Quarterly Investment Report - Aberdeen City Council

For the Period 01 Apr 2021 to 30 Jun 2021

Aberdeen City Council

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Accounting Summary (expressed in GBP)

As of 30 Jun 2021

	Market Value 01 Apr 2021		Contributions	Withdrawals	Change in Market Value	Market Value 30 Jun 2021	
Passive Equity Portfolio	1,124,285,891	77.50%	97,403	150,297,559	75,718,783	1,049,804,519	68.40%
UK ESG Screened Index Equity Sub-Fund	561,352,109	38.69%	0	72,467,257	33,910,175	522,795,027	34.06%
International (GBP Dynamic Currency Hedged) ESG Screened Index Equity Sub-Fund	562,933,782	38.80%	97,403	77,830,302	41,808,608	527,009,492	34.34%
Passive Fixed Income Portfolio	326,453,693	22.50%	150,023,078	5,650	8,514,316	484,985,437	31.60%
MPF UK Index Linked Gilts All Stocks Index Sub-Fund	326,453,693	22.50%	150,023,078	5,650	8,514,316	484,985,437	31.60%
Total	**1,450,739,584**	**100.00%**	**150,120,481**	**150,303,209**	**84,233,099**	**1,534,789,956**	**100.00%**

Performance Summary (expressed in GBP)

As of 30 Jun 2021

	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	Inception
Passive Equity Portfolio								01 Nov 1999
Total Returns	1.59%	6.74%	12.05%	28.06%	7.79%	10.39%	9.31%	6.45%
FTSE All Share & World ex UK Custom Index	2.00%	6.68%	11.59%	25.33%	7.84%	10.43%	9.20%	6.37%
Difference	**-0.41%**	**0.06%**	**0.46%**	**2.73%**	**-0.05%**	**-0.04%**	**0.11%**	**0.08%**
Total Returns (Net)	1.58%	6.72%	12.01%	28.02%	N/A	N/A	N/A	N/A
FTSE All Share & World ex UK Custom Index	2.00%	6.68%	11.59%	25.33%	N/A	N/A	N/A	N/A
Difference	**-0.42%**	**0.04%**	**0.42%**	**2.69%**	**N/A**	**N/A**	**N/A**	**N/A**
UK ESG Screened Index Equity Sub-Fund								01 Nov 1999
Total Returns	0.59%	5.92%	10.39%	19.60%	1.59%	6.23%	6.31%	5.03%
FTSE ALL SHARE EX CONTROVERSIES EX CW INDEX	0.58%	5.90%	10.32%	19.59%	1.52%	6.15%	6.21%	4.93%
Difference	**0.01%**	**0.02%**	**0.07%**	**0.01%**	**0.07%**	**0.08%**	**0.10%**	**0.10%**
Total Returns (Net)	0.59%	5.91%	10.38%	19.59%	N/A	N/A	N/A	N/A
FTSE ALL SHARE EX CONTROVERSIES EX CW INDEX	0.58%	5.90%	10.32%	19.59%	N/A	N/A	N/A	N/A
Difference	**0.01%**	**0.01%**	**0.06%**	**0.00%**	**N/A**	**N/A**	**N/A**	**N/A**
International (GBP Dynamic Currency Hedged) ESG Screened Index Equity Sub-Fund								01 Feb 2011
Total Returns	2.59%	7.58%	13.58%	35.90%	13.89%	14.38%	12.21%	11.81%
FTSE CUSTOM WORLD EX UK EX CONT EX CW 50% HEDGED TO GBP NET TAX	3.44%	7.46%	12.87%	31.12%	14.28%	14.71%	12.17%	11.84%
Difference	**-0.85%**	**0.12%**	**0.71%**	**4.78%**	**-0.39%**	**-0.33%**	**0.04%**	**-0.03%**
Total Returns (Net)	2.59%	7.53%	13.52%	35.82%	N/A	N/A	N/A	N/A
FTSE CUSTOM WORLD EX UK EX CONT EX CW 50% HEDGED TO GBP NET TAX	3.44%	7.46%	12.87%	31.12%	N/A	N/A	N/A	N/A
Difference	**-0.85%**	**0.07%**	**0.65%**	**4.70%**	**N/A**	**N/A**	**N/A**	**N/A**

	1 Month	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	Inception
Passive Fixed Income Portfolio								01 May 2015
Total Returns	-0.24%	3.52%	-3.07%	-4.01%	4.90%	4.64%	N/A	5.75%
Total Returns (Net)	-0.24%	3.52%	-3.07%	-4.02%	N/A	N/A	N/A	N/A
MPF UK Index Linked Gilts All Stocks Index Sub-Fund								01 May 2015
Total Returns	-0.24%	3.52%	-3.07%	-4.01%	4.90%	4.64%	N/A	5.75%
FTSE Actuaries UK Gilts British Government Index Linked All Stocks	-0.20%	3.58%	-2.99%	-3.96%	4.87%	4.62%	N/A	5.72%
Difference	**-0.04%**	**-0.06%**	**-0.08%**	**-0.05%**	**0.03%**	**0.02%**	**N/A**	**0.03%**
Total Returns (Net)	-0.24%	3.52%	-3.07%	-4.02%	N/A	N/A	N/A	N/A
FTSE Actuaries UK Gilts British Government Index Linked All Stocks	-0.20%	3.58%	-2.99%	-3.96%	N/A	N/A	N/A	N/A
Difference	**-0.04%**	**-0.06%**	**-0.08%**	**-0.06%**	**N/A**	**N/A**	**N/A**	**N/A**

For information regarding performance data, including net performance data, please refer to the section entitled "Important Information" at the end of the report.

R-Factor™ Summary

As of 30 Jun 2021

UK ESG Screened Index Equity Sub-Fund

Benchmark: FTSE ALL SHARE EX CONTROVERSIES EX CW INDEX

R-Factor Summary	Fund	Benchmark	Difference
R-Factor	66.75	66.76	-0.01
ESG	66.92	66.93	-0.01
Corporate Governance	49.75	49.74	0.01

Source: SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.

What is R-Factor?

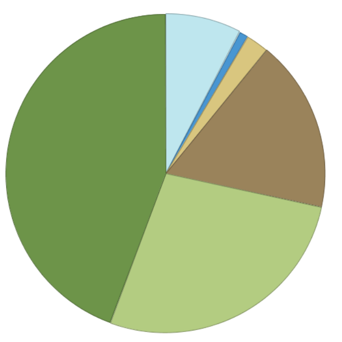
R-Factor™ is built off a transparent scoring methodology that leverages the Sustainability Accounting Standards Board (SASB) Materiality Map, corporate governance codes, and inputs from four best-inclass ESG data providers. R-Factor supports the development of sustainable capital markets by giving investors the ability to invest in solutions that integrate financially material ESG data while incentivizing companies to improve their ESG practices and disclosure in areas that matter.

Fund Coverage	Count	Percent of Total Securities	Percent of Total Market Value
R-Factor Securities Coverage	362	61.99%	92.29%
Total Number of Securities in Portfolio	584		

Source: Factset/SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.

Fund R-Factor Profile	
Not Available	7.71%
Laggard	0.87%
Underperformer	2.35%
Average Performer	17.45%
Outperformer	27.23%
Leader	44.39%

Source: Factset/SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.



Top 10 Positions	Fund Weight	Benchmark Weight	Difference	R-Factor Rating
AstraZeneca PLC	5.14%	5.14%	0.00%	73.53
Unilever PLC	4.98%	4.98%	0.00%	83.51
Diageo plc	3.58%	3.58%	0.00%	91.02
GlaxoSmithKline plc	3.16%	3.16%	0.00%	82.56
Rio Tinto plc	2.91%	2.91%	0.00%	72.95
British American Tobacco p....	2.88%	2.88%	0.00%	62.54
BP p.l.c.	2.83%	2.83%	0.00%	62.30
Royal Dutch Shell Plc Class...	2.69%	2.68%	0.01%	62.81
Royal Dutch Shell Plc Class...	2.33%	2.34%	-0.01%	62.81
Reckitt Benckiser Group plc	1.83%	1.83%	0.00%	69.34

Source: Factset/SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.

Top 5 R-Factor Ratings				
Diageo plc	3.58%	3.58%	0.00%	91.02
Anglo American plc	1.59%	1.59%	0.00%	88.38
Land Securities Group PLC	0.21%	0.22%	-0.01%	86.75
United Utilities Group PLC	0.30%	0.30%	0.00%	86.38
Unilever PLC	4.98%	4.98%	0.00%	83.51

Source: Factset/SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.

Bottom 5 R-Factor Ratings				
Ten Entertainment Group Pl...	0.01%	0.00%	0.00%	15.62
IntegraFin Holdings PLC	0.06%	0.06%	0.00%	22.32
PPHE Hotel Group Limited	0.02%	0.02%	0.00%	23.64
Melrose Industries PLC	0.33%	0.34%	0.00%	25.67
PureTech Health PLC	0.03%	0.02%	0.00%	26.79

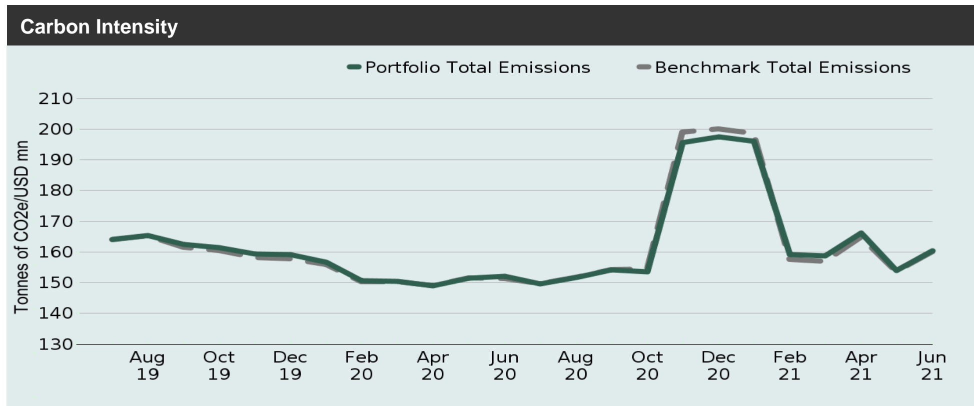
Source: Factset/SSGA. Holdings as of 30 Jun 2021, R-Factor data as of 31 May 2021.

The R-Factor summary reflects certain ESG characteristics only, and does not reflect the portfolio's performance. Certain instruments such as cash & derivatives are excluded. ESG analytics data reported on a one month lag relative to monthly performance reporting period. Please see Important Information section for more information and definitions of the ESG Metrics presented.

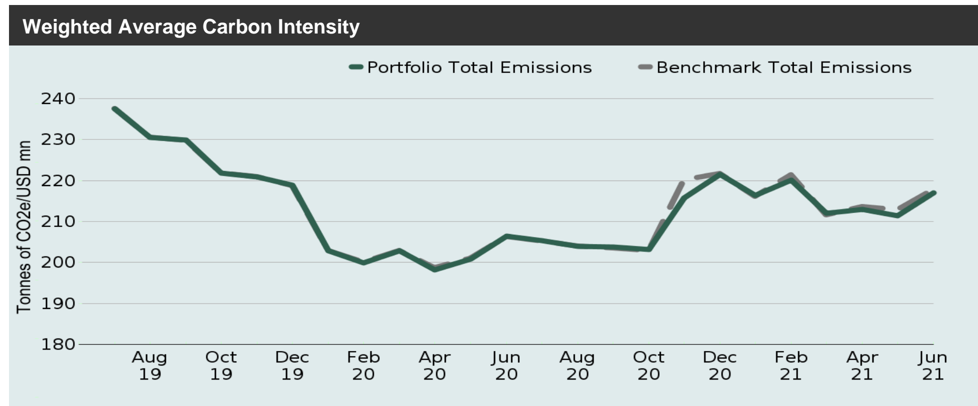
Climate Profile

UK ESG Screened Index Equity Sub-Fund

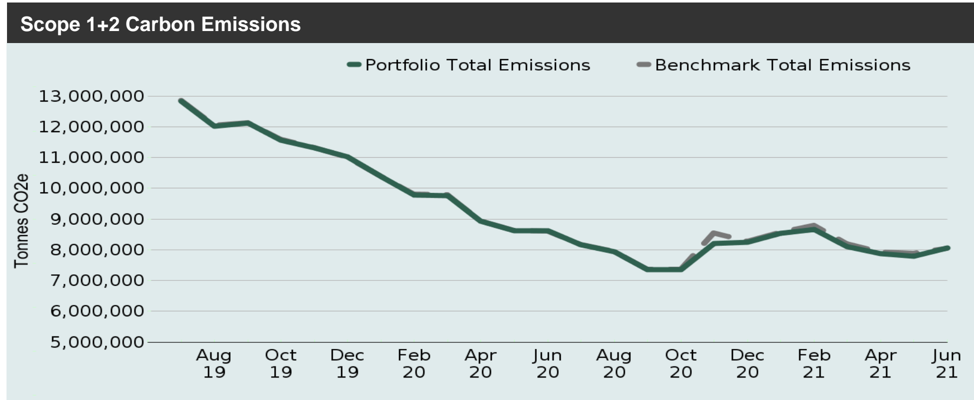
Benchmark: FTSE ALL SHARE EX CONTROVERSIES EX CW INDEX



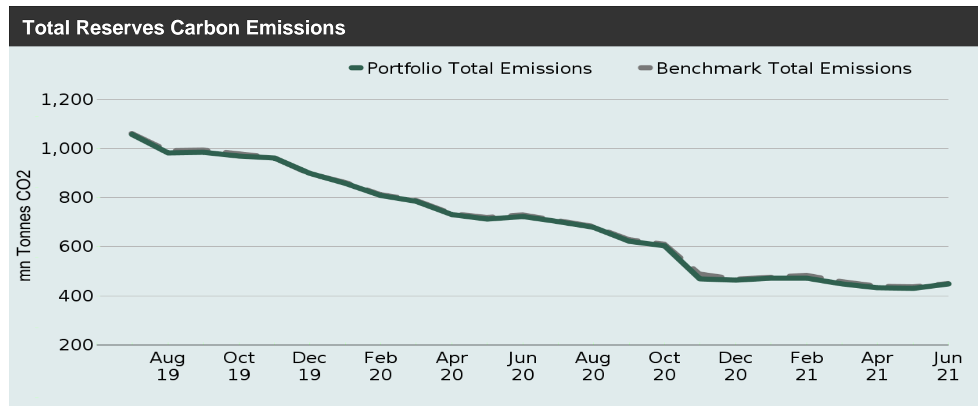
Source: SSGA Holdings as of 30 Jun 2021. Trucost data as of 31 May 2021.



Source: SSGA Holdings as of 30 Jun 2021. Trucost data as of 31 May 2021.



Source: SSGA Holdings as of 30 Jun 2021. Trucost data as of 31 May 2021.



Source: SSGA Holdings as of 30 Jun 2021. Trucost data as of 31 May 2021.

Stewardship Profile

As of 30 Jun 2021

UK ESG Screened Index Equity Sub-Fund

Benchmark: FTSE ALL SHARE EX CONTROVERSIES EX CW INDEX

Stewardship Profile	Q1 2021
Number of Meetings Voted	623
Number of Countries	7
Management Proposals	1,329
Votes for	90.37%
Votes Against	9.63%
Shareholder Proposals	2
With Management	100%
Against Management	0%

Source: SSGA as of 31 Mar 2021

Figures are based on State Street Global Advisors’ general approach to voting at the companies held by the Fund at quarter end. This information is not a substitute for a proxy voting report, which can be requested through your relationship manager.

State Street Global Advisors' (SSGA) asset stewardship program is aimed at engaging with our portfolio companies on issues that impact long-term value creation across environmental, social and governance (ESG) considerations. In the recent past, SSGA has issued extensive guidance on key governance matters such as effective, independent board leadership. SSGA's current focus is on helping boards think about the possible impacts of environmental and social issues and incorporating a sustainability lens into boards' oversight of long-term strategy as a sound business practice.

Gender Diversity

Women on Board	Number of Securities
0	13
1	81
2	213
3	160
4	75
5	30
6	7
7	1
8	1
9	0
10	0
10+	0
Not Available	3
Total	**584**

Source: Factset/SSGA. Holdings as of 30 Jun 2021, Factset data as of 31 May 2021.

Summary of Views

	Short/Medium Term Outlook	Strategic Outlook	Comment
AUD	▬	▼	The recovery continues supported by strong commodity prices, loose monetary and fiscal policies, rising home prices, and employment growth. However, recent lockdowns due to the surge in Covid cases and a central bank that is unlikely to project rate increases until 2024 weight on near term AUD prospects.
CAD	▬	▬	YTD growth is strong creating a firm base for recovery and hawkish Bank of Canada policy. The recovery in the US economy and expectations of an earlier FED rate hike are likely to spill over to help support CAD vs the broader G10 universe. CAD leads the G10 year to date reflecting these positives and that reduces scope for further near term gains.
CHF	▼	▼	We are negative CHF due to ultra-low yields, low inflation, SNB intervention to limit further CHF gains, and extreme overvaluation vs long run fair value. Any pullback in global risk sentiment or setbacks to EU recovery may delay CHF weakness, but we look through that and remain max short the Franc.
EUR	▼	▼	We remain negative EUR due to negative interest rates, elevated long term valuation, and weak potential growth. We see scope for a cyclical bounce in EUR later this year (EURUSD to 1.25) the recovery matures but prefer to gain exposure to an EU recovery via higher beta, higher yielding currencies with regional EU ties such as the CE3, NOK, and SEK.
GBP	▲	▬	The UK vaccination program has been impressive and underpins a solid recovery while GBP remains substantially below fair value compared to EUR, CHF, and USD. Optimistic tones from the Bank of England are also supportive. We see ample medium term upside for GBP, but the YTD GBP rally prices much of this optimism and may slow gains near term.
JPY	▲	▲	The Yen is substantially below fair value and its yields are more competitive compared to the past 10 years. But, JPY tends to underperform in a global recovery and we expect it to remain challenged in this recovery, but our long JPY position diversifies higher beta long positions in NOK, SEK, and GBP.
NOK	▲	▲	An steady post-covid growth recovery, strong oil prices, an expected Q3 rate hike, ample fiscal support, and a cheap valuation are positive for NOK. We expect potentially sharp downdrafts in NOK if equity market volatility increases, but we see strong gains for NOK over the medium term.
NZD	▬	▼	Fast recovering labor markets, solid manufacturing PMI, and rising inflation support NZD gains. The RBNZ opening the door to an H2 2022 rate hike is also positive. But a recent slowing in the recovery and steady fall in commodity export prices limits near term upside.
SEK	▲	▲	SEK remains among the cheapest G10 currencies while both Swedish and EU growth accelerates. The biggest obstacle to SEK appreciation the Riksbank expectation to maintain policy rates at 0% well into 2024. This may limit SEK vs. currencies with rising short term rate expectations, but we see room for appreciation vs. low yielders such as EUR and CHF.
USD	▼	▼	World leading growth enabled by massive fiscal stimulus and tremendous progress in Covid vaccinations support USD near term, especially now that the FED appears willing to begin rate hikes as soon as 2023. Medium to long term USD remains quite expensive to fair value and we expect its relative growth advantage to erode into 2022 as the world catches up in vaccinations, this is likely to drive USD back down toward fair value.

Source: SSGA

DSH Performance and Positioning

The GBP based DSH strategy applied to the MSCI World xUK index lost 0.04% in Q2 relative to a benchmark 50% passive hedge. Despite a third surge in Covid cases challenged the expected pace of recovery later in the quarter the overall pace of the pandemic recovery was stable and close to expectations. That helped to prevent a sustained move lower in GBP but was insufficient to propel GBP to further gains. After a G10 leading performance in Q1 GBP was much choppier in Q2 as investors turned their attention toward currencies which have lagged in the recovery. In June attention then turned to a more positive US Dollar outlook after the FED pulled forward the expected date of its first rate hike. In the end GBP and the GBP based DSH strategy had a near zero return for the quarter.

The Pound's gains vs. the US Dollar are particularly important for the GBP base DSH strategy as we currently recommend maximum hedges of 100% for the expensive US Dollar and the USD is the largest exposure in most global equity portfolios. For Q2 the USD hedge contributed +0.02% of excess return relative to the 50% passive benchmark hedge. Active returns to the maximum 100% hedge on the euro contributed another -0.03% while excess returns to the other currencies fell into an extremely small range from -0.02% and +0.01% and netted to -0.3%. The average total portfolio hedge ratio for a typical MSCI World xUK investor finished the quarter at 92.05% vs. a 50% neutral benchmark hedge ratio, unchanged on the quarter.

The strategic views described below (and in the summary table above) are based on our value model which is the core driver of the DSH model. The shorter term (tactical) views are not part of the DSH strategy but provide some insight into the short term expected performance and opportunities which we expect to explain nearby performance for strategic DSH investors, based on our full suite of models. GBP is now only 12.4% below fair value against USD compared to a near 20% undervaluation in early 2020. DSH is a long run value-based strategy and GBP remains at historically cheap levels by our estimates. That still provides a wonderful strategic opportunity for patient GBP based DSH investors to better control foreign currency downside risks and add value over a simple passive currency hedge.

Macro Environment

Q2 began with a continuation of the major theme that has dominated markets since the development of effective vaccines, the theme of global recovery and reflation as the world emerges from the pandemic. In terms of currency market behavior this favored pandemic recovery leaders and a steady rotation from past leaders to the next set of leaders. APAC outperformed in 2020 given their success in containing Covid, followed by the UK and US in Q1 as the early vaccine leaders, and finally in early April we saw a rotation into EU currencies, the euro and Eastern European currencies. Alongside this recovery rotation was a general risk positive sentiment that favored higher beta and higher yielding currencies at the expensive of more defensive and low yielding currencies, this mostly weight on the Japanese Yen. By early May, after a six week rally in EU and EM currencies to start the quarter the tone began to change. Tthe world was running out of laggards for the market to rotate into most liquid currencies across the developed and emerging worlds already priced an optimistic recovery scenario. New themes also emerged that questioned the smoothness and extent of the global recovery. Specifically, diverging central bank outlooks, a slower, bumpier recovery from the pandemic as new Covid surges emerged, and stubbornly high inflation due to more dramatic and longer-lived supply-side constraints. These new themes and a lack of clearly undervalued opportunities led to more volatile trendless markets and a partial rebound in the US Dollar.

The shift toward less market friendly themes grew more influential in June. The largest market impact came from the surprisingly hawkish shift in outlook from the US Federal reserve on June 16th. The FED pulled forward the date of its first expected policy rate increase while leaving the long run expected rate unchanged at 2.5%. The policy path based on the FED DOTS projection now calls for two rate hikes in 2023 up from zero at the March meeting and seven FED policy makers now see at least one rate hike in 2022 up from four in March. In addition, the FED chair Powell indicated that the committee is now talking about tapering the QE program. USD short end yields and the US Dollar moved higher in response. However, after an initial knee jerk sell-off equity markets and emerging markets handled the news well as the expected terminal policy rate of 2.5% did not change and longer dated US yields fell. There may be a number of technical reasons contributing to the drop longer dated yields, but an important possible explanation is that a more responsive FED reduces the risk of a severe inflation overshoot which requires the FED to move more aggressively and potentially raise rates to restrictive levels. Lower risk of a policy error is good for longer term stability and growth. Going forward we expect the currencies backed by more proactive central banks to hold up better. We now add the US Dollar to that list. This should help to support USD through Q3 however USD is already expensive to fair value and that along with other factors that we discuss in the USD section suggest that USD is likely to come under pressure once again later this year and into 2022.

The second major theme, a slower global recovery, also intensified in June as the delta variant of Sars-Cov-2, the one that was first discovered in India, began to spread rapidly in many countries. By month end Australia was back in widespread lockdowns, the number of new daily cases in the UK rose back above 20k despite high vaccination rates, and a number of other countries especially in Asia and Latin America saw pronounced surges. The US, Canada, and continental Europe fared well. Nevertheless, the pace of global recovery will be longer and bumpier than many had hoped, and persistent global supply frictions should keep inflation stubbornly high. In this environment the relative pace of recovery across countries will continue to be an important driver of currency returns. Right now, that favors USD. In June the rise off the delta variant outside the United States relative the continued fall in case rates in the US favor USD. Later this year and into 2022 we expect to see a shift in leadership which is likely to impact currency differently, across Europe through the summer and into next year, and Asia Pacific and broader EM universe later the year and very much in 2022.

Supply chain and labor market bottlenecks not only slow the pace of growth but introduce higher inflation and higher inflation volatility. To the extent that investors and policy makers regard these price disruptions as temporary the impact is likely to be small. But, the consequences of a more permanent shift in inflation that requires a material increase in real policy rates is likely to be extremely disruptive given current valuations and high global debt levels. Even if the probability of a structural shift higher in inflation is low, it cannot be ignored due to its potentially serious impact. The difficulty in forecasting medium to long run inflation means that investors are very likely to assign some reasonable chance to the risk of structurally higher inflation. Greater inflation pressure likely amplifies the important of central bank policy divergence as a driver of currency. More responsive central banks reduce risks of runaway inflation but the pace of tightening and difficulty in resolving supply side constraints are likely to keep inflation front of mind for investors. We must also be careful to watch out for central banks that are forced to tighten policy much earlier than warranted by growth and employment conditions due to inflation concerns. This is more of a problem for emerging markets, but in such cases the damage to the currency outlook from reduced growth may offset the benefits to the currency from higher rates. Either way, inflation is likely to continue to be an important factor for currency markets going forward.

US Dollar (USD)

The US Dollar lost 0.27% vs. the G10 average in Q2. The expectation of peak US growth and rotation into the regions yet to experience the peak recovery from Covid led USD lower early in the quarter. US yields fell from their March peak reflecting the same peak US growth narrative and further helped encourage a weaker US Dollar. Following a disappointing US employment report on May 7th the USD reached its low for the quarter. At its worst USD more than retraced its entire 2.5% Q1 gain. A positive inflation surprise on May 12th and ongoing flare ups of Covid globally caused some equity market volatility which led to a safe haven bid supporting USD and helped stem the drop in US interest rates.

June brought a more substantial rebound in USD allowing it to end the quarter almost unchanged. Nearly the entire gain happened in the 2 days following the FED surprise, the 16th through the 18th. Outside of those two days USD only gained 0.15% on the month. The story is quite straightforward. Currency is particularly sensitive to shifts in short term rates and the FED shift toward a 2023 increase in policy rates was positive for short end yields and by extension USD. Covid dynamics also helped to underpin a positive USD story. While the delta variant resulted in Covid surges across the globe the number of US cases continued to their lowest level since the early days of the outbreak in March 2020. Economic data verified a steady pace of recovery albeit not at the breakneck pace many had hoped for earlier this year. Nonfarm employment once again disappointed at 559k new jobs compared to 675k expected. May retail sales also disappointed at -1.3% MoM vs. -0.8% expected, however the shift from goods consumption to services as consumer mobility increases likely explains much of the decline. Core inflation once again surprised higher at +0.7% Mom, +3.8% YoY. The US recovery is robust and supply side constraints are keeping inflation at an elevated level. YoY base effects should turn negative over H2, but the strong MoM inflation numbers point to continued strength in CPI. This validates the recent FED shift and should help to support USD over the near term as it did in June. Overall, a slower but robust recovery and higher risk of an earlier FED rate hike should be USD supportive over coming months.

We retain a longer-term negative USD position despite the USD positive shift in FED expectations.

USD remains overvalued, more than 9% above fair value vs. an MSCI World xUS basket of currencies. That suggests much of the US advantage is already priced. While recent trends in US relative growth and inflation favor US assets and USD over the near term, the rest of the world is likely to catch up later this year and especially in 2022. If that happens as we expect, then it should favor a weaker dollar. In addition, USD tends to suffer during broad global recoveries. The rest of the world catches up in vaccinations and recovery suggests a broadening, more synchronized global recovery into 2022. US capital flows are also a risk as US equities remain historically expensive relative to foreign equities. Our expected shift in growth leadership increases potential for relative upside surprises in earnings growth outside the US. Greater risk

of higher corporate taxes in the US later this year further increase the chance for equity market outflows which tend to weigh on the dollar. For these reasons the shift in FED stance this past month and surges in Covid in many locations outside the US are likely to delay the resumption of a USD downtrend, but ultimately we do not think it eliminates USD downside potential into next year.

This negative dollar view does not mean that we reject the thesis of US exceptionalism that many investors see as a basis for longer term USD strength. It is hard to deny the pillars of the US exceptionalism thesis. Many factors support a structurally stronger USD over the next several years. The US potential growth and monetary policy/ interest rate outlooks remain attractive relative to much of the world. US demographics are healthier than in most developed countries and China while friendlier immigration policies under the Biden administration could also help labor force growth. The US remains well-positioned to lead in a global economy driven by innovation and the development of intellectual property while we may see some technology enabled re-shoring of manufacturing. We respect these positive long run factors and think that they result in the mildest USD bear market since currencies were floated in the early 1970's. Whereas the USD typically moves 15-20% below fair value at the trough of a bear market we think USD only falls back to and maybe slightly through fair value in this cycle. However, that still implies a broad 8-10% fall in USD.

Euro (EUR)

EUR gained 0.45% in Q2 vs. the G10 in an uneven pattern that saw small steady gains in April and May followed by modest losses in June. Having lagged APAC last year and the US and UK in Q1, the euro appreciated during the first part of the quarter in response to accelerating Covid vaccinations and the gradual lifting of pandemic related economic restrictions. Despite hopes for a strong economic rebound EUR gains vs. the broader G10 average were muted because currencies such as SEK enjoy greater leverage to EU growth and have higher interest rates. EUR also underperformed CHF in April and May as the Franc appeared well supported by the unwind of yield seeking carry trades triggered by the fall in US yields. The consistently dovish ECB also contributed to limit EUR strength against the broader G10.

The tone turned less positive in June. The euro lost 0.5% against the G10 average on the month in largely directionless, sideways trading. EUR is caught between the dovish ECB and hopes for a rapid acceleration in economic activity as its eurozone economies reopen. In contrast to the more hawkish central banks of Canada, Norway, New Zealand, and the US the ECB stuck to its extremely dovish stance seeing no need to adjust QE or rates policy in the foreseeable future. After the policy meeting on the 10th ECB President Christine Lagarde commented that it was premature to even discuss adjustments to policy. With YoY core CPI stuck around 1% there is certainly little pressure for tighter policy, although pressure may grow later this year as recent month on month inflation has picked up notably. Growth also appears to be accelerating sharply with the German IFO sentiment index back to late 2018 levels and the Markit composite PMI hitting a 15-year high. Hard economic data does not yet show the rebound due to reporting delays. The June data releases for retail sales, employment, and industrial production were all from April.

Looking ahead, we are bearish EUR over both the tactical and strategic horizon. All three of our long-term signals, interest rate carry, valuation, and long-term growth, suggest a short EUR position. EUR is quite expensive compared to GBP, NOK, SEK, CAD, and JPY and only fairly valued vs. USD, AUD, and NZD. The EU is trapped in a negative interest rate regime and hindered by an anemic potential growth outlook which is a function of low productivity growth and poor demographics. That is not a good backdrop for currency strength. More importantly, we do not have high hopes for change because of high debt levels, persistently high levels of regulation, resistance to reform, and potential misallocation of capital due to the ECB's large QE program. As a result, our long-term potential growth model ranks the EUR at the bottom of the G10 universe.

While we are negative on EUR against the G10, we recognize the risk that EUR could surge vs. the US Dollar as its economy reopens and US growth peaks. The EU vaccination program is catching up to the US and UK. Growth is increasing supported by a return of the consumer backed by historically high household savings rates over the past year. The EU is now disbursing fiscal support from the Next Generation EU fund, which will provide additional tailwinds as mentioned above and may help to raise longer term potential growth depending on the effectiveness of the investment programs. At very least the EU appears unlikely to repeat its mistake of forcing excessive fiscal contraction after the 2008-2009 global financial crisis which should help it achieve a much more robust cyclical recovery. Low interest rates are a drag, but we expect that as the recovery matures, we are more likely to see a steadier rotation toward cyclical and higher yielding sectors of the equity market favoring some rotation out of US equities into European equities. Such a rotation would help to push EUR higher vs. USD. We saw this during late 2020 and think it may well resume as we get closer to a sustained post-pandemic recovery. To put a number to it, we could see EURUSD up toward 1.25 at some point in the second half of the year or H1 2022. This call is a bit less aggressive than in prior commentaries in which we saw the potential for a move as high as 1.27 and saw the chance that could happen during Q3. We believe the relative strength of the US recovery and more responsive FED policy approach modestly reduces and delays any potential for a EURUSD rebound.

British Pound (GBP)

The Pound was down 0.17% vs. the G10 average in Q2 after a difficult April in which it fell more than 1.5%. GBP led the G10 in Q1 largely due to its strong vaccination program which raised expectations for a rapid recovery from the pandemic. Once that optimistic recovery scenario was priced into GBP investors turned their attention to the next regions that were likely to outperform. This rotation sent GBP lower. Concerns about the potential for a Scottish independence vote following the Scottish parliamentary elections in May also weighed on GBP in April. In May, GBP bounced back nicely from its April losses gaining 1.6% vs. the G10 average, the best performance in the group. The bulk of the gains came in the days following the May 6th Scottish parliamentary vote. The Scottish National Party (SNP) had committed to push for a second Scottish exit referendum if it won a clear majority and that would introduce significant uncertainty and hurt the Pound outlook. The UK government opposes another vote, but it could eventually be forced to allow it by the courts. The SNP won a clear majority but was one seat shy of an outright majority. That's still enough support to move toward a vote, but it won't be quite as easy as it would have been with an outright majority. More importantly, SNP leader Nicola Sturgeon indicated that she would not push the topic until at least next year given the stresses of the pandemic. GBP rallied in response.

GBP held on to the bulk of its May gains in June losing only 0.2% vs. the G10 average, mostly due to a 2.8% underperformance against USD. Events in June were broadly mixed. The delta variant has become the most common variant in the UK and is responsible for a steady rise in daily cases. On June 14th PM Boris Johnson delayed the plan to lift all restrictions until July 19th from the original end June date. The impact was muted as it mostly prohibited large gatherings such as concerts, most day to day activity is already unrestricted. Economic data is strong but decelerating after the initial reopening surge. Retail sales for May fell 1.4% compared to +1.5% expected. Markit composite PMI stabilized at high levels, 62.2, but that is down slightly from May's 62.9. Employment was also slightly below expectations with a 3M/3M change of 113k, near the average during the pre-pandemic 2017-2019 period. The unemployment rate is now only 0.9% above its December 2019 pre-pandemic level. Inflation is picking up with both April and May inflation printed +0.6% MoM pointing to further gains in the YoY number which remains low at 2.1%.

The Bank of England met on June 24th voting to keep policy settings unchanged noting that "The Committee does not intend to tighten monetary policy at least until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% inflation target sustainably." That statement sounds dovish but is really outlining a data dependent policy path. Rising inflation and a solid growth outlook suggest that the BOE could tighten in late 2022 or early 2023 expected prior to the BOE meeting. As a result, GBP was little changed.

The long-term GBP story seems straightforward to us and it is positive. The currency is cheap to fair value and now that Covid and Brexit stresses are receding there is plenty of upside in terms of growth, inflation, and monetary policy expectations. In addition, we see the potential for capital flows into the lagging UK equity market may further help to accelerate GBP gains. We hold a tactical long position. For strategic investors/hedgers we also encourage long GBP positions and/or higher than average hedge ratios on most foreign currencies. With a long horizon it is better to ensure that you are in the market with a positive GBP position once the recovery takes hold and GBP reverts to fair value as this is our central long run forecast. The pound's gains Q1 were a good example of the need for long term investors to look through short term uncertainty.

Japanese Yen (JPY)

The Yen lost 0.80% against the G10 average in Q2 and continues to be driven by external factors. The broad pandemic recovery and reflation theme that dominated investor behavior in April and May led to a steady downtrend in JPY up until the hawkish FED surprise in mid-June. That FED surprise initially drove equities lower and the Yen sharply higher alongside, but trailing, USD gains. After that knee-jerk reaction equity markets recovered and JPY gave back most of its gains until it began to track higher into month end. The late June appreciation is difficult to tie to a specific driver. Most likely it was due to weakness in non-US equity markets amidst rising concerns over the increased spread of the delta variant. Lower US 10-year yields may have also helped support the currency. Japan lifted its third state of emergency on June 20th, but it is far too soon to see benefits from that in hard economic data. Even as growth picks up, we expect little impact on the Yen because with core CPI still in deflationary territory, -0.3% YoY, there is a long way to go before the BOJ will react. The global recovery may be hitting its share of roadblocks, but it remains intact while an increasing number of central banks are preparing for an eventual tightening of policy. It will be difficult for the defensive, low-yielding JPY to sustain a rally in such an environment.

That said, we remain long Yen over the tactical and strategic horizons and see room for appreciation vs. USD, EUR, and CHF. On the surface this appears at odds with our commentary above. We are calling for a general improvement in global conditions which according to our framework should result in a weaker Yen, in fact our outright JPY return forecast is negative vs. the G10 average. Yet we are long. Why?

Over the tactical horizon the long position is attributable to two factors. First, and most importantly, JPY provides diversification against adverse events as it tends to rise during global shocks and equity market corrections. We may lose on the long JPY position during this recovery, but using long Yen as a hedge allows us to take even more aggressive long positions in higher beta currencies such as NOK, SEK, and GBP which we think are likely to more than offset any losses on long Yen. Secondly, Japanese yields are higher than EUR and CHF yields across the curve and short end yields are historically high vs. most of the rest of G10. This implies that Yen weakness is likely be mild compared to prior global recovery periods in which JPY was the clear low yielding currency used to fund interest rate carry trades. The yield gap is even more attractive in real terms because of the very low Japanese inflation rate. Thus, over the tactical horizon we may lose money in absolute terms on a long JPY position during this recovery, but the diversification and likely limits to those losses vs. other low yielding currencies make it a worthwhile position.

Over the longer-term horizon, we have a more explicitly positive Yen view. The Yen is quite cheap to long run fair value relative to most G10 currencies except for NOK, SEK, and GBP. This suggests that long run forces are tilted toward a stronger JPY. Projecting ahead into late 2022 and 2023 the business cycle is more likely to support gains in JPY. We may be in the early stages of a dramatic global recovery, but by mid-2022, or earlier, investors will turn their attention to the reversion of growth back to sub-par long run averages. In fact, depending on the drag from high global debt levels, the potential misallocation of capital due to ultra-easy policy, and the degree to which government's efficiently allocate fiscal spending, global long run potential growth may even be lower than the already weak level prior to the pandemic. That future period of a mature and decelerating expansion is more consistent with outright Yen appreciation given its lofty valuation. The major risk to this view is a longer recovery period and greater than expected productivity gains outside Japan on the back of government financed development programs and higher levels of private investment.

Canadian Dollar (CAD)

CAD gained vs. the G10 average in each month during Q2 and finished the first half of the year as the top performer in the group, up 5% YTD. Strong oil prices were a positive throughout the quarter, but the bulk of CAD's gains happened following the Bank of Canada's (BoC) April meeting. They delivered a positive outlook and decided to begin reducing bond purchases in the QE program. The April to May surge in CAD largely ignored a negative surprise in April employment data, -207k jobs compared to -150k expected. The loss of employment was anticipated given the Covid lockdown. The fact that the number of lost jobs was slightly higher than expected did not have a major impact because it did not derail prospects for gains once the economy fully reopens, and the bulk of the employment loss was explained by a loss in part-time employment. An accelerating vaccination program as well as continued strong US growth was sufficient to preserve positive forward-looking growth expectations and allow investors to look through the negative surprise. Later in May CAD received an additional boost from BoC Governor Macklem who noted that interest rates were unusually low and rapidly rising home prices are a risk. Macklem's comments underscore the potential for the BoC to begin increasing interest rates in 2022, potentially before the US FED. This monetary tightening theme is likely to provide ongoing support to CAD.

June brought more mixed sentiment and underperformance vs. USD. CAD traded in a very tight range during the month to finish with a small gain of 0.2% against the G10 average. The lack of volatility in CAD appears to be the result of two factors. Firstly, CAD proved less sensitive to the FED surprise than most currencies. Good news out of the US has direct positive spillover effects on the Canadian economy helping to anchor CAD to USD. The Canadian Dollar did underperform the US Dollar as one would expect after the hawkish FED surprise, but that anchoring effect also helped CAD to outperform other G10 currencies thereby keeping it very stable against the G10 average. Secondly, there was little news that impacted the medium to long run Canadian outlook. Economic data was on the weak side but that was largely expected due to the significant spike in Covid cases from April into early May. May employment fell 68k jobs relative to -25k expected while April retail sales ex autos fell sharply, -7.2% MoM. Going forward the outlook is more positive. The vaccination rate is steadily rising and is now on par with Europe at about 35%. As the economy more fully reopens growth should rebound nicely. The Bank of Canada (BoC) expressed similar confidence in the outlook at its meeting on the 9th. Policy was unchanged but the BoC retained its hawkish outlook noting that it sees potential for a rate hike in H2 2022, in line with current BoC expectations. With lower sensitivity to the FED surprise and little news to challenge the medium-term recovery and monetary policy outlook, CAD was quiet on the month.

Similarly, our CAD forecast was little changed. We retain a small long CAD bias though at a reduced level as we favor the GBP and SEK on their improved economic outlooks. A stronger than expected recovery as Canada reopens would likely refocus our attention on CAD upside. But at this point the expected Canadian recovery and continued strong oil prices appear to be well priced by CAD at current levels. As a result, we limit the size of our long position. From a longer-term hedging perspective, the story is mixed. CAD is slightly expensive vs. the G10 average but that average valuation measure masks major differences across currencies. CAD is cheap vs. USD, AUD, and EUR and extremely cheap vs CHF while it is expensive vs JPY, GBP, NOK, and SEK. Therefore, we recommend that Canadian based currency hedgers adopt above-average hedge ratios on USD, AUD, CHF, and EUR and lower than average hedge ratios on JPY, GBP, NOK, and SEK.

Swiss Franc (CHF)

CHF gained 1.3% in Q2, the second best performance in G10. Almost 1.25% of that 1.3% happened in April. Sharply rising global yields and increased optimism about the global recovery in February and March pushed CHF lower as investors favored higher yielding more cyclically sensitive currencies. The fall back in yields in April provided some relief by prompting an unwind of those short yield seeking CHF positions sending the currency higher. May and June brought a choppy trendless market for CHF, though the behavior around the June FED surprise was interesting.

The first half of the June brought steady CHF strength. It outperformed all G10 currencies except for the Norwegian Krone. A resumption of the downtrend in global yields and the dovish ECB meeting likely supported the Franc, similar to its behavior in April. The spike in short end US yields after the June 16th FED surprise disrupted that early month strength sending CHF lower to finish near flat for the month. Unlike JPY, the Franc did not benefit from the two-day equity market correction following the FED meeting despite its traditional behavior as a defensive currency. However, this makes sense compared to recent history. CHF has been quite sensitive to global interest rates but far less sensitive to equity market fluctuations. Interestingly, the market has recently priced in a 0.25% policy rate hike from the Swiss National Bank by end 2023 compared to only 0.10% for the ECB. This may be helping to keep EURCHF depressed despite the pickup in EU economic activity.

We continue to hold a large short CHF position over both tactical and strategic horizons. Our strategic negative view is driven almost entirely by the Franc's extreme overvaluation and ultra-low yields. By our estimates, after the recent rally CHF is approximately 23% expensive to its long run fair value vs an MSCI World currency basket. Over the tactical horizon, very low inflation, an overvalued currency, and weak growth point to continued currency intervention and negative interest rates. As domestic and EU growth pick up capital outflows are likely to accelerate (eventually) as investors look for growth and higher yield opportunities, much like they did during the 2017 EU growth spurt. The net result will be pressure for a weak CHF during the recovery.

Norwegian Krone (NOK)

The Krone fell 1.08% vs. the G10 average in Q2, a poor performance considering strong oil prices and continued progress toward recovery from the pandemic. The quarter started on a positive note as oil rose more than 10% from its March low and both inflation and manufacturing PMI's came in higher than expected. April gains reversed sharply in May. A modest disappointment in the April CPI report released May 10th, +0.3% MoM vs. +0.5% expected, helped to push NOK lower. Those losses then accelerated alongside an 8% fall in Brent crude prices from May 18th to the 24th. Brent crude prices bounced back by month end while NOK only retraced a portion of its loss.

Early June brought some relief before NOK resumed its May downtrend. NOK tracked oil higher during the first half of the month despite weak April industrial production, -0.1% MoM, and a significant disappointment in May core inflation, -0.4% MoM vs. +0.1% expected. Those early month gains reversed sharply as NOK fell more than 2% in the two days following the hawkish FED surprise. This is another example of the Krone's very high sensitivity to equity market losses; a risk we have highlighted consistently in these notes. The Norges Bank meeting on the 17th and reaffirmation of their expected September rate hike did little to stop the pain. The quick recovery in oil and equity markets after the 18th did stop the pain and NOK recovered almost all its month to date loss by the 25th before following oil prices lower into month end.

The Krone has had a strong year, but it remains very cheap to long run fair value. The Norges Bank has penciled in a rate hike as early as September backed by Norway's solid growth outlook. Oil prices appear well supported by the global recovery and supply restraint. Overall, NOK fits the profile of an attractive global economic recovery currency very well given its cyclical sensitivity and commodity market exposure. We are positive on NOK and hold a tactical long position.

That long position is not without interim volatility risk. We cannot ignore the Krone's extreme volatility during 2020 and its frequent hypersensitivity to equity market corrections, as we recently witnessed in late February and again in mid-June. Norway's underlying fundamentals and the Krone's cheap valuation may portend strong returns, but they do come at a greater level of risk. And, even if the vaccination process continues to accelerate globally, equity markets at or near all-time highs are likely to experience a correction or two along the way. This higher volatility and the Krone's high beta to global risk sentiment limits the size of our position. Over the strategic horizon, we can look through the short-term risks and are more positive in our view. We recommend Norwegian based investors set strategic hedge ratios on foreign currency at a high level while most foreign investors leave NOK almost completely unhedged.

Swedish Krona (SEK)

The Krona enjoyed a G10 leading 1.6% gain in Q2 but remains down 1.8% vs. the G10 average YTD. Sweden is highly sensitive to EU growth and enjoyed the rotation toward currencies of the region in anticipation of recovery during the first two months of Q2. This rotation is the same dynamic that supported EUR during April and May. However, Sweden is arguably a more attractive vehicle to capture a broad EU and global recovery because it is quite cheap to long run fair value, has a high beta to EU growth, and provides 0.5% higher yields compared to EUR.

Like EUR, SEK performance was mixed to slightly negative in June. But that is not a reflection of a deterioration in Swedish fundamentals. Sweden's recovery is well under way with the May Markit composite PMI reaching a new 15 year high at 70.2 and retail sales rising 2.3%, up from a contraction of 1.4% in April. However, modest inflation, a very dovish Riksbank, and recent softness in EUR are hindering further Krona appreciation. The May inflation report released on the 10th showed a small 0.1% MoM increase and 1.2% YoY increase. This is well below the Riksbank's 2% target and we expect they will continue to project the 0% policy rate into 2024. SEK began to slide lower in the days following the inflation data. The hawkish FED surprise and two day pull back in global equities hit SEK hard in the middle of the month sending it down nearly 1.4% vs. the G10 average. Like equity markets and the neighboring Norwegian Krone, SEK recovered until he 24th, but was unable to erase the entire mid-month loss as it was slightly lower during the final week of June. This late month weakness may have been partly due to political uncertainty. PM Stefan Lofven lost a confidence vote and called on the parliamentary speaker to form a new government. We don't see this as a major risk to broad economic policy or SEK, but heightened political uncertainty is not helpful to the currency.

We retain a significant long SEK position over the tactical and strategic horizons. Starting from a stronger base compared to its regional neighbors (apart from NOK) we are seeing a solid economic recovery as Covid recedes. This will benefit SEK over time and is likely to put upward pressure on inflation later this year and into 2022. On a less positive note the Riksbank also indicated that have little appetite to raise policy rates from zero into at least 2024. This is likely to limit SEK gains against higher yielding, equally cyclical G10 currencies. But our positive tactical SEK view is strongest vs. EUR and CHF both of which are backed by even more dovish central banks. Also, long SEK vs. EUR and CHF also provides 50-70 basis points of positive interest rate carry even if the Riksbank holds rates at zero. Over the strategic horizon, we focus on SEK's extreme undervaluation as the primary driver. We recommend that long term global investors significantly reduce SEK hedge ratios while Swedish investors adopt high hedge ratios on foreign currency.

Australian Dollar (AUD)

AUD and CAD are both pro-cyclical, commodity sensitive currencies. But, unlike CAD which gained in each of the 3 months during the quarter, AUD was lower in each month. By end Q2 AUD was the worst performing G10 currency down 1.8% vs. the average. In April AUD did not participate in the rotation to the next set of pandemic recovery currencies at it had enjoyed its pandemic reopening rally in Q4 of last year. Relative expected growth was decelerating by Q2 this year. In May AUD faced headwinds as it became clear that the Reserve Bank of Australia (RBA) was not shifting its expected policy rate path higher in contrast to the central banks of other commodity producers such as New Zealand, Canada, and Norway. Continued trade tensions with China also helped to cast a shadow on AUD prospects despite record high terms of trade. June began quietly until the hawkish US FED surprise pushed AUD into negative territory for a third month in a row. AUD bounced back after that initial FED induced selloff, but it was cut short by rising Covid cases and a series of lockdowns which sent AUD to new lows by month end. Entering July nearly the entire country, or at least all major population centers, were in lockdown. Only about 7% of the population has been fully vaccinated putting the population at significant risk of the new, fast spreading delta variant. Things are improving with near 25% of the population having received at least one shot, but that is not enough to prevent lockdowns well into July. However, the acceleration of the vaccination program is likely sufficient to preserve the positive economic outlook for H2 overall. As a result, the impact of lockdowns on AUD, monetary policy, and fiscal policy should be muted.

Outside of the mid-month volatility caused by the FED and the latest surge in Covid, the economic data continues to look optimistic. Australian terms of trade finished the month at new 12-year highs thanks in large part to strong iron ore prices. May employment gained 113k new jobs compared to expectations for only +30k and much of the surprise came from the 97.5k new full-time positions. June PMI softened a touch from 58.0 to 56.7, but that remains consistent with strong growth. The only clear disappointment in the data was a 0.1% MoM gain in May retail sales compared to +0.4% expected. Overall, the data was strong enough to prevent a serious reaction from the RBA at its upcoming July meeting. Expectations are for the RBA to hold fast to its prediction that policy rates will remain at historic lows until 2024 but to be open to tapering bond purchases under its QE program later this year. Many investors and forecasters remain skeptical of the RBA's willingness to taper so any move in that direction is likely to be marginally positive.

We remain neutral to slightly positive on AUD over the tactical horizon. The story is not as positive as in prior months given the Covid surge. But with increased vaccination and Australia's track record of controlling spread through lockdowns we do not see this surge as derailing the broader recovery. While economic data remains strong in absolute terms the pace of recovery is decelerating compared to other countries such as the US, UK, and EU. It is hard to see Australian growth accelerating meaningfully until global travel and immigration resume. Easing of China's restrictions on Australian imports such as coal, wine, and barley would also be helpful, but that doesn't appear likely in the near term. In fact, tensions continue to rise. The firm commitment by the RBA to keep yields at 0.1% over the three-year horizon is also weighing on our AUD forecast due to the pickup in rate hike expectations in countries such as the US, Canada, New Zealand, and Norway. In the end AUD appears stuck near current levels. The positive impact of its healthy long-term outlook and strong commodity prices are offset by the negative impact of its lower relative interest rate outlook and decelerating growth relative to the broader G10 universe.

Our strategic view is also mixed. By our estimates, AUD is now about 0.7% cheap to fair value relative to an MSCI World xAU basket of currencies, a massive recovery compared to March 2020's 16.9% undervaluation. This average valuation differs quite a lot across individual currencies. We still recommend that Australian investors maintain higher than average hedge ratios on foreign investments against the USD and fully hedge CHF positions. We estimate an AUDUSD long term fair value of 0.770, about where we finished the month. However, as currencies revert to fair value they tend to overshoot. We have been modestly underhedged USD and suggest remaining in that position in anticipation of some overshooting of AUD to the expensive side. More broadly we recommend Australian investors leave positions in the cheaper GBP, CAD, JPY, and the Scandinavian currencies mostly unhedged; AUD is rather expensive relative to these currencies.

New Zealand Dollar (NZD)

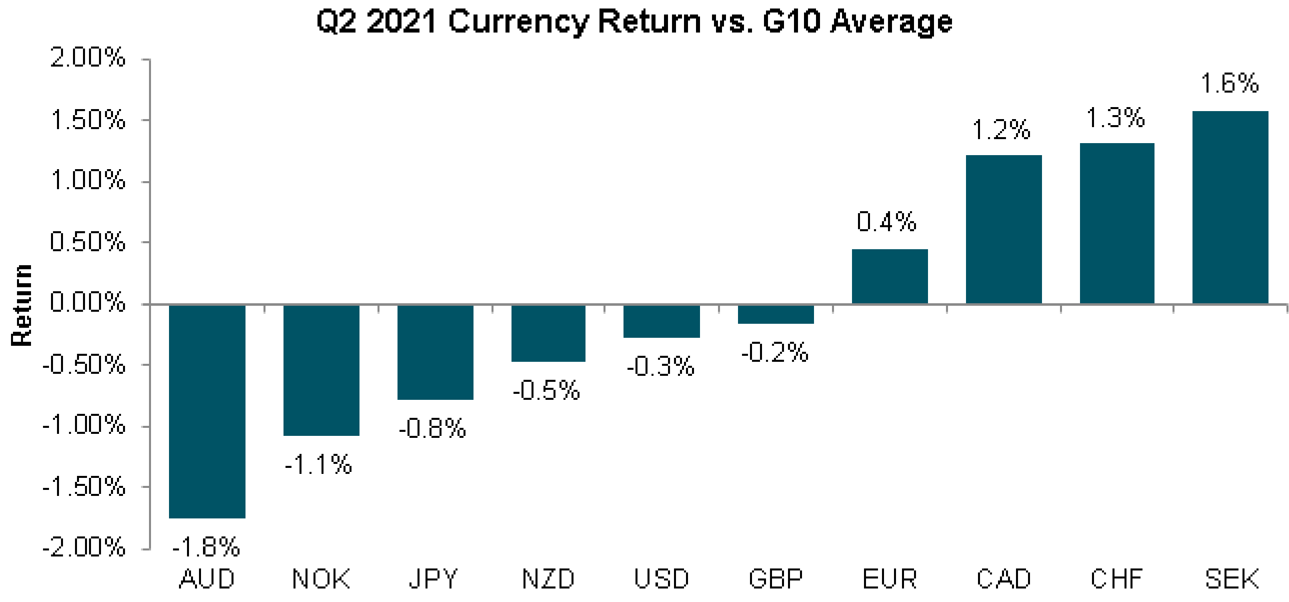
The New Zealand Dollar diverged significantly from AUD with gains in April and May. During April NZD enjoyed support from a rebound in commodity prices and a better than expected outcome from the Reserve Bank of New Zealand policy meeting on the 14th. Investors were concerned the RBNZ might shift to a more dovish stance following the announcement of government policies to control accelerating home price appreciation. The fact that the RBNZ delivered a rather quiet and consistent policy statement after the meeting on the 14th was a relief. In May that relief turned into outright optimism. NZD jumped at the start of the month in response to a better than expected Q1 employment report, unemployment of 4.7% vs. expectations of 4.9%. The currency then jumped higher again after the RNBZ policy meeting on the 25th in which they shifted to a more optimistic/hawkish tone and raise the possibility for a rate hike in H2 2022.

June brought a sharp reversal of the April – May gains sending NZD down to finish the quarter with a 0.5% loss vs. the G10 average. NZD had a muted response to the mid-June FED surprise, unlike other cyclically sensitive commodity currencies, but that appears largely since it had been falling steadily from the start of the month. The weakness is likely a reflection of falling commodity terms of trade, the Citi terms of trade index for New Zealand trended lower throughout the month and has now completely retraced its January to May rally. NZD also entered the month slightly overbought after the strong reaction to the RBNZ's hawkish shift at its May meeting which added a negative bias going into June. The RBNZ remains one of the few G10 central banks most likely to increase policy rates later in 2022, but that is still at least a year away. Otherwise, economic activity remains on a strong footing. On the 16th we learned that Q1 GDP growth was revised sharply higher to 1.6% QoQ relative to +0.5% expected. More recent data such as Westpac's Q2 consumer confidence survey rose to 107.1, a level consistent with 2018-2019 pre-pandemic levels and home prices have risen 22.8% for the year ended in June. The ANZ business confidence survey dipped back into negative territory at -0.60 over the past two months, but in 2018-2019, prior to the pandemic, it was dramatically lower lingering in the -40 range and reached a trough at -60 during the peak of Covid in March 2020.

We remain close to neutral NZD over the tactical horizon with a small negative bias. New Zealand and the NZD are likely to perform well once we see a broader global recovery from the pandemic and nations reopen to international travel. The greater likelihood of a 2022 monetary policy tightening and before that a tapering of QE is clearly a positive. We see upside potential against the currencies with more dovish central banks, EUR, CHF, JPY, and to some extent USD. But, at this point it is difficult to see substantial currency appreciation against other pro-cyclical and commodity sensitive currencies given headwinds to a reacceleration of growth prior to the reopening of the border and the weakness in terms of trade which will weigh on the important export sector. For long term strategic hedgers, we suggest a maximum hedge ratio on CHF and slightly higher than average USD hedge ratio. Oppositely, NZD remains quite expensive vs. NOK, SEK, GBP, and JPY based on our estimates of fair value. We recommend New Zealand based currency hedgers maintain very low hedge ratios against NOK, SEK, GBP, and JPY. We are near neutral vs. AUD and EUR. We remain close to neutral NZD over the tactical horizon with a small negative bias. New Zealand and the NZD are likely to perform well once we see a broader global recovery from the pandemic and nations reopen to international travel. The greater likelihood of a 2022 monetary policy tightening and before that a tapering of QE is clearly a positive. We see upside potential against the currencies with more dovish central banks, EUR, CHF, JPY, and to some extent USD. But, at this point it is difficult to see substantial currency appreciation against other pro-cyclical and commodity sensitive currencies given headwinds to a reacceleration of growth prior to the reopening of the border and the weakness

in terms of trade which will weigh on the important export sector. For long term strategic hedgers, we suggest a maximum hedge ratio on CHF and slightly higher than average USD hedge ratio. Oppositely, NZD remains quite expensive vs. NOK, SEK, GBP, and JPY based on our estimates of fair value. We recommend New Zealand based currency hedgers maintain very low hedge ratios against NOK, SEK, GBP, and JPY. We are near neutral vs. AUD and EUR.

Currency Performance



Source: Bloomberg/SSGA

Important Information

- R-Factor™ is an ESG scoring system that leverages commonly accepted materiality frameworks to generate a unique ESG score for listed companies. The score is powered by ESG data from four different providers in an effort to improve overall coverage and remove biases inherent in existing scoring methodologies. R-Factor™ is designed to put companies in the driver's seat to help create sustainable markets.
- R-Factor™ Scores are comparable across industries. The ESG and Corporate Governance (CorpGov) scores are designed to be based on issues that are material to a company's industry and regulatory region. A uniform grading scale allows for interpretation of the final company level score to allow for comparison across companies.
- Responsible-Factor (R Factor) scoring is designed by State Street to reflect certain ESG characteristics and does not represent investment performance. Results generated out of the scoring model is based on sustainability and corporate governance dimensions of a scored entity.
- The returns on a portfolio of securities which exclude companies that do not meet the portfolio's specified ESG criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's ESG criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole.
- The R-Factor™ scoring process comprises two underlying components. The first component is based on the framework published by the Sustainability Accounting Standards Board ("SASB"), which is used for all ESG aspects of the score other than those relating to corporate governance issues. The SASB framework attempts to identify ESG risks that are financially material to the issuer-based on its industry classification. This component of the R-Factor™ score is determined using only those metrics from the ESG data providers that specifically address ESG risks identified by the SASB framework as being financially material to the issuer-based on its industry classification.
- The second component of the score, the CorpGov score, is generated using region-specific corporate governance codes developed by investors or regulators. The governance codes describe minimum corporate governance expectations of a particular region and typically address topics such as shareholder rights, board independence and executive compensation. This component of the R-Factor™ uses data provided by ISS Governance to assign a governance score to issuers according to these governance codes.
- Within each industry group, issuers are classified into five distinct ESG performance groups based on which percentile their R-Factor™ scores fall into. A company is classified in one of the five ESG performance classes (Laggard - 10% of universe, Underperformer - 20% of universe, Average Performer - 40% of universe, Outperformer - 20% of universe or Leader - 10% of universe) by comparing the company's R-Factor™ score against a band. R-Factor™ scores are normally distributed using normalized ratings on a 0-100 rating scale.
- Discrepancy between the number of holdings in the R-Factor™ Summary versus the number of holdings in the regular reporting package may arise as the R-Factor™ Summary is counted based on number of issuers rather than number of holdings in the portfolio.
- For examples of public language regarding R-Factor see the ELR Registration Statement here: https://www.sec.gov/Archives/edgar/data/1107414/000119312519192334/d774617d497.html
- Carbon Intensity - Measured in Metric tons CO2e/USD millions revenues. The aggregation of operational and first-tier supply chain carbon footprints of index constituents per USD (equal weighted).
- Weighted Average Carbon Intensity - Measured in Metric tons CO2e/USD millions revenues. The weighted average of individual company intensities (operational and first-tier supply chain emissions over

revenues), weighted by the proportion of each constituent in the index.

- Scope 1+2 Carbon Emissions- Measured in Metric Tons of CO2e.The GHG emissions from operations that are owned or controlled by the company, as well as GHG emissions from consumption of purchased electricity, heat or steam, by the company
- Total Reserves CO2 Emissions - Measured in Metric tons of CO2. The carbon footprint that could be generated if the proven and probable fossil fuel reserves owned by index constituents were burned per USD million invested. Unlike carbon intensity and carbon emissions, the S&P Trucost Total Reserves Emissions metric is a very specific indicator that is only applicable to a very selected number of companies in extractive and carbon-intensive industries. Those companies are assigned Total Reserves Emissions numerical results by Trucost, whereas the rest of the holdings in other industries do not have numerical scores and are instead displaying "null", blank values. In order to present a more comprehensive overview of a portfolio's overall weighted average fossil fuel reserves, State Street Global Advisors replaces blank results with "zeros". While that might slightly underestimate the final weighted average volume, it provides a more realistic result, given that most companies in global indices have no ownership of fossil fuel reserves.
- We are currently using FactSet's own "People" dataset to disclose the number of women on the board, for each company in the Fund's portfolio.
- Data and metrics have been sourced as follows from the following contributors as of the date of this report, and are subject to their disclosures below. All other data has been sourced by SSGA.
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- The account summary page details the opening balance at the start of the reporting period which is the equivalent of the closing balance of the previous reporting period.
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