



ASSET ALLOCATION & RESEARCH

MONTHLY REVIEW

DECEMBER 2022



KNNG

INTERNATIONAL ADVISORS

MONTHLY COMMENTARY – DECEMBER 2022

Upwardly spiralling inflation ignited by substantial amounts of stimulus poured into the global economy in 2021 to offset the COVID pandemic made last year a dangerous year for investors. Matters were made worse at the end of February when Russia invaded Ukraine, impacting the flow of natural gas, oil, and food supplies, further fanning the flames of inflation. Global central banks reacted to spiking prices by aggressively raising interest rates and tightening money supplies, triggering an interest rate shock that wrecked stocks in 2022. Trillions of dollars of value were erased from world stock markets, bond markets faced unforeseen volatility, currencies and commodities took control of markets and the crypto market collapsed. US and Global markets experienced their worst declines since the financial crisis of 2008. Government bonds fared no better with both U.S. Treasuries and German bonds, the benchmarks of global borrowing markets and traditional go-to assets in troubled times, losing 17% and 25% respectively in dollar terms. The US dollar index advanced more than 20% in 2022, making it one of the best performing assets in the year. Gold prices ended the year about where they began, but other commodities soared. Energy, specifically oil, had a strong year, helping the commodity sector to outperform.

United States

US markets closed out a dismal year with a dismal December as hopes for a Fed policy pivot faded after the central bank in December signalled that it would likely wait until 2024 to cut interest rates. Additionally, markets may have also been hit by tax loss selling in the final days of the month. An uncertain outlook for 2023 was also taking its toll, as investors fretted about the strength of corporate profits, the economy, and the U.S. consumer with fourth-quarter earnings season looming early next year.

The major large and small cap indices posted losses for the month, as did Treasury bonds. The Nasdaq Composite ended the month at 10,466.48, just off its yearly low set on 28 December. As a result, all three major averages registered their biggest one-year percentage decline since the 2008 fiscal crisis, with the S&P 500 posting a 19.4% fall for 2022, Nasdaq finishing down 33.3% and the Dow Jones losing 8.7% for the year. The S&P logged its fourth worst yearly performance since its inception in 1957. The only years where the index fared worse were 2002, 1974, and 2008.

Previously high-flying mega cap technology stocks and other interest-rate sensitive assets crumbled, value stocks outperformed over the year, sending the Dow to its biggest calendar-year outperformance vs. the Nasdaq since 2000. The blue-chip gauge also recorded its biggest outperformance vs. the S&P 500 since the index's creation. Energy stocks were the lone bright spot, enabling the energy sector to record its best year on record with a 59% gain. The ten remaining S&P sectors all posted losses for the year with seven of the eleven sectors scoring double digit losses. Small cap stocks as measured by the Russell 2000 outperformed the S&P and Nasdaq but tailed the Dow in both December and the year. The aggressive tightening by the Fed helped US government bonds to notch their largest calendar year increase in yields since the 1970s. The pace of the tightening cycle and the Fed's commitment to fight inflation has been the leading issue facing US equities in 2022.



Those concerns will be foremost in investors' minds as we enter the new year, as they review the mixed data released in December. The US economy is cooling, and interest-sensitive sectors have seen a significant pullback in spending. This has been especially notable in housing, where the Federal Reserve's aggressive efforts to rein in inflation have resulted in a sharp rise in mortgage rates that have left potential buyers unable to afford a home. Correspondingly, builder confidence in the market for newly built single-family homes posted its 11th straight monthly decline in November and builders are cutting back on single-family construction.

Nonfarm payroll employment surprised to the upside in November with a solid 261,000 increase, and the unemployment rate held near a half-century low. In the same month, though, continued jobless claims rose 28% from half a year earlier. The consistent strength in employment continues to confuse and stymie the Fed's efforts to slow the economy. Notably, it would be very unusual for the US to be in recession amid such strong payroll growth. A recession is something the Fed would like to avoid.

Healthy US employment has helped drive strong retail sales which are up 6.5% year over year through November. The strong annualized spending numbers have led to the Atlanta Fed projecting GDP growth for the fourth quarter at 3.2%, flat against the 3.2% reported for the third quarter.

The latest CPI report released in December confirmed the slowing growth story, as prices climbed just 0.1% in November, a smaller increase than expected as the 12-month rate dropped to 7.1% from a peak of 9.1% in June. Excluding food and energy, the core CPI rate was at 6%. Both measures were the lowest since December 2021. Consumers and the market both welcomed the drop in prices with a rally, but the Fed soon reminded markets there was still work to be done to reach its target of 2% inflation.

The S&P Global US Manufacturing PMI fell to 46.2 in December of 2022 from 47.7 in November, well below forecasts of 47.7, preliminary estimates showed. The reading pointed to the biggest contraction in factory activity since May 2020, driven by subdued demand and a faster fall in output. New orders declined at one of the sharpest paces since the 2008-09 fiscal crisis and sufficient stocks of inputs and a further reduction in new orders led to the sharpest contraction in purchasing activity in over two-and-a-half years.

The S&P Global US Services PMI slumped to 44.4 in December 2022 from 46.2 in the previous month and well below market expectations of 46.8, a preliminary estimate showed. The latest data signalled the fastest pace of contraction in the service sector for four months, also one of the quickest since 2009, led by a further solid decrease in new orders. In addition, the rate of job creation was the second lowest since September 2021, due to the non-replacement of voluntary leavers and reports of layoffs. At the same time, pressure on capacity waned further, as backlogs of work fell at a solid pace. On the price front, input cost inflation was the lowest since October 2020, while selling prices rose the least for over two years. Finally, business confidence was among the weakest in two years as firms highlighted concerns regarding inflation, hikes in interest rates and dwindling demand. Again, welcomed data but a concern if manufacturing slows too much in 2023.

The Federal Reserve/Interest Rates

At its mid-December meeting, the Federal Open Market Committee unanimously voted to boost the overnight borrowing rate by half a percentage point, taking its

targeted range to between 4.25% and 4.5%. The move was in line with street expectations and broke a string of four straight three-quarter point hikes, the most aggressive policy moves since the early 1980s. Along with the increase came an indication that officials expect to keep rates higher through next year, with no reductions until 2024. The expected “terminal rate,” or point where officials expect to end the rate hikes, was put at 5.1%, according to the FOMC’s “dot plot” of individual members’ expectations.



During the press conference following the meeting, Chairman Jerome Powell emphasized a theme he has highlighted since the Jackson Hole meeting in August, namely that it was important to keep up the fight against inflation. “Inflation data received so far for October and November show a welcome reduction in the monthly pace of price increases,” the chair said at his post-meeting news conference. “But it will take substantially more evidence to have confidence that inflation is on a sustained downward path.” The FOMC’s commitment to fight inflation was the biggest influence on rate and equity market direction in 2022.

The last several moves by the Fed have been straightforward — raising interest rates has been its focus all year and recent data has shown some improvement in inflation. But the next few months may be more difficult to predict. When the Fed began raising rates the economy was aggressively rebounding from the COVID pandemic, now the economy is slowing. How far and how fast the economy will slow is the question the Fed and investors must answer.

The latest Fed projections, released in December, expect the committee to increase the fund’s rate until it hits a median level of 5.1% next year, equivalent to a target range of 5% -5.25. At that point, officials are likely to pause to allow the impact of monetary policy tightening to make its way through the economy. The consensus then points to a full percentage point worth of rate cuts in 2024, taking the funds rate to 4.1% by the end of that year. Followed by another percentage point

of cuts in 2025 to a rate of 3.1%, before the benchmark settles into a longer-run neutral level of 2.5%.

However, there was a wide dispersion in the outlook for future years, indicating that members are uncertain about what is ahead for an economy dealing with the worst inflation it has seen since the early 1980s. The newest dot plot featured multiple members seeing rates heading higher than the median point for 2023 and 2024. For 2023, seven of the nineteen committee members – voters and non-voters included – saw rates rising above 5.25%. Similarly, there were seven members who saw rates higher than the median of 4.1% in 2024. This more aggressive rate tightening outlook was one of the reasons for the December sell-off in equities. Specifically, investors were hoping for a change to the FOMC's statement, expecting the Fed would alter the language that it sees "ongoing increases" ahead to something less committal, but that phrase remained in the statement.

In addition, the Fed also has been engaged in "quantitative tightening," a process in which it is allowing proceeds from maturing bonds to roll off its balance sheet each month rather than reinvesting them. A capped total of \$95 billion is being allowed to run off each month, resulting in a \$332 billion decline in the balance sheet since early June. The balance sheet now stands at \$8.63 trillion.

So, while rates may not rise as quickly in the new year, it does not mean they will drop either. For borrowers and savers rates are not going down any time soon.

The Federal Reserve has scheduled its next meeting for Tuesday, January 31 to Wednesday, February 1, 2023. This will be the first meeting of the new year.

US government bond investors battered by the worst year on record for Treasury prices faced another selloff in December. While bonds rebounded in October and November, prices have fallen over the month as investors digest mixed US economic data and a reopening of the Chinese economy, which may add to price pressure in the new year.

Falling prices have pushed up yields, which move inversely to price. The benchmark 10-year Treasury yield has climbed over forty basis points since mid-December to nearly 3.9%, its highest level in over a month. The two-year yield - which more closely reflects monetary policy expectations - hit an intra-day peak of 4.445% on 27 December, its highest level since November.

In 2022, the yield on the 2-year note soared approximately 3.67 percentage points, while the 30-year yield jumped 2.05 percentage points — the largest calendar-year rise on record based on data going back to 1973. The 10-year yield jumped 2.33 percentage points, the largest on record based on data going back to 1977.

The yield curve has remained inverted for most of 2022, with measures of short-dated yields trading above longer-dated yields. This phenomenon is seen as a reliable harbinger of recession, though questions about its usefulness in the present scenario persist. The questions facing the market headed into 2023 are can the Fed engineer an economic "soft landing" and how high should rates go to accomplish that goal?

Commodities & the US Dollar

December is normally a weak month for the dollar, having declined over the month in eight of the last ten years and this year is no exception. The dollar had a volatile ride in December, posting a loss of nearly 3%. However, for much of 2022, it was a one-way ticket higher for the US dollar against other major currencies. From its low in mid-January through its peak in September, the US Dollar Currency Index was up nearly 22% compared with double-digit declines in stocks and bonds. Fuelling the dollar's rally was the fastest and most aggressive series of rate hikes by the Fed in 40 years. The currency, whose moves are closely tied to the direction of interest rates, soared as foreign investors looking for higher yields and the safety of US Government bonds turned to US Treasuries and the world's reserve currency following Russia's invasion of Ukraine.

The surging dollar, however, sent other world currencies tumbling, including the euro, Japanese yen, and British pound. The dynamic helped accelerate already rising inflation abroad and forced other countries to defend their currencies through rate hikes and the sales of foreign reserves to buy back their own currencies. However, as the Fed began to acknowledge a peak in inflation and central banks in Europe and — more recently — Japan applied a more aggressive monetary policy, the dollar began to lose ground. There are still enough uncertainties in global economic conditions that a dollar decline in 2023 is not inevitable. The elevated risk of recession in both the US and abroad, particularly in Europe where inflation is running at double-digit levels and potential energy shortages as China reopens, may leave investors no choice but to stick with the safety of the dollar.

One potential problem that a weakening dollar poses to the Fed is higher commodity prices. Commodities have been the top-performing asset class in dollar terms this year with the sector giving up some of its gains in December but still finishing the year as the only asset class to generate double-digit returns. Early in the year, the sector was driven by the rise in crude and natural gas prices, as demand held steady, but supply was limited by the Russian invasion of Ukraine. However, a close look at 2022 commodity performance reveals performance was not limited to the energy sector. The “soft commodities,” livestock and agriculture, outpaced the metal complex as food exports from Ukraine slowed driving up prices.

Gold prices climbed in December but were flat on the year, posting a loss of 0.1% in 2022. Silver climbed nearly 3% on the year but was outpaced by platinum and nickel. Copper, often seen as an indication of industrial growth, finished the year down approximately 16% and looks to be headed lower as demand out of China is uncertain.



Oil prices saw profit taking in December with both West Texas Intermediate and Brent crude down for the month. However, both recorded a second year of gains as supply fears triggered by Russia’s invasion of Ukraine outweighed weakening demand and worries of a global recession. In mid-March, WTI hit a nearly 14-year high above \$130 a barrel while Brent traded just shy of \$140 but both closed out the year well off those levels. WTI ended the year up 6.7% and Brent annualized a nearly 10% return.

If you view bitcoin as a commodity, it finished 2022 at the bottom of the performance table, down by 64% year

to date in US dollar terms, weighed down by the same inflation and interest rate hike fears that have hindered stock markets, and, more recently, the collapse of FTX, the second-largest crypto exchange.

Global Markets

December was no better for the international markets as it closed out a year investors would like to forget. European stocks capped off their biggest percentage drop for a calendar year since 2018, with the Stoxx Europe 600 falling 12.8%. In local markets, the German DAX tumbled more than 12% and the French CAC slid 9.6%. The Italian Borsa retreated almost 14% in 2022, underperforming its European peers. Spain’s IBEX posted a 6% decline in the year.

The European economies faced the same inflationary issues as the US but the war in Ukraine made the job of containing inflation harder. The consumer price inflation in the Euro Area was revised to 10.1% year-on-year in November 2022, slightly up from a preliminary estimate of 10.0%. The rate slowed for the first time since June 2021 from October’s record high of 10.6% but remained well above the European Central Bank’s mid-point target of 2.0 percent, suggesting policymakers will be raising interest rates for some time. Energy prices rose at a softer 34.9 percent (vs 41.5 percent in October) but remained the largest contributor to the overall price increase. Meanwhile, inflation was little changed for both services (4.2 percent vs 4.3 percent) and non-energy industrial goods (6.1 percent, the same as in October), while it picked up for food, alcohol & tobacco (13.6 percent vs 13.1 percent). The core rate, which excludes volatile items such as energy and food, held steady at an all-time high of 5.0 percent.

The ECB, Like the Federal Reserve, hiked interest rates by fifty basis points in December but said it would need to raise rates “significantly” further to tame inflation.

Britain’s central bank in December raised its key interest rate by half a percentage point to 3.5% but slowed the pace of its hikes as inflation shows signs of easing, mirroring action by the U.S. Federal Reserve and European policymakers. The bank last month forecast a prolonged recession in the U.K. and consumer price inflation staying “very high” in the near term. Should that scenario play out, further rate increases may be needed to get inflation back to its 2% target, the bank said, adding that it “will respond forcefully, as necessary.” The FTSE is betting against the BOE, as it was the only major stock index to post a gain in 2022, finishing the year up 0.91%.

Shares of major Chinese firms have been up and down in 2022 and for good reasons. There is plenty weighing on sentiment; worries about leading Chinese companies

getting delisted in the United States, Beijing's crackdowns on big Chinese tech firms, criticism over China's "no limits" relationship with Russia, and a resurgence of Covid cases in China. The government's insistence on a zero COVID policy has added to investor concerns. Recent weeks have seen some reversal of the policy and Chinese stocks have rallied.

The Shanghai Composite dropped 15% to 3,089 while the Shenzhen Component plunged 26% to 11,016 in 2022, with both benchmarks posting their first annual losses since 2018. The Hang Seng plunged 14.4% to 19,781.4 in 2022, marking the worst year since 2011 and recording a third straight year of losses.

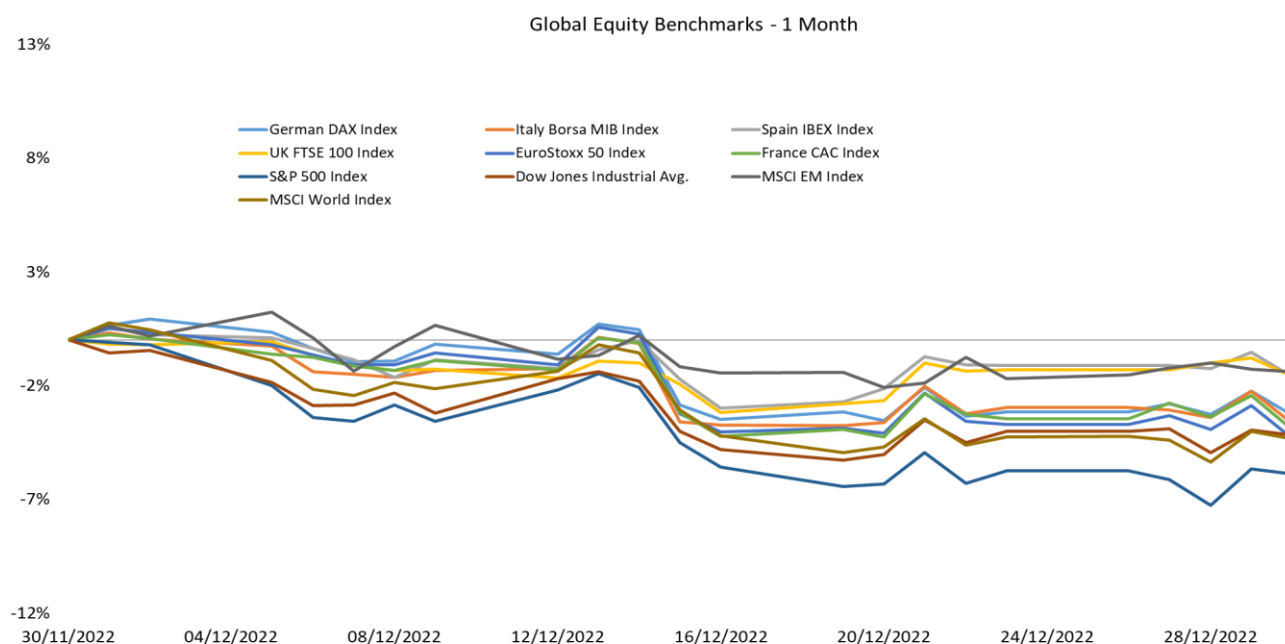
The Nikkei 225 Index tumbled 9.4% to 26,094 while the broader Topix Index dropped 5.1% to 1,892 in 2022, with both benchmarks posting their first annual losses since 2018 as persistently high inflation and aggressive rate hikes from major central banks offset the impact of solid corporate earnings. The Bank of Japan also had an eventful year, as it was forced to defend the yen after it plunged to 32-year lows, and unexpectedly raised the upper limit of its tolerance band on 10-year government

bonds to 0.5% from 0.25%. The surprise policy adjustment prompted speculations that the BOJ may soon abandon negative interest rates, but the central bank clarified that its decision was not indicative of a hawkish tilt.

One bright spot in Asia was the BSE Sensex, India's benchmark equity index, which rose by 4.4% in 2022, a seventh consecutive year of gains but the least since 2018. Still, it significantly outperformed other major benchmarks in Asia as steady, albeit slower, growth in the Indian economy prevailed despite high inflation and interest rate hikes by the RBI. Indian manufacturers and technological services providers took advantage of structural changes in supply chains and uncertainty in Asia as China continued to suffer from pandemic-induced lockdowns, driving corporate earnings to increase sharply and setting the economy to grow by 6.8% in the current fiscal year and 6% in the fiscal year ending March 2024. The robustness to the volatile economic momentum in Asia drove investors to become net buyers of Indian equities in November and December, setting a positive precedent for the start of 2023.

GLOBAL MARKET PERFORMANCE

Global markets finished a tough year with a tough final month. The S&P 500 fell 5.9% and the Dow Jones declined 4.17% in December. The Pan-European Stoxx 50 decreased by 4.32% in the month. In European markets, the German DAX was down 3.29%, the Italian Borsa slipped 3.67%, the Spanish IBEX slid 1.60%, and the French CAC lost 3.93%. The UK FTSE 100 Index fell by 1.60% over the month. The MSCI World Index retreated 4.34%, while the MSCI EM Index declined 1.64%.



MARKET OUTLOOK

Inflation in the US appears to have peaked in June thanks to the aggressive action taken by the Federal Reserve and signs of a peak in European inflation are materializing. China has backed off its zero COVID policy and begun to support its struggling economy and prop up financial markets. The Bank of Japan has reluctantly joined other central banks in tightening monetary policy. All signs that the gloom of the past year may be left in 2022. With inflation eroding real incomes and interest rates rising sharply, recessions are likely in early 2023. But the US, UK, and European economies should all be recovering in the second half of the year. With China likely to accelerate steadily through the year as policy easing takes hold, the global economic landscape should be much improved towards the end of 2023.

Much of 2023's investment outlook will depend on how soon the rate tightening cycle ends and if the US economy achieves the sought after "soft-landing". We expect the Federal Reserve to continue hiking interest rates in the first few meetings of 2023 but at a reduced pace, ending hikes sometime in the first quarter. Following the end of rate hikes, Treasury yields are likely to peak in the late first quarter. A mild recession is likely in the US, but strong employment numbers prevent any serious slowdown. A retest of the 3500 level by the S&P is possible but we see equities gaining momentum as the year progresses. History shows that the Federal Reserve typically begins to cut interest rates eight and a half months after the last rate hike. Historically, back-to-back down years are a rare occurrence. The S&P 500 has only seen consecutive years of negative returns three times since 1957. In addition, since World War II every bear market, which we are in, followed by recession, which is likely, has led to the start of a new bull market. Global markets will benefit from the end of the monetary tightening cycle as well, but global economies are trailing the US in recovery and global central banks appear to be behind the Fed. We believe a diversified portfolio spread of market cap size will provide investors with the best long-term performance. Large cap US equities look best positioned to rebound in 2023. Best of luck in the New Year.

ASSET ALLOCATION & RESEARCH - MODEL PORTFOLIOS

The table below illustrates the monthly returns of the Asset Allocation & Research Model Portfolios.

Index	MTD Return (GBP)	YTD Return (GBP)	MTD Return (USD)	YTD Return (USD)
AAR Cautious Model Portfolio GBP/USD	-3.05%	-18.78%	-2.49%	-21.37%
AAR Balanced Model Portfolio GBP/USD	-3.16%	-15.74%	-3.76%	-20.19%
AAR Growth Model Portfolio GBP/USD	-3.37%	-18.28%	-4.20%	-23.35%
AAR Equity Only Model Portfolio GBP/USD	-4.11%	-16.35%	-4.31%	-23.08%
AAR Concentrated Cautious Model Portfolio GBP/USD	-2.98%	-19.08%	-2.56%	-21.65%
AAR Concentrated Balanced Model Portfolio GBP/USD	-3.62%	-14.71%	-4.79%	-21.63%
AAR Concentrated Growth Model Portfolio GBP/USD	-3.66%	-18.62%	-4.41%	-24.28%
Legal & General Cautious GBP/ Legg Mason Conservative Fund USD*	0.07%	-10.69%	-0.48%	-16.48%
Legal & General Balanced GBP / Legg Mason Balanced Fund USD	-0.69%	-12.28%	-1.14%	-17.39%
Legal & General Adventurous GBP / Legg Mason Performance Fund USD	-1.07%	-11.97%	-1.80%	-17.85%
FTSE 100 TR Index GBP / S&P 500 TR Index USD	-1.49%	4.70%	-5.76%	-18.11%

**Please note the Legal & General Cautious GBP fund used as a benchmark previously was liquidated in October. The L&G Investec Cautious Managed G21 has been chosen as the replacement benchmark for the GBP Cautious portfolios.*

MODEL PORTFOLIOS

Below you will find the top and the bottom two performers of each Asset Allocation & Research Model Portfolio:

USD Model Portfolios								
	Cautious		Balanced		Growth		Equity Only	
Top	SPDR GOLD SHARES	2.93%	SPDR GOLD SHARES	2.93%	ISHARES EUROPE ETF	-2.37%	SPDR S&P CHINA ETF	0.44%
	PIMCO INV GRADE CORP BD ETF	-1.51%	ISHARES IBOXX INVESTMENT GRA	-2.16%	ISHARES MSCI JAPAN ETF	-2.44%	ISHARES EUROPE ETF	-2.37%
Bottom	CASTLESTONE LOW VOL IN U-B	-6.51%	ISHARES CORE S&P SMALL-CAP E	-7.07%	BLUEBOX GLOBAL TEC FD-C USDA	-9.21%	BLUEBOX GLOBAL TEC FD-C USDA	-9.21%
	ISHARES 20+ YEAR TREASURY BO	-3.09%	CASTLESTONE FAANG+ UCITS-B	-6.75%	AQA-CASTLESTN NEXTGEN-EUSDA	-8.90%	AQA-CASTLESTN NEXTGEN-EUSDA	-8.90%
GBP Model Portfolios								
	Cautious		Balanced		Growth		Equity Only	
Top	INVESCO PHYSICAL GOLD ETC	3.74%	INVESCO PHYSICAL GOLD ETC	3.74%	IFSL MRLBGH US MULTI CAP-IN	-0.48%	LYXOR SG GLOB INCOM-MH-GBP-A	-1.37%
	ISHARES CORE GBP CORP	-2.17%	ISHARES CORE GBP CORP	-2.17%	ISHARES MSCI JAPAN	-1.37%	ISHARES MSCI JAPAN	-1.37%
Bottom	CASTLESTONE LOW VOL IN U-B	-6.51%	CASTLESTONE FAANG+ UCITS-B	-6.75%	BLUEBOX GLOBAL TECH-C GBP	-10.11%	BLUEBOX GLOBAL TECH-C GBP	-10.11%
	ISHARES CORE UK GILTS	-3.98%	CASTLESTONE LOW VOL IN U-B	-6.51%	AQA-CASTLESTN NEXTGEN-EGBPA	-9.08%	AQA-CASTLESTN NEXTGEN-EGBPA	-9.08%

NOTE ABOUT PORTFOLIO PERFORMANCE

Risk assets closed out the year with a weak December. The USD Cautious portfolio declined 2.49%, the USD Balanced portfolio fell 3.76%, the USD Growth portfolio lost 4.20% and the USD Equity Only portfolio tumbled 4.31% for the month. The S&P 500 Total Return Index was down 5.76% (including dividends) in December.

The best performing USD holding in the month was the SPDR Gold ETF.

The GBP Cautious portfolio declined 3.05% over the month. The GBP Balanced portfolio decreased 3.16%, the GBP Growth portfolio slid 3.37%, and the Equity Only GBP Portfolio was down 4.11%. In December the FTSE 100 TR Index posted a loss of 1.49%, including dividends.

The Invesco Physical Gold ETF was the best monthly performer in the GBP portfolios.

CONCENTRATED PORTFOLIOS

Below you will find the top and the bottom two performers of each Asset Allocation & Research Concentrated Portfolios:

USD Concentrated Model Portfolios						
	Cautious		Balanced		Growth	
Top	SPDR GOLD SHARES	2.93%	ISHARES IBOXX INVESTMENT GRA	-2.16%	ISHARES EUROPE ETF	-2.37%
	ISHARES IBOXX INVESTMENT GRA	-2.16%	ISHARES 20+ YEAR TREASURY BO	-3.09%	DOMINION GT-MGD FD-USDB	-2.47%
Bottom	CASTLESTONE LOW VOL IN U-B	-6.51%	INVESCO QQQ TRUST SERIES 1	-9.23%	BLUEBOX GLOBAL TEC FD-C USDA	-9.21%
	ISHARES 20+ YEAR TREASURY BO	-3.09%	ISHARES CORE S&P SMALL-CAP E	-7.07%	AQA-CASTLESTN NEXTGEN-EUSDA	-8.90%
GBP Concentrated Model Portfolios						
	Cautious		Balanced		Growth	
Top	INVESCO PHYSICAL GOLD ETC	3.74%	ISHARES CORE GBP CORP	-2.17%	ISHARES CORE FTSE 100	-2.18%
	ISHARES CORE GBP CORP	-2.17%	ISHARES CORE FTSE 100	-2.18%	VANG FTSE EM USDD	-2.27%
Bottom	CASTLESTONE LOW VOL IN U-B	-6.51%	CASTLESTONE LOW VOL IN U-B	-6.51%	BLUEBOX GLOBAL TECH-C GBP	-10.11%
	ISHARES CORE UK GILTS	-3.98%	ISHARES NASDAQ 100 USD ACC	-5.75%	AQA-CASTLESTN NEXTGEN-EGBPA	-9.08%

NOTE ABOUT CONCENTRATED PORTFOLIO PERFORMANCE

The USD Cautious portfolio dipped 2.56% in December, while the USD Balanced portfolio fell 4.79% and the USD Growth portfolio decreased by 4.41%. The SPDR GOLD ETF was the best performing USD asset over the month.

The GBP Cautious portfolio slid 2.98% and the Balanced portfolio dropped 3.62%, while the Growth portfolio shrank by 3.66%. The Invesco Physical Gold ETF was the best performing GBP holding in December.

DISCLAIMER

Note: Please be aware that hypothetical or simulated performance results have certain limitations. Unlike an actual performance record, simulated results do not represent actual trading. Past performance cannot be relied on as a guide to future performance.

The information contained in this document is not directed at, nor is it intended for distribution to, or use by, persons in any jurisdiction in which the investment products are not authorized for distribution or in which the dissemination of information regarding the investment products is not permitted. This document is not offering to sell any product. Asset Allocation & Research LLC is a wholly owned subsidiary of Castlestone Management LLC. The information contained herein is for information purposes only. Any decision to purchase securities in any proposed offering should be made solely based on the information to be contained in the final prospectus published in relation to such offering. Asset Allocation & Research LLC model portfolios do not form a fiduciary relationship or constitute advice and is not and should not be construed as an offer or a solicitation of an offer of securities or related financial instruments, or an invitation or inducement to engage in investment activity and cannot be relied upon as a representation that any particular transaction necessarily could have been or can be affected at the stated price. Asset Allocation & Research LLC model portfolios are not an advertisement of securities. Asset Allocation & Research LLC opinions expressed may differ or be contrary to opinions expressed by other business areas of Castlestone Management LLC as a result of using different assumptions and criteria. All such information and opinions are subject to change without notice, and neither Asset Allocation & Research LLC nor any of its related companies or affiliates is under any obligation to update or keep current the information contained in the Asset Allocation & Research LLC model portfolio or in any other medium. Any projections and opinions expressed herein are expressed solely as general market commentary and do not constitute investment advice or guaranteed return. Any simulated performance data and/or past performance data contained herein is not a reliable indicator of future performance. The Asset Allocation & Research LLC model portfolio should not be regarded by recipients as a substitute for the exercise of their own judgment as the Asset Allocation & Research LLC model portfolio has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. The information and opinions have been compiled or arrived at based on information obtained from sources believed to be reliable and in good faith. All statements of opinion and all projections, forecasts, or statements relating to expectations regarding future events, or the possible future performance of investments represent Asset Allocation & Research LLC's own assessment and interpretation of information available to them currently. The securities described in the Asset Allocation & Research LLC model portfolios may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors and trading in these instruments is considered risky. Past performance is not necessarily indicative of future results. The value of investments may fall as well as rise and the investor may not get back the amount initially invested. Foreign-currency-denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or the price of, or income derived from, the investment. Other risk factors affecting the price, value or income of an investment include but are not necessarily limited to political risks, economic risks, credit risks, and market risks. The analysis/research herein is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own judgement in making their investment decisions. Asset Allocation & Research LLC is a registered investment adviser in the state of New Jersey. Being registered does not imply a certain level of skill or training. Investment in any Fund involves significant risks. A prospective or continuing investor should not invest in any Fund unless satisfied that it and/or its investment representative or professional adviser has/have asked for and received all information which would enable it or both of them to evaluate the risks in terms of an investment or continued investment in the Fund. The information in this document has not been approved or verified by the United States Securities and Exchange Commission or by any state securities authority. This document is confidential. No part of it may be reproduced, distributed or transmitted without Asset Allocation & Research LLC's written permission. Neither this document nor any copy of it may be distributed, directly or indirectly, in the United States of America or its territories or possessions (the "United States" or to any US Person as defined in Regulations under the United States Securities Act of 1933 (as amended)). Any failure to comply with these restrictions may constitute a violation of United States securities law. This is not exhaustive; other regional-specific wording may apply. No invitation to the public in Hong Kong to buy or subscribe for any product is permitted to be made. You should consult your own attorney, business adviser and tax adviser as to legal, business, tax and related matters concerning any of the contents of this document.

Differences in performance have occurred due to the historical restatement of the underlying securities in the portfolios for the period 01/01/2020-30/10/2020. These restatements now have been considered in the performance for the period 30/10/2020-31/11/2020. The Discrepancies were created due to a reporting method within Bloomberg.

Additional information about Asset Allocation & Research LLC is available on the United States Securities and Exchange Commission's website at <https://adviserinfo.sec.gov/firm/summary/307248>