copia
Capital Management

Copia Capital Management

The art of portfolio construction

Quarterly Performance Update

31 March 2020

For professional investors only

copia Capital Management

Market performance

Macro update

ETF Flows

Risk barometer

Portfolio performance

Outcome charts

copia Capital Management

Market performance

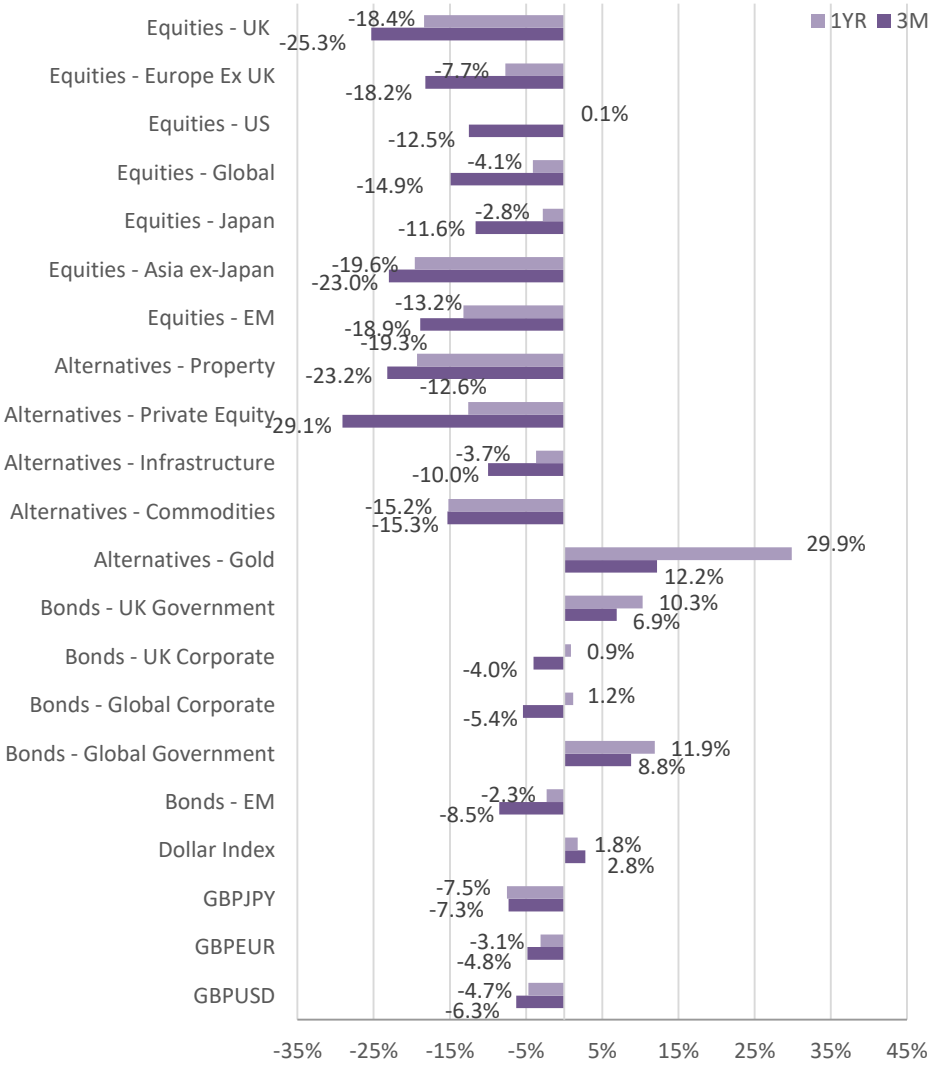
Market performance Q1 2020

- The first quarter of 2020 saw extreme volatility in markets driven by the Coronavirus outbreak. The outbreak was expected to be localised and contained in China in January. However, it rapidly spread across to Europe, North America and other Asian countries in February and March, now causing 42,100 confirmed deaths globally as end of March. With country lockdowns in place, investors are grappling to assess the impact of shutdowns on the economy. A strong risk-off sentiment has gripped the markets as the concerns of a potential global recession are mounting.

- A historical sell-off hit the stock markets in mid-March, following two emergency rate cuts by the US Fed, which took the Fed Fund rate down to 0.25%. In spite of the drastic policy response from global central banks, Equities suffered steep losses in Q1.

- To add to negative sentiment, Saudi Arabia and Russia engaged in a Oil price war driving the price of crude oil to almost $20/barrel a 60% drop from prices a month ago.

- Government bonds rallied on interest rate cuts whereas Corporate bonds prices fell on investors' concerns of the impact of the company shutdown due to the Covid-19. Gold prices surged hitting an hit a 8-year high as investments swarmed into safe-haven assets.



Source: Bloomberg, Copia Capital Management
All numbers expressed in GBP

copia Capital Management

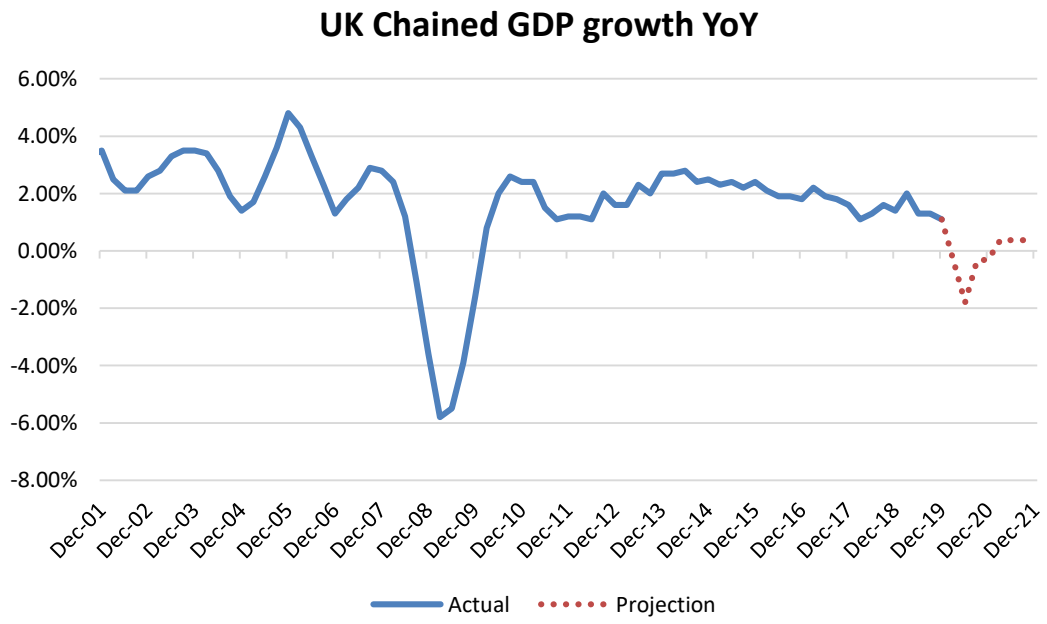
Market performance
Macro update
ETF Flows
Risk barometer
Portfolio performance
Outcome charts

Macro update: growth

UK GDP growth decelerating

- UK economy expanded at 1.1% for the year ending in December 2019, but is expected to contract in second quarter of 2020 stabilising in Q3 2020 and returning to growth from Q4 2020 onwards.

- The UK manufacturing PMI dropped to 47.8 in March, falling from 51.7 in February and Service PMI was down to a record low of 35.7 from February's figure of 53.2. The economic disruption caused by Covid-19 was the main reason for the contraction.



Source: Bloomberg, Copia Capital Management

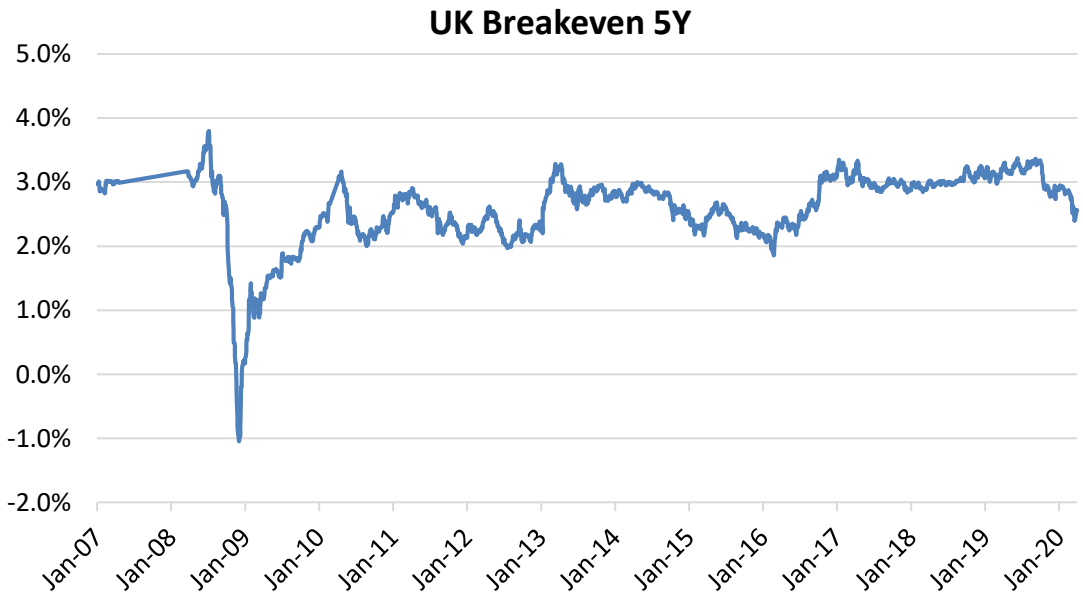
copia Capital Management

Macro update: inflation

Dropping inflation expectations combined with an uncertain labour market

- UK Inflation rate fell to 1.7% in February from 1.8% in January, while unchanged compared to the inflation rate a year ago in February 2019. The decrease was mainly due to the downward change in housing & utilities prices. The expected rate of inflation implied from the 5yr breakeven rate decreased from 2.9% to 2.6%, as a slowdown is now expected due to the nationwide lockdowns in place to combat the coronavirus outbreak.

- UK unemployment increased to 3.9% in the three months from November 2019 to January 2020 while the estimated employment rate was at a record high of 76.5%. The annual wage growth for the same period rose to 3.1% compared to 2.9% in December. The unemployment rate is expected to spike up to as job losses mount due to a slowdown caused by the pandemic.



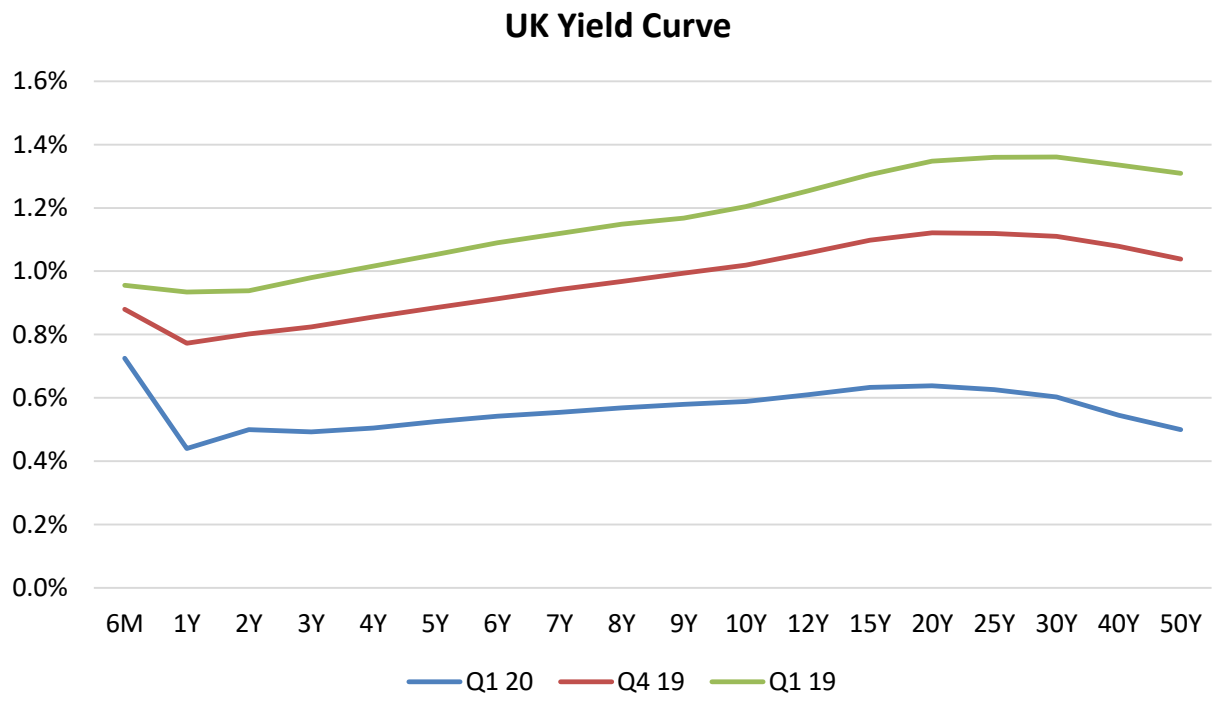
Source: Bloomberg, Copia Capital Management

Macro update: rates

UK yield curve moved lower and flattened

- The shorter end of the yield curve stayed inverted and the yield curve flattened with the spread between 2Y and 10Y yields dropping to 9bps at the end of Q1 2020, reflecting the market concern about the impending economic recession due to the coronavirus disruption.

- The Bank of England announced two rounds of rate cuts in March, bringing the effective rate to 0.1%. The yield on the 10 year gilt dropped by 43bps to 0.59% compared to the end of Q4.



Source: Bloomberg, Copia Capital Management

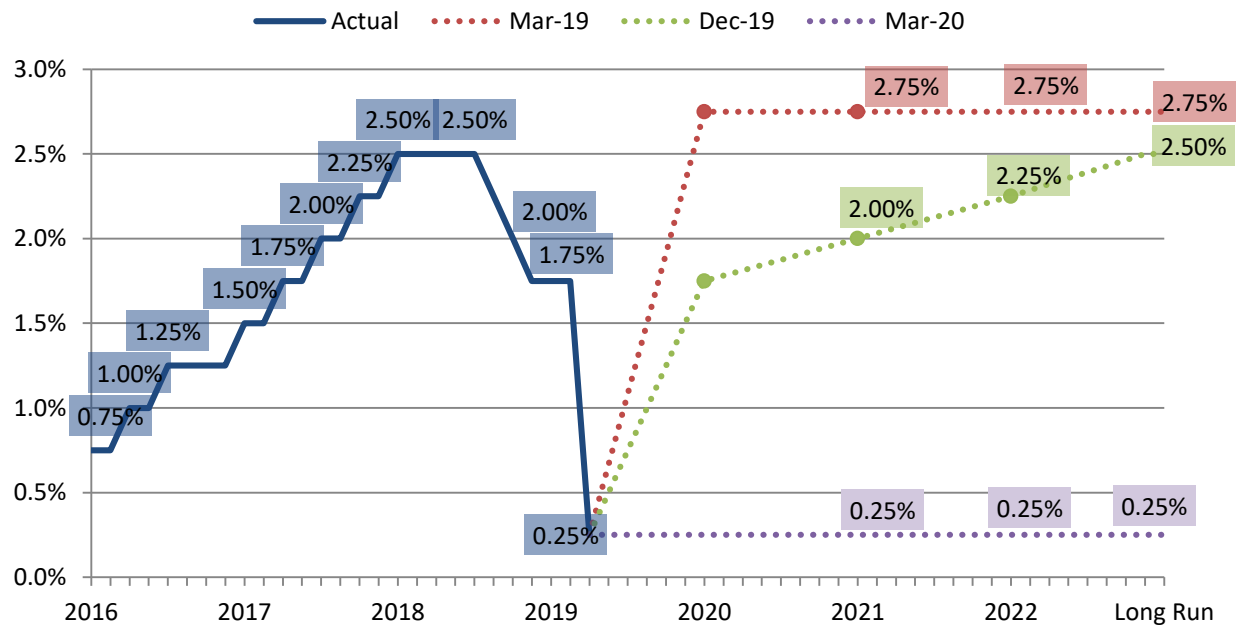
Macro update: Fed

Fed slashes rates to historic lows

- The US Fed made two emergency Fed Fund rate cuts totalling 1.5% in March 2020, which took the federal funds target rate down to 0.25%. The cuts are a proactive move to soften the economic slowdown brought by the Coronavirus pandemic. Policymakers expect no further change in interest rates until the economy has stabilised.

- In March the Fed made unprecedented moves by
  - Expanding its reverse repo operations, adding $2 trillion of liquidity to the banking system.
  - Restarting QE by buying $1.325 trillion of US Treasury Bonds and Mortgage Backed Securities.

Median Fed Fund Rate Projection



Source: Bloomberg, Copia Capital Management

copia Capital Management

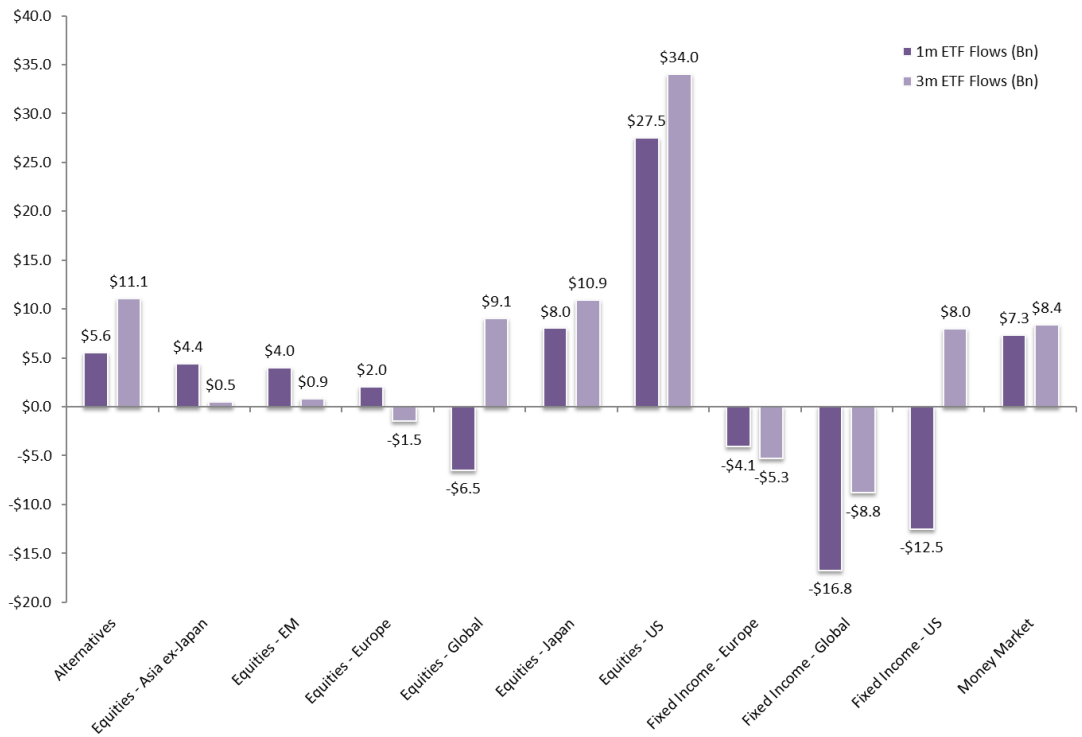
Market performance
Macro update
ETF Flows
Risk barometer
Portfolio performance
Outcome charts

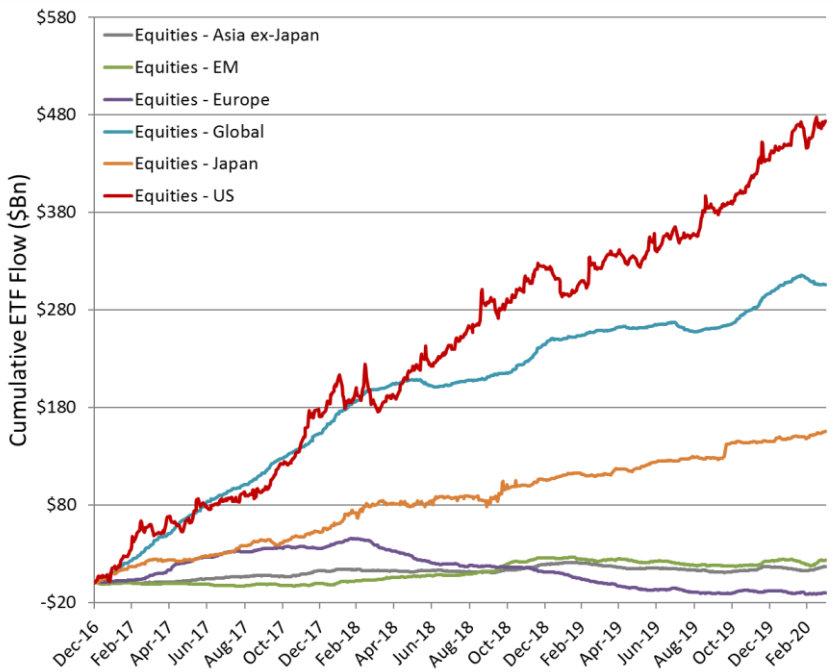
copia Capital Management

ETF Flows

Net ETF Fund Flows by asset class

- US Equities ETFs saw the largest inflow of $34.0bn over three months, slowing down compared to previous quarter, while continuing to be the most favoured asset classes. Japan Equities ETFs saw a net new inflow of $10.9bn, closely followed by Global Equities ETFs. Fixed Income ETFs lost new investments in Q1 2020 while assets invested in Alternatives ETFs and Money Market increased in Q1 2020.
- With rising fears of a global recession and more risk averse investments, ETFs remained the preferred route for investors investing in both risk and safe-haven assets.





Source: Bloomberg, Copia Capital Management

copia Capital Management

Market performance
Macro update
ETF Flows
Risk barometer
Portfolio performance
Outcome charts

Copia Risk Barometer

+0.65 → **+0.19**

As of 31-December-2019 → As of 31-March-2020

Based on our proprietary Prediction Algorithm the Copia Risk Barometer is now reading +0.19 as of 31-March-2020, a change from +0.65 on 31-December-2019. The risk barometer moved down into the amber zone, indicating that the global economic outlook is neither positive nor negative.

Primary drivers for the Risk Barometer:

- **US Fed projections and bond market pricing:** The term premium, yield difference between long term rates and short term rates, is now close to zero across all developed markets making the yield curve extremely flat and yields across all maturities close to 0%. Supportive actions from Central Banks around the world is being picked up by the Risk Barometer as a positive signal.

- **Increased volatility in equities:** The short sharp sudden drop in equity prices with increased uncertainty around corporate earnings in the near term as well as the medium term due to the Coronavirus outbreak is one of the major negative signals for the Risk Barometer. Equity valuations have also deflated sharply which is now a positive signal.

- **Credit Spreads materially widen:** Credit spreads have materially widened to levels last seen at the start of the 2008 Global Financial Crisis indicating liquidity stresses mounting in the corporate bond market. A negative signal picked up by the Risk Barometer.

- **Overall:** With mixed Positive and Negative signals picked up by the Risk Barometer it is currently indicating a neutral economic outlook, down from last month.

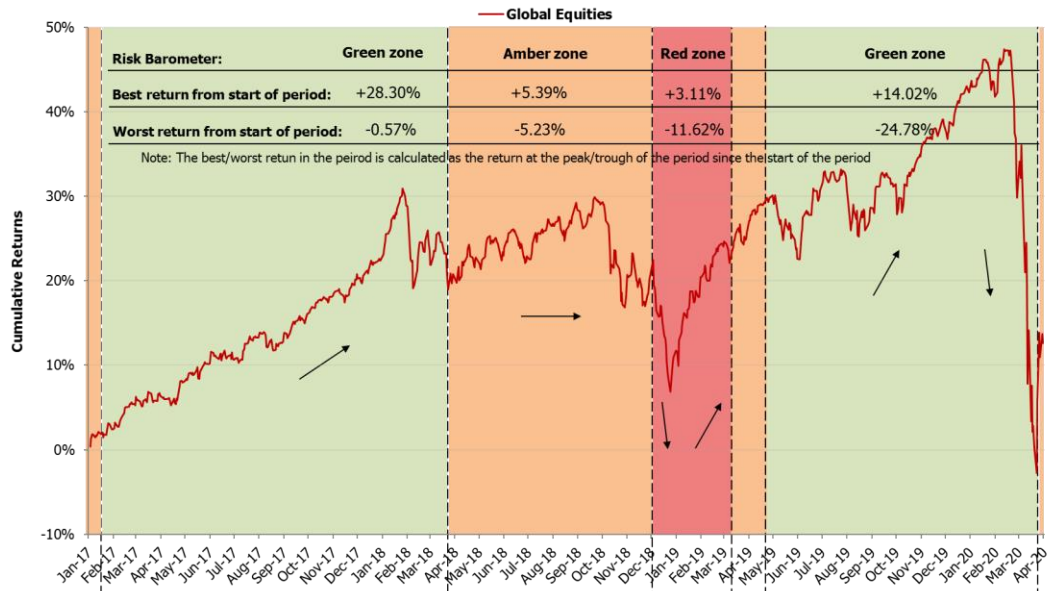
Note: The Risk Barometer score varies between -1.0 and +1.0. A score of -1.0 indicates an extremely poor economic outlook, which is accompanied by a high probability of negative returns in risky asset classes. A score of 0 indicates a neutral economic outlook with almost equal probability of positive and negative returns in risky asset classes. A score of +1.0 indicates an extremely positive economic outlook, which is accompanied by a high probability of positive returns in risky asset classes.

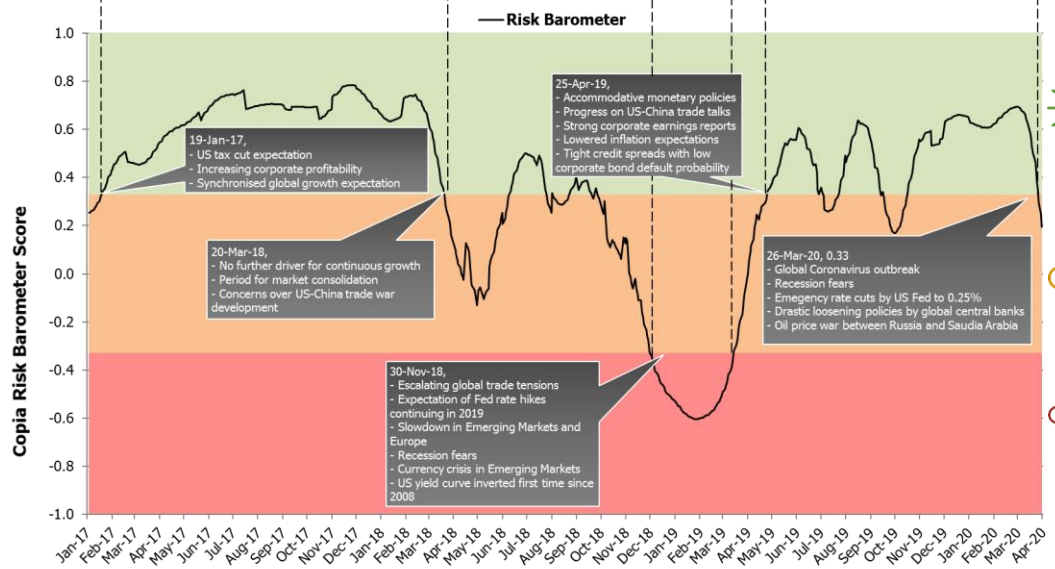
copia Capital Management

Copia Risk Barometer

Risk Barometer 3-year history

- The top chart shows the market performance (best and worst returns) during different Risk Barometer regimes.
- The bottom chart shows how the Risk Barometer has moved between different regimes and the triggers for regime changes.
- The Risk Barometer is a forward-looking quantitative model that provides a systematic rules-based approach for dynamic risk management.





Note: The Risk Barometer score varies between -1.0 and +1.0.

A score of -1.0 indicates an extremely poor economic outlook, which is accompanied by a high probability of negative returns in risky asset classes.

A score of 0 indicates a neutral economic outlook with almost equal probability of positive and negative returns in risky asset classes.

A score of +1.0 indicates an extremely positive economic outlook, which is accompanied by a high probability of positive returns in risky asset classes.

Source: Copia research, Bloomberg Data

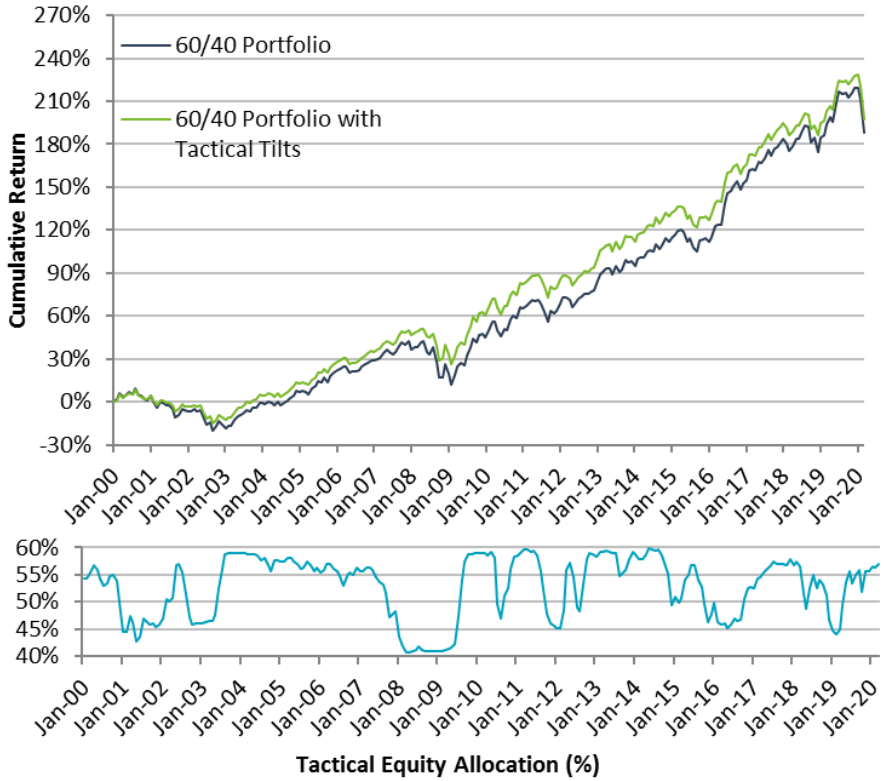
Global Equities Returns is based on actual data of MSCI World Index for the period between 31-Dec-2016 and 31-Mar-2020.

Risk Barometer Simulated Impact

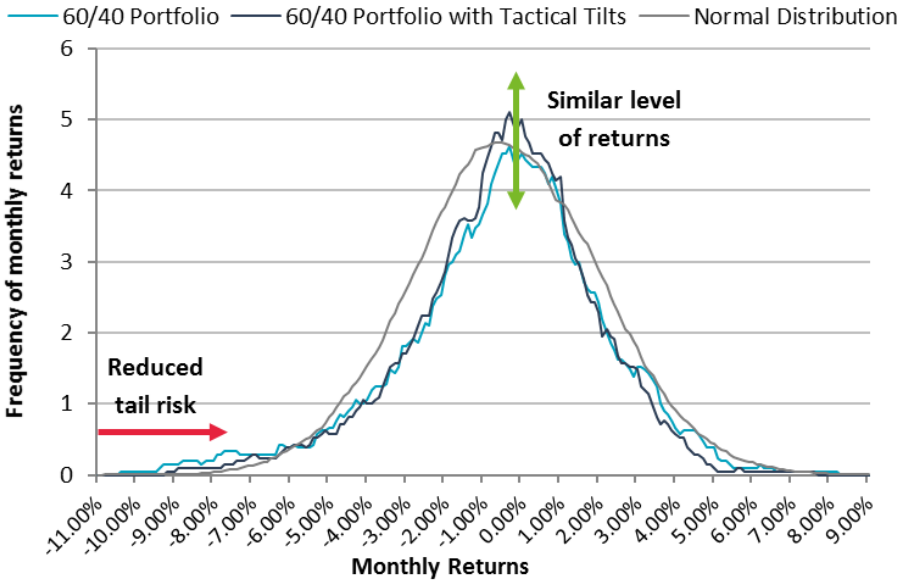
Impact of dynamic risk management using the Risk Barometer

- Objective is to achieve similar levels of returns, with a narrower dispersion of returns (reduced tail risk)
- Can enhanced risk-adjusted returns
- Can deliver a smoother investment journey whilst mitigating downside risk
- We evaluate impact using a theoretical 60/40 portfolio with and without the Risk Barometer

	Annualised Return	Annualised Volatility	Sharpe Ratio	Maximum Drawdown
60/40 Portfolio	5.66%	9.01%	0.63	-27.02%
60/40 Portfolio with Tactical Tilts	5.72%	7.86%	0.73	-21.69%
Impact	→ 1.14%	↓ -12.78%	↑ 15.95%	↓ -19.71%



Source: Copia Capital Management



Note: 60/40 Portfolio consists of 60% allocation to MSCI World ACWI ETF and 40% allocation Global Aggregate Bond ETF rebalanced monthly. Figures are based on historic actual figures in GBP terms for the period 31-Jan-2000 and 31-Mar-2020. All return figures are before fees.

The 60/40 Portfolio with Tactical Tilts consists of dynamic allocation to MSCI World ACWI ETF within a range of 40% to 60% driven by the Risk Barometer. The portfolio is rebalanced monthly and remaining allocation is to Global Aggregate Bond ETF.

Source: Copia research, Bloomberg data.

copia Capital Management

Market performance
Macro update
ETF Flows
Risk barometer
Portfolio performance
Outcome charts

copia Capital Management

Volatility Focus performance table

Copia Volatility Focus	Cumulative Returns							Discrete Returns			
	3 M	6 M	1 Yr	3 Yr	Since Inception (28-Oct-2013)	Since Inception (28-Oct-2013) (Annualized)	1 Yr Volatility	Year 1 31-Mar-16 to 31-Mar-17	Year 2 31-Mar-17 to 31-Mar-18	Year 3 31-Mar-18 to 31-Mar-19	Year 4 31-Mar-19 to 31-Mar-20
Model 1	-1.5%	-1.6%	0.8%	1.9%	8.7%	1.3%	3.1%	2.32%	-0.37%	1.49%	0.79%
Model 2	-1.9%	-2.1%	0.6%	2.0%	8.1%	1.2%	3.6%	2.90%	-0.24%	1.70%	0.58%
Model 3	-5.2%	-6.0%	-1.1%	0.4%	11.6%	1.7%	6.5%	5.18%	1.09%	0.45%	-1.15%
Model 4	-7.1%	-8.3%	-3.3%	-1.9%	13.0%	1.9%	7.6%	7.48%	1.09%	0.38%	-3.29%
Model 5	-10.7%	-12.2%	-6.8%	-3.9%	10.5%	1.6%	10.1%	8.23%	1.56%	1.52%	-6.82%
Model 6	-12.8%	-14.5%	-8.3%	-5.0%	9.6%	1.4%	11.2%	9.86%	1.72%	1.84%	-8.33%
Model 7	-13.3%	-15.3%	-8.8%	-4.0%	12.5%	1.8%	11.7%	11.72%	2.40%	2.86%	-8.81%
Model 8	-11.9%	-14.4%	-7.4%	-2.3%	15.0%	2.2%	11.5%	13.11%	2.79%	2.68%	-7.40%
Model 9	-15.3%	-17.6%	-10.3%	-5.9%	13.0%	1.9%	13.7%	14.60%	2.75%	2.07%	-10.30%
Model 10	-13.9%	-16.2%	-8.6%	-4.1%	14.7%	2.2%	13.1%	14.51%	2.83%	2.11%	-8.62%

Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates

copia Capital Management

Select performance table

Copia Select	3 M	6 M	1 Yr	3 Yr	Since Inception (31-Oct-2016)	Since Inception (31-Oct-2016) (Annualized)	1 Yr Volatility	Discrete Year 1 31-Mar-17 to 31-Mar-18	Discrete Year 2 31-Mar-18 to 31-Mar-19	Discrete Year 3 31-Mar-19 to 31-Mar-20
Cautious	-2.4%	-4.9%	2.7%	7.6%	9.0%	2.6%	6.2%	-0.99%	5.78%	2.75%
Moderate	-6.9%	-8.4%	0.1%	7.1%	10.5%	3.0%	8.5%	-0.16%	7.16%	0.08%
Balanced	-12.4%	-12.4%	-4.8%	2.8%	7.9%	2.3%	11.9%	1.06%	6.83%	-4.81%
Growth	-15.2%	-14.9%	-7.1%	1.0%	7.0%	2.0%	14.1%	0.95%	7.70%	-7.14%
Equity	-16.1%	-15.3%	-8.1%	0.5%	7.4%	2.1%	14.9%	1.72%	7.47%	-8.07%

Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates

copia Capital Management

Retirement Income performance table

Copia Retirement Income	3 M	6 M	1 Yr	3 Yr	Since Inception (28-Feb-2017)	Since Inception (28-Feb-2017) (Annualized)	1 Yr Volatility	Discrete Year 1 31-Mar-17 to 31-Mar-18	Discrete Year 2 31-Mar-18 to 31-Mar-19	Discrete Year 2 31-Mar-18 to 31-Mar-19
RP1/3-10Y	-2.9%	-3.0%	0.4%	2.64%	2.9%	0.9%	3.5%	-0.7%	3.0%	0.4%
RP1/11-15Y	-5.4%	-5.3%	-0.9%	1.79%	2.3%	0.7%	5.3%	-1.2%	3.9%	-0.9%
RP1/16-20Y	-6.9%	-7.1%	-1.6%	2.10%	2.7%	0.9%	6.7%	-1.0%	4.7%	-1.6%
RP1/20-25Y+	-8.3%	-8.4%	-2.4%	1.94%	2.6%	0.8%	8.0%	-0.9%	5.4%	-2.4%
RP2/3-10Y	-7.4%	-6.7%	-3.2%	-1.14%	-0.8%	-0.2%	6.2%	-1.4%	3.5%	-3.2%
RP2/11-15Y	-10.9%	-10.0%	-5.7%	-2.61%	-2.0%	-0.7%	8.9%	-1.6%	5.0%	-5.7%
RP2/16-20Y	-11.6%	-11.0%	-5.8%	-1.44%	-0.8%	-0.3%	9.7%	-1.4%	6.1%	-5.8%
RP2/20-25Y+	-13.4%	-12.6%	-7.0%	-1.98%	-1.5%	-0.5%	11.4%	-1.1%	6.7%	-7.0%
RP3/3-10Y	-12.7%	-11.2%	-7.5%	-5.12%	-4.5%	-1.5%	10.0%	-2.0%	4.7%	-7.5%
RP3/11-15Y	-15.0%	-13.3%	-8.9%	-5.84%	-5.1%	-1.7%	11.9%	-2.0%	5.6%	-8.9%
RP3/16-20Y	-16.1%	-14.7%	-9.5%	-4.87%	-4.2%	-1.4%	12.9%	-1.7%	7.0%	-9.5%
RP3/20-25Y+	-17.7%	-16.2%	-11.1%	-6.00%	-5.4%	-1.8%	14.4%	-1.6%	7.4%	-11.1%
RP4/3-10Y	-18.9%	-16.5%	-12.5%	-9.35%	-8.6%	-2.9%	14.7%	-2.5%	6.3%	-12.5%
RP4/11-15Y	-20.7%	-18.2%	-13.9%	-10.02%	-9.2%	-3.1%	16.3%	-2.3%	7.0%	-13.9%
RP4/16-20Y	-20.2%	-17.8%	-13.3%	-9.03%	-8.2%	-2.7%	16.1%	-2.2%	7.3%	-13.3%
RP4/20-25Y+	-20.6%	-18.2%	-13.9%	-9.30%	-8.5%	-2.8%	16.3%	-2.2%	7.6%	-13.9%
RP5/3-10Y	-21.5%	-19.4%	-14.4%	-9.02%	-8.1%	-2.7%	17.1%	-2.3%	8.9%	-14.4%
RP5/11-15Y	-22.1%	-19.7%	-15.3%	-10.02%	-9.1%	-3.0%	17.4%	-2.4%	9.0%	-15.3%
RP5/16-20Y	-22.1%	-19.7%	-15.5%	-10.66%	-9.7%	-3.3%	17.5%	-2.3%	8.3%	-15.5%
RP5/20-25Y+	-22.3%	-19.4%	-15.5%	-11.25%	-10.3%	-3.4%	17.6%	-2.5%	7.8%	-15.5%

Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates

copia Capital Management

Smart Beta performance table

	3 M	6 M	1 Yr	3 Yr	Since Inception (14-Mar-2016)	Since Inception (14-Mar-2016) (Annualized)	1 Yr Volatility	Discrete			
								Year 1 31-Mar-16 to 31-Mar-17	Year 2 31-Mar-17 to 31-Mar-18	Year 3 31-Mar-18 to 31-Mar-19	Year 4 31-Mar-19 to 31-Mar-20
Copia Enhanced Equity	-17.2%	-15.1%	-11.0%	-5.6%	19.7%	4.5%	15.2%	25.05%	5.73%	0.32%	-10.98%

Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates

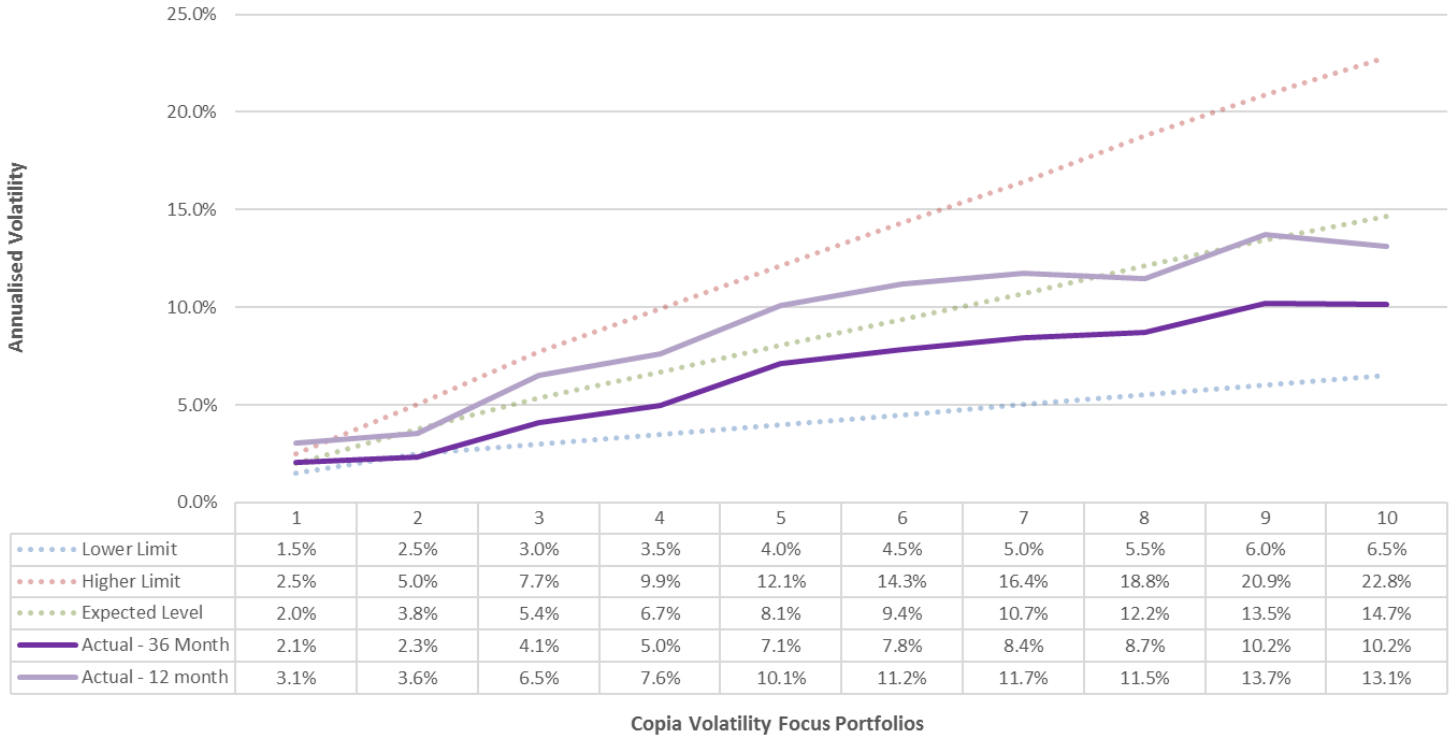
copia Capital Management

Market performance
Macro update
ETF Flows
Risk barometer
Portfolio performance
Outcome charts

copia Capital Management

Volatility Focus: outcome chart

Outcome analysis as at 31 March 2020



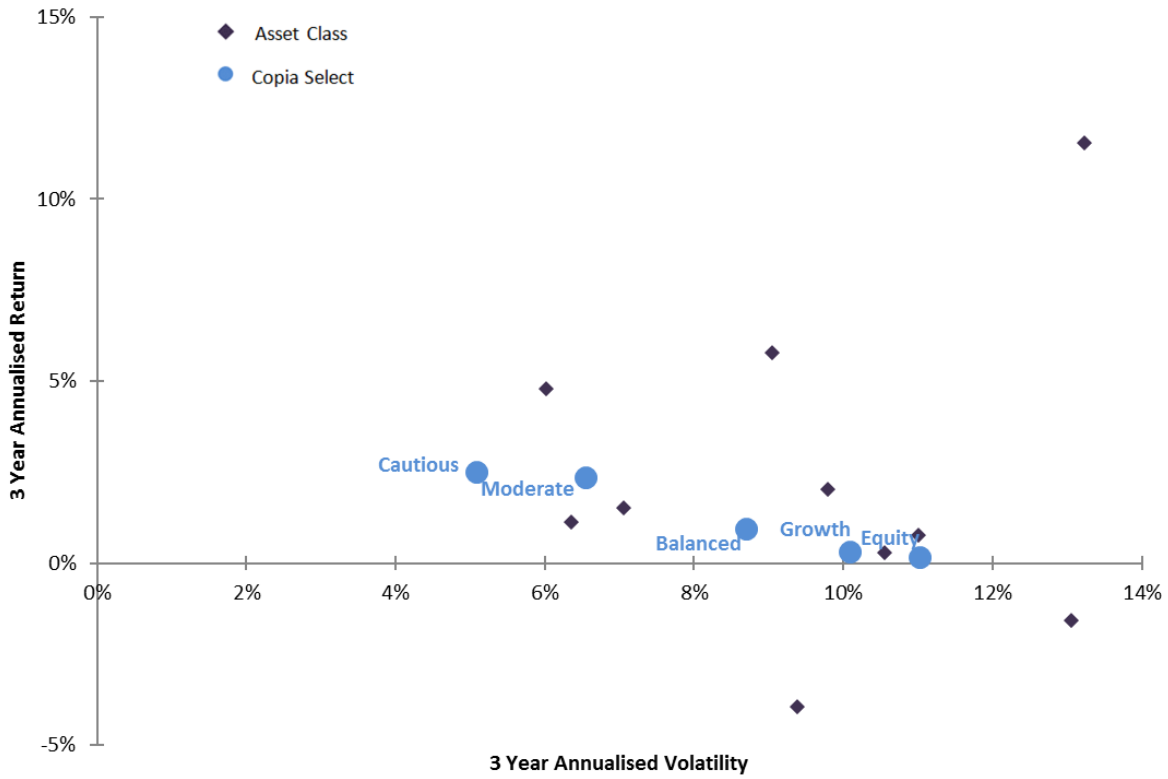
	1	2	3	4	5	6	7	8	9	10
Lower Limit	1.5%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%	6.0%	6.5%
Higher Limit	2.5%	5.0%	7.7%	9.9%	12.1%	14.3%	16.4%	18.8%	20.9%	22.8%
Expected Level	2.0%	3.8%	5.4%	6.7%	8.1%	9.4%	10.7%	12.2%	13.5%	14.7%
Actual - 36 Month	2.1%	2.3%	4.1%	5.0%	7.1%	7.8%	8.4%	8.7%	10.2%	10.2%
Actual - 12 month	3.1%	3.6%	6.5%	7.6%	10.1%	11.2%	11.7%	11.5%	13.7%	13.1%

For illustration only
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.

copia Capital Management

Select: outcome chart

Outcome (risk-return) analysis as at 31 March 2020

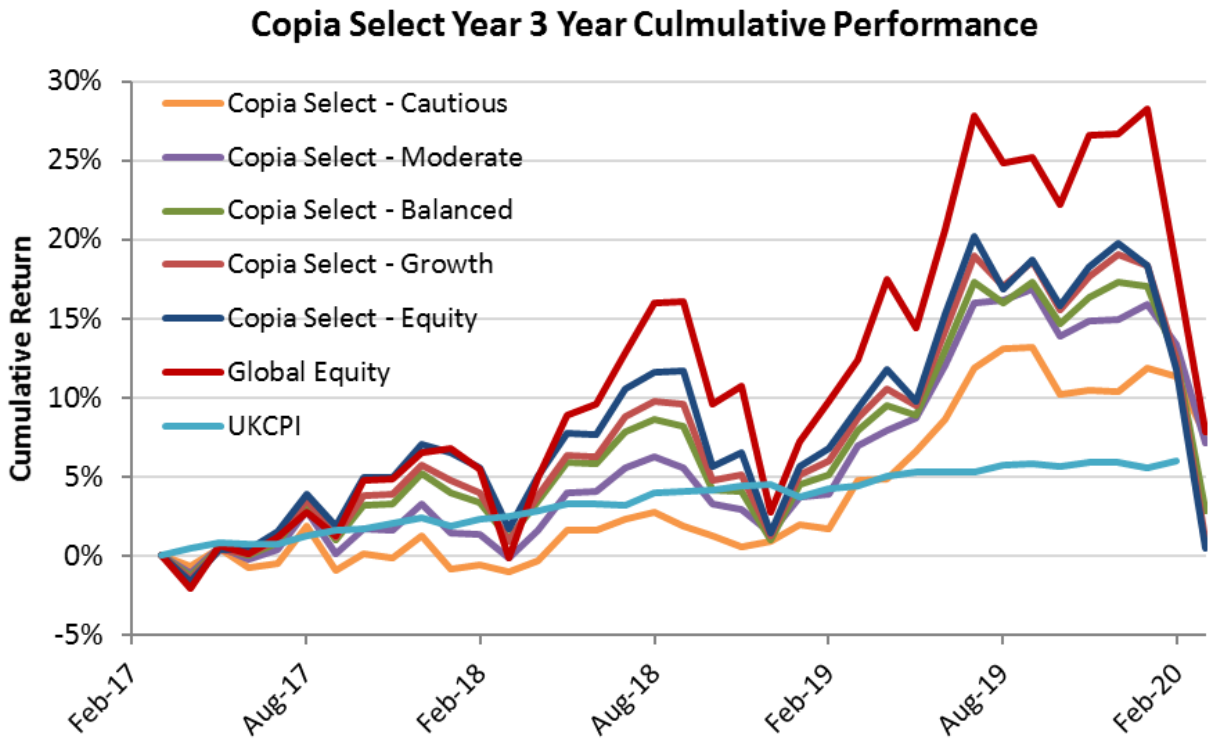


For illustration only.
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.
Select Portfolios Performance does not include simulated performance. Actual data is used from 1-Nov-2016 to Present

copia Capital Management

Select: outcome chart

Outcome (3 year cumulative return) analysis as at 31 March 2020

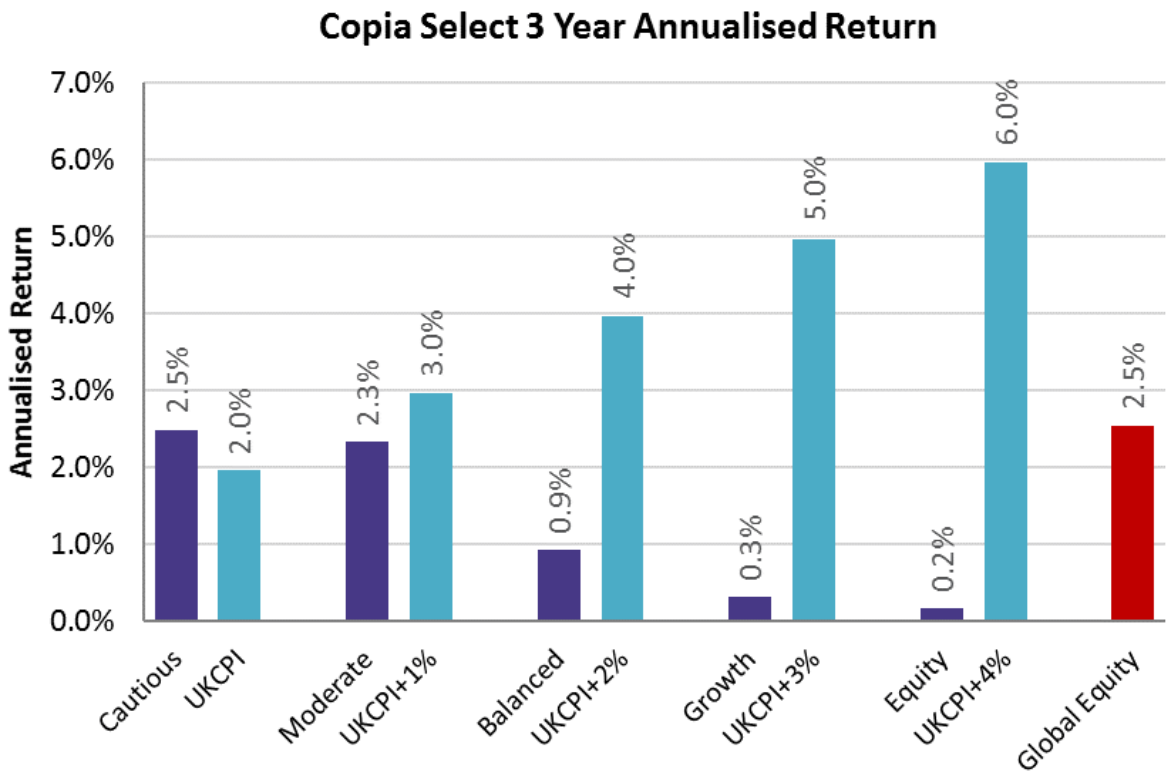


For illustration only.
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.
Available CPI data has been used as a comparator for real returns. CPI data for March 2020 is currently unavailable and not shown.

copia Capital Management

Select: outcome chart

Outcome (3 year annualised return) analysis as at 31 March 2020

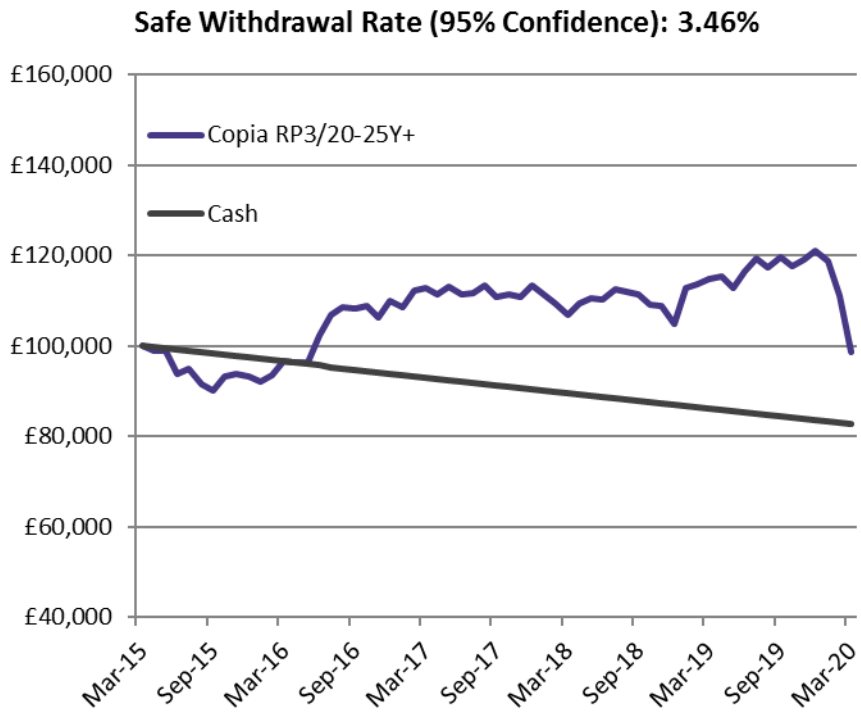


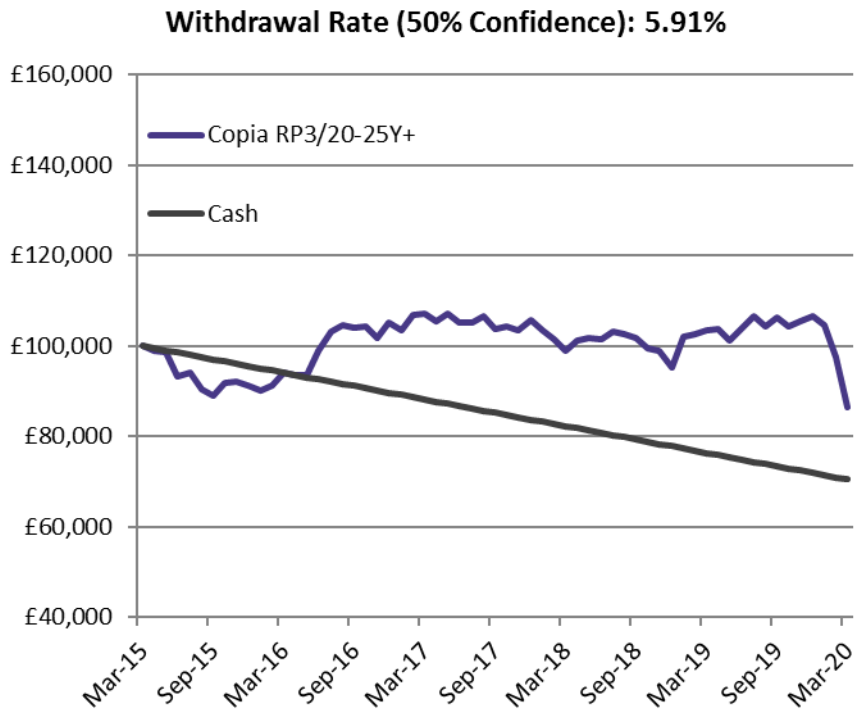
For illustration only.
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.
Available CPI data has been used as a comparator for real returns. CPI data for March 2020 is currently unavailable and not shown.

copia Capital Management

Retirement Income: outcome chart

Outcome analysis as at 31 March 2020



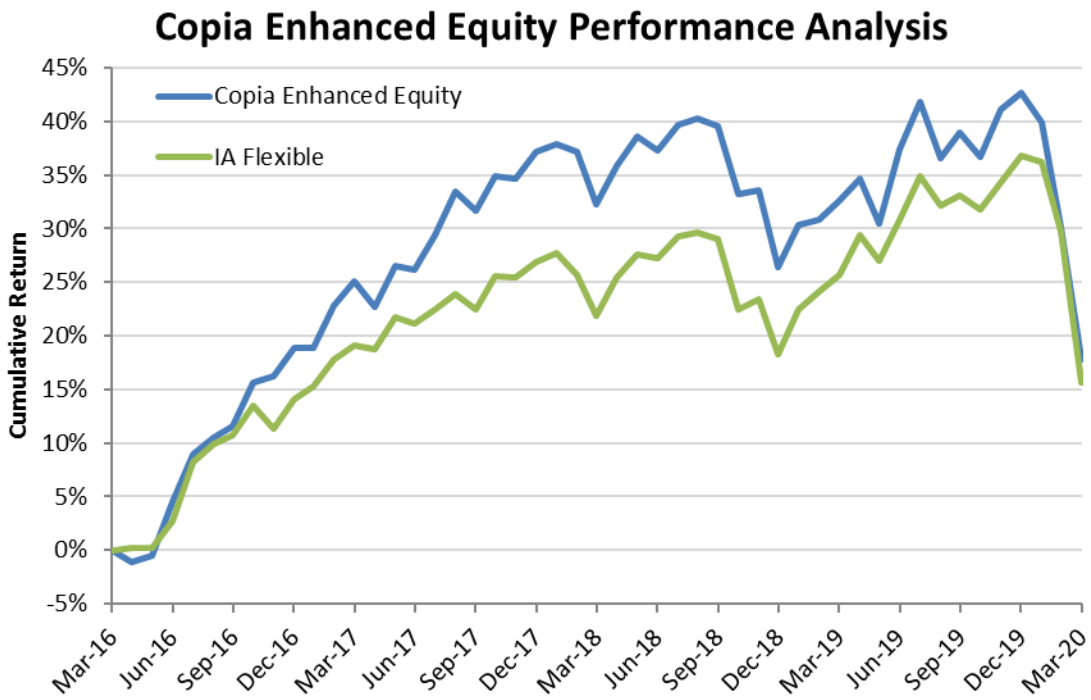


For illustration only.
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.
Performance includes simulated performance for data prior to launch date (28-Feb-2017). Actual data is used from 1-Mar-2017 to Present

copia Capital Management

Enhanced Equity portfolio: outcome chart

Outcome analysis as at 31 March 2020



For illustration only.
Returns based on Total return, assuming income is re-invested immediately and rebalanced on due dates.

Copia Capital Management

The art of portfolio construction

Disclaimer

Some figures and numbers in this document are based on Copia's simulation data. Figures relating to simulated performance are not a reliable indicator of future. The performance shown represents the results of the model portfolio managed by Copia Capital Management. Copia model performance and comparisons are shown gross and take no account of the Novia platform charge or Copia Capital Management charge. Individual investor performance will differ due to factors specific to the investors account, trading drag and charges and the effect of Platform, Investment management and Adviser charges.

This illustrative document is intended for investors where advice has been given by Advisers. The value of investments September go down as well as up, investors September not get back the amount invested, figures quoted relate to the past and past performance is not a reliable indicator of future. Models are prepared in accordance with tolerance to risk and not client circumstances and information is from given sources and taken to be reliable and accurate, which Copia cannot warrant for accuracy or completeness.

Copia is a trading name of Novia Financial plc. Novia Financial plc is a limited company registered in England & Wales. Register Number: 06467886. Registered office: Cambridge House, Henry Street, Bath, Somerset, BA1 1JS. Novia Financial plc. is authorised and regulated by the Financial Conduct Authority. Register Number: 481600

QIR-0320