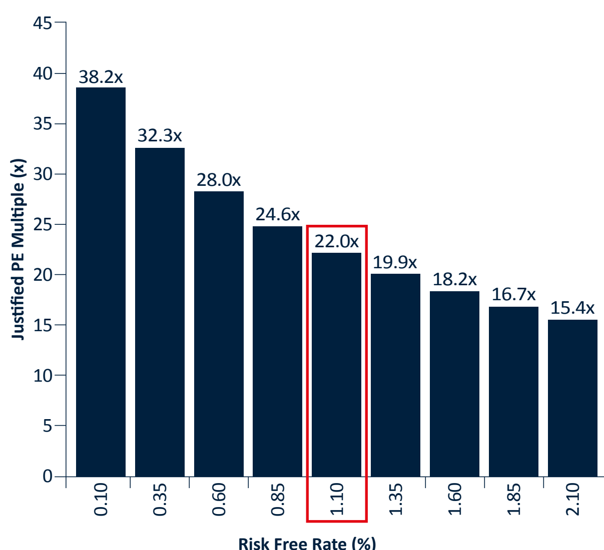
Exhibit 9

Justified P/E Ratio of S&P 500 for different levels of 10-year Treasury Yields, holding all other variables constant

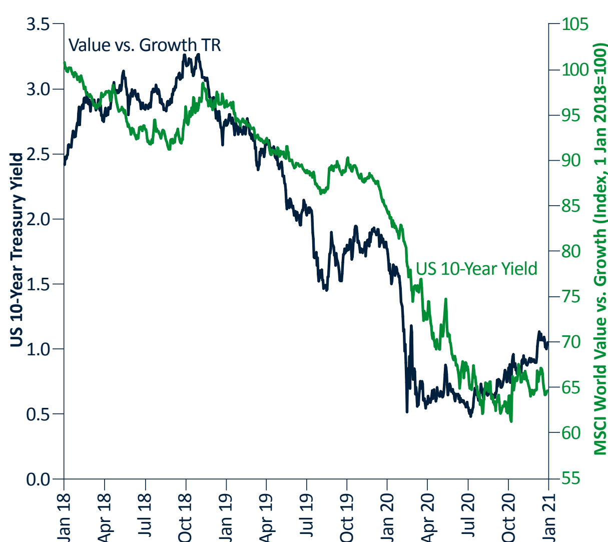


Notes: *For illustrative purposes only. Assumes an Equity Risk Premium of 5%, long-term growth expectation of 3.7% and dividend retention rate of 50%.*

Source: *Partners Capital Analysis*

Exhibit 10

MSCI World Value stocks have dramatically underperformed growth stocks as bond yields have fallen



Source: *Bloomberg*

are supported by the assumption that very low interest rates are here to stay. Consequently, a major downside scenario for investment portfolios is one in which interest rates rise faster than is currently discounted by the market.

Interest Rates and the value vs. growth debate

Low yields have also contributed to the outperformance of Growth stocks relative to Value stocks over the last three years. From January 2018 to January 2021 the MSCI World Growth index rose by +18.0% annualised, while the MSCI Value index rose by a modest 2.8% annualised. Exhibit 10 highlights how this outperformance coincided with a 130 bps decline in the 10-year US Treasury yield, from 2.4% to 1.1%. Value stocks are defined by MSCI with three factors: book value/price, 12 months forward earnings and dividend/price. Growth stocks are defined by five metrics: long-term historical EPS growth rate, long-term forward EPS growth rate, short-term forward EPS growth rate, historical revenue/share growth rate, and the internal growth rate.

There are obviously other factors at play in the recent outperformance of Growth stocks, including increased digitalisation and the acceleration adoption of technology caused by the pandemic. However, a simple regression of the relationship between yields and the relative performance of Growth versus Value suggests that every +10 bps increase in the 10-year Treasury yield relative to what is already being discounted could lead to 3-4% underperformance of Growth relative to Value.

In our base case we expect yields to rise moderately faster than is currently being discounted by the market, driven primarily by our view on inflation explained above across our base case and high inflation case. With the risk of a steepening yield curve and rise in longer-dated yields, the dispersion between Growth and Value is too large to ignore and merits ensuring there is a relatively balanced exposure to Value and Growth equities in the portfolio. However, we would not recommend a more pronounced overweight to Value at this stage, as we retain longer-term conviction in the innovation theme and believe the tech revolution is only accelerating.

Interest Rate Scenario Analysis

The path of bond yields will be determined by which of our three core scenarios plays out. The table below summarises the downside, base case and upside economic scenarios as they relate to US Treasury yields.

Exhibit 11

2021 Scenario table with expected changes in Inflation and Treasury yields

2021 Scenario	Downside Case: Ongoing Waves	Base Case: The Herd Slowly Immunises	Upside Case: Warp Speed to Normal
Probability	20%	60%	20%
Inflation over 2021 (US CPI)	1.0%	2.4%	3%
US 10yr Treasury Yield by year end 2021	0.7%	1.7% (1-yr forward 1.6%)	1.9%

Source: *Partners Capital Analysis*

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