26th October 2022

The Adaptive Asset Allocation Report

A Model driven Business Cycle Trend Following approach to investing

Issue No. 5

Robin Griffiths
Editor

► Robin Griffiths is Editor of The Adaptive Asset Allocation Report. Prior to this he was the Editor of the Dynamic Investment Trends Alert, a market newsletter for private investors published by Southbank Investment Research. Robin has served as Head of Multi-Asset Research & Advisory at the ECU Group. He was previously Chief Technical Strategist at HSBC Investment Bank for 20 years, before becoming Head of Global Asset Allocation at Rathbones, and then a director and technical strategist for Cazenove Capital Management. Robin was a Partner of WI Carr and Head of Technical Analysis at Grieveson Grant. Robin is a committee member and former chairman of the International Federation of Technical Analysts, and former chairman, now fellow, of the British Society of Technical Analysts. Robin has been a member of ECU's Global Macro Team for over 20 years. Robin has won several Technical Analyst awards for his research.

Omnishambles

Dear Readers,

In the United Kingdom, we tend to think the only problems are our own. We can't even seem to have a Prime Minister who lasts longer than 44 days. Chancellors get even less time - we have had four since June. However, the reality is that the rest of the world is also in trouble. It all followed an agenda to freely print money to bail out the global economy. This worked for a while, but then, when the yield on Treasury bonds became negative, the game had to stop.

We now have a Fed chairman who sees Mr. Volker as his role model. He will hike until he crushes inflation and the economy. He will continue to hike even as the economy goes into recession and will not be early in stopping. The going is going to get tough. In the UK, following the humiliating end of "Trussonomics" we can look forward to big cuts in spending and austerity.

Our AAA model has moved to a barbell position. This includes shorting the FTSE 100 Index and holding Global low volatility equities as a hedge. It has reduced most commodity positions but still holds Agricultural Commodities as an inflation hedge. We notice that both Gold and cash come higher in the ranking table than the USA Equity market. There are chances of a technical rally in November and December but after that, the downside risk will be high again. We need hedged bets to preserve capital. If some investors prefer to hold just cash for a while, they will not be punished for doing so. Not losing is the main priority. No new boom is close at hand, even though bear rallies can be exciting. Be hedged, be cautious. Good luck.

Best Wishes,

Robin Griffiths

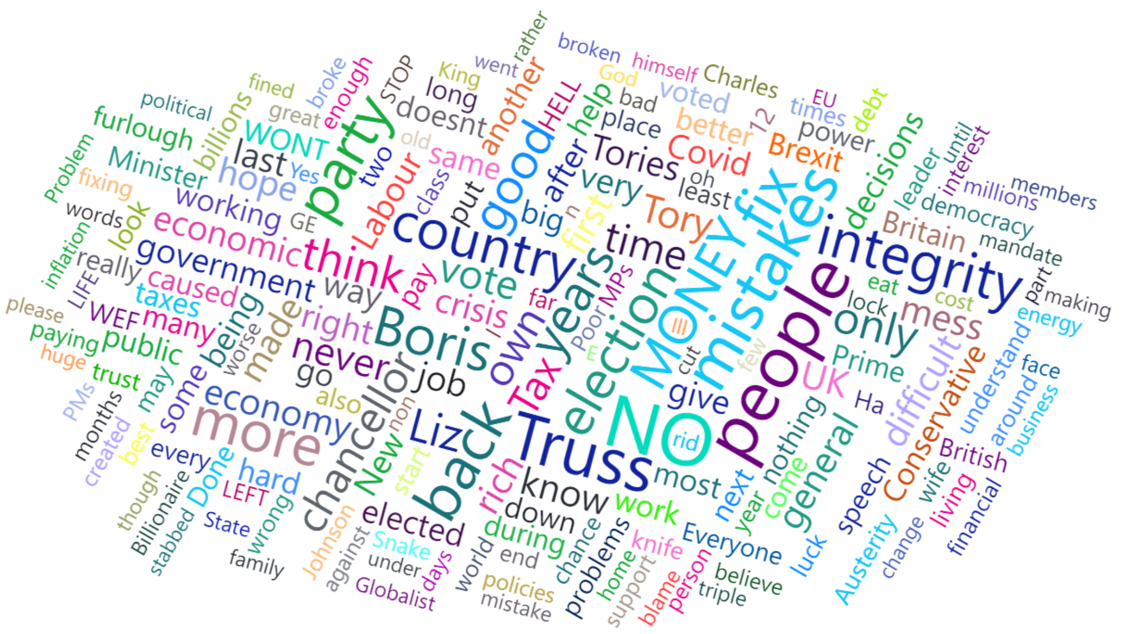
Rashpal Sohan
Managing Editor

► Rashpal Sohan is Managing Editor of The Adaptive Asset Allocation Report. Prior to this he was the Managing Editor of the Dynamic Investment Trends Alert, a model driven investment publication for private investors published by Southbank Investment Research. Rashpal is a consultant data scientist who has developed the model for The AAA report. Rashpal holds a keen interest in data driven insights using Visualisation and Machine Learning and holds a Masters in Data Science from City, University of London, with distinction. His dissertation was on the topic of a Risk-Based Dynamic Asset Allocation Strategy using Ensemble Machine Learning and was awarded the City University Computer Science Outstanding Project Prize. The underlying trend algorithm from his dissertation forms the basis of the AAA Model. Rashpal has served as Senior Macro & Quantitative Strategist to the ECU Group, and built several fundamental and quantitative models for use in Dynamic Asset Allocation. Rashpal has over 15 years of experience in Asset Allocation, having previously served as Senior Asset Allocation Analyst for one of the UK's largest discretionary investment management firms, Rathbone Brothers. He holds a first class honors degree in Actuarial Science from the London School of Economics, is a qualified Financial Risk Management (FRM) professional and has passed all three levels of the Chartered Financial Analyst (CFA) Program. As a consultant Data Scientist, Rashpal has done projects for ByteTree, where he helped extract key insights from their Network Demand set of indicators using Machine Learning and Data Visualisation and has also done Data Science projects in Facial Recognition, Reinforcement Learning, Recommender Systems and the influence of regional personality differences on the UK's vote to leave the European Union amongst others. Rashpal has won several Technical Analyst awards for his research, together with his business partner.

Dear Readers,

Britain has a new Prime Minister, but not everyone is thrilled. Delivering [his first speech as PM](), Rishi Sunak has pledged to "unite our country not with words, but with action… work day in, and day out to deliver for you… [with] integrity, professionalism and accountability at every level". Marrying up his speech with readers comments regarding the same – from a widely read UK newspaper – it's clear that many UK citizens don't relate to him as their leader and remain skeptical about his ability to deliver. These comments have been summarized as a word-cloud below, with the size of the words proportional to how frequently they have been used.

Words like "Mistake", "Hell", "Fix", "Snake", "Knife", "Stabbed", "Won't last", "Broken", "GE" (General Election), "Blame", "Poor" etc. serve to capture the dour mood in the country and negative sentiment towards the new PM. Reading through some of these comments, it's clear that many hold the current PM responsible for betraying Boris Johnson, feel he is out of touch with the hardship faced by millions of households, argue that his policies as Chancellor contributed to the current crisis and go as far as to question his own integrity – especially given some of his recent appointments.

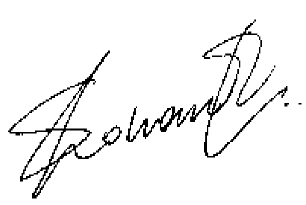


Britain faces two major crises: an economic and a political one. The disastrous economic policies of successive UK governments are at the heart of this crisis and ending the chaos and restoring credibility is a herculean task. As Britain's new PM, Rishi is going to have to address the cost-of-living crisis, industrial unrest, stretched public finances and political infighting. Cuts will have to be made and a return to a version of austerity awaits – all the while a recession is right around the corner. Rishi is going to face the political test of his career without any hope of a magic wand. We wish him all the best as he steps up to the "lectern of doom" outside Number 10.

If you have any questions or comments, please write in to aaa@bytetree.com. In future we will be hanging out at https://bytetree.com/research/aaa. If you have friends or family who you believe can benefit from our service, please spread the word.

Thank you again for your support over the years and good luck with your investments.

Best Wishes,



Rashpal Sohan

AAA Model Ranking
GBP Portfolio

Model Ranking Date: **25th October 2022**

IMPORTANT: Please Read the Addendum below before buying or selling any Assets.

ADDENDUM

The model was first run-on 20th October 2022 this month. At this time, the strongest ranked assets were India Equities, World Low Volatility Equities, Agricultural Commodities and Inverse UK Equities. The model was rerun on the 25th of October 2022 and the strongest assets remain the same. Buy or Hold these.

▼ For an explanation of what this portfolio is and how to use it, please see the "Model Guide" we've compiled at the end of this issue.

Buy	• **Inverse UK Equities**
Hold	• **India Equities** • **World Low Volatility Equities** • **Agriculture Commodities**
Sell	• **Energy Commodities**

- **The World is in a mess. The Global equity bear market rages on.**
- **The situation in the United Kingdom is a complete and utter omnishambles. A new government is needed now.**
- **The Fed is determined to kill inflation. It will hike interest rates further, crushing the economy in the process.**
- **The US Housing market is in free fall and predicts the US economy will fall into recession next year.**
- **Whilst Global equity markets remain in a bear market, they are very oversold in the short-term making a counter trend rally likely between November and December.**

"Omnishambles / om-nuh-sham-buhlz /

INFORMAL•BRITISH

A situation, especially in politics, in which poor judgment results in disorder or chaos with potentially disastrous consequences"

– Dictionary.com

The World is in a mess. There is far too much debt, runaway inflation, social unrest, climate change and a real war ongoing. People living in the UK have an additional set of problems to contend with, going through Prime Ministers and Chancellors at a rate of knots. These problems do not, however, make the situation especially unique here. The entire planet is in a mess.

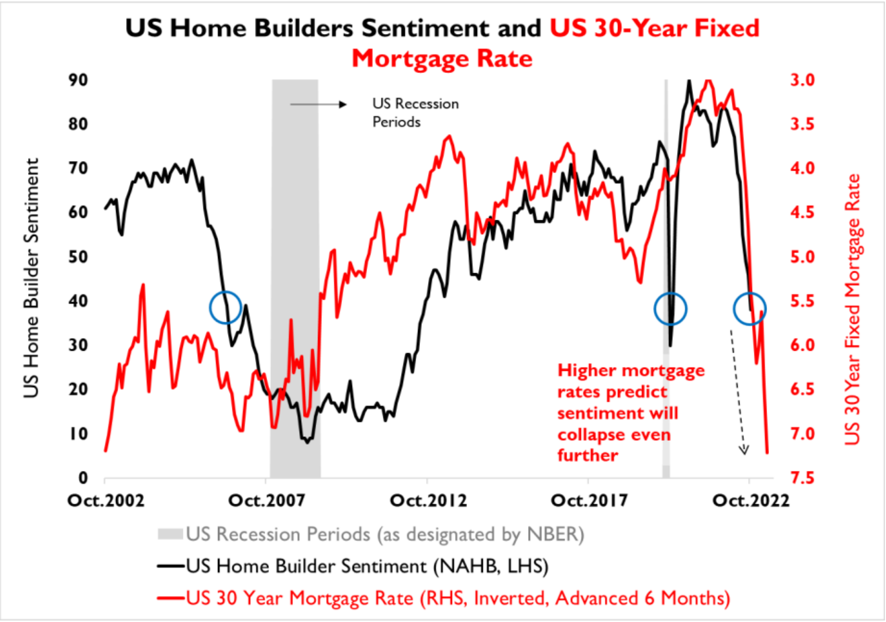
For many years it had become normal to avoid recessions by freely printing money. The US Central Bank started this under Mr. Greenspan when interest rates and debt levels were at completely different levels. The policy worked for him and his next two successors. Following the Great Financial Crisis, it was copied by other major central banks. **The trend went on until the real yield on Government bonds became negative**. It was untenable and had to stop.

It was clearly evident to many that a massive reversal of this plan would be difficult and painful. However, **it was not known who or what would lead the change. The answer to that question is now known: it is rising interest rates - due to inflation pressures - and the Fed has led the charge.** We now know that the US Fed has adopted a policy modelled closely on that utilized by Mr. Volker. The brief is to crush inflation by increasing interest rates. **Unfortunately, this also crushes the economy in the process.** However, the Fed is determined to take the pain and succeed. They wish there was a painless way to do it, but there isn't. They will persist until they succeed. Parts of the US economy are already in recession; the rest of it will follow in due course.

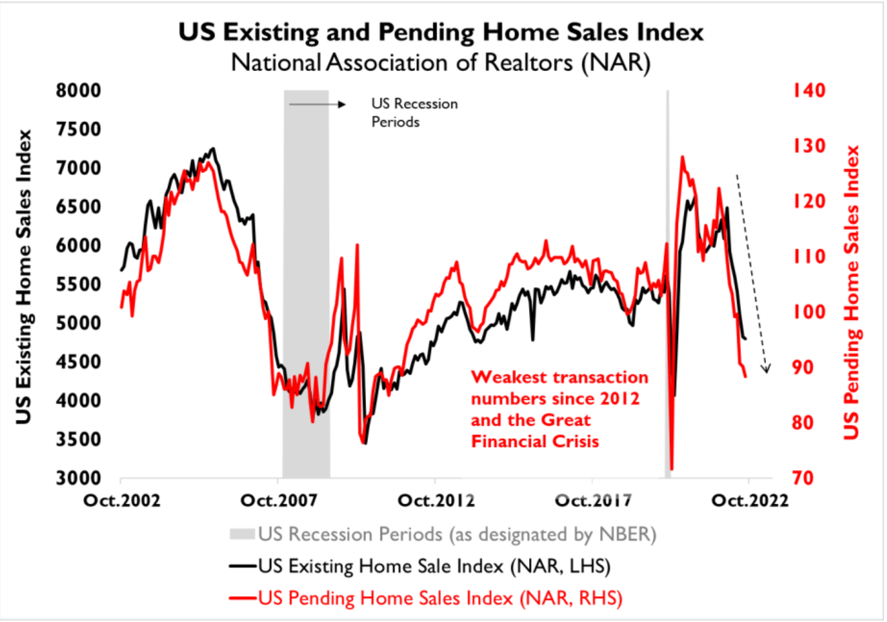
The part that we are referring to is **the US Housing Sector. Historically, it has served as a leading indicator of the broader US economy** owing to direct and indirect contributions. The sector represents between 15% and 18% of the total US economy and for every home built, around three jobs are created. Appreciating house prices also make home owners wealthier and psychologically more willing to spend. This is why **the collapse in the US Housing market is especially worrisome and convinces us that a recession is around the corner**. The NAHB Housing Market Index, a very widely followed sentiment gauge of the US Housing market (Figure 1a -black line), has fallen for ten consecutive months and is now back to levels visited during the pandemic. The speed and level at which mortgage rates have climbed this year (Figure 1a – red line) have made housing significantly less affordable for many potential buyers and caused the sale of new and existing homes to tumble by around a quarter since the beginning of this year (Figure 1b).

► Figure 1: The US Housing market is in free fall owing to a significant rise in mortgage rates and is a precursor to a US Recession

(a)



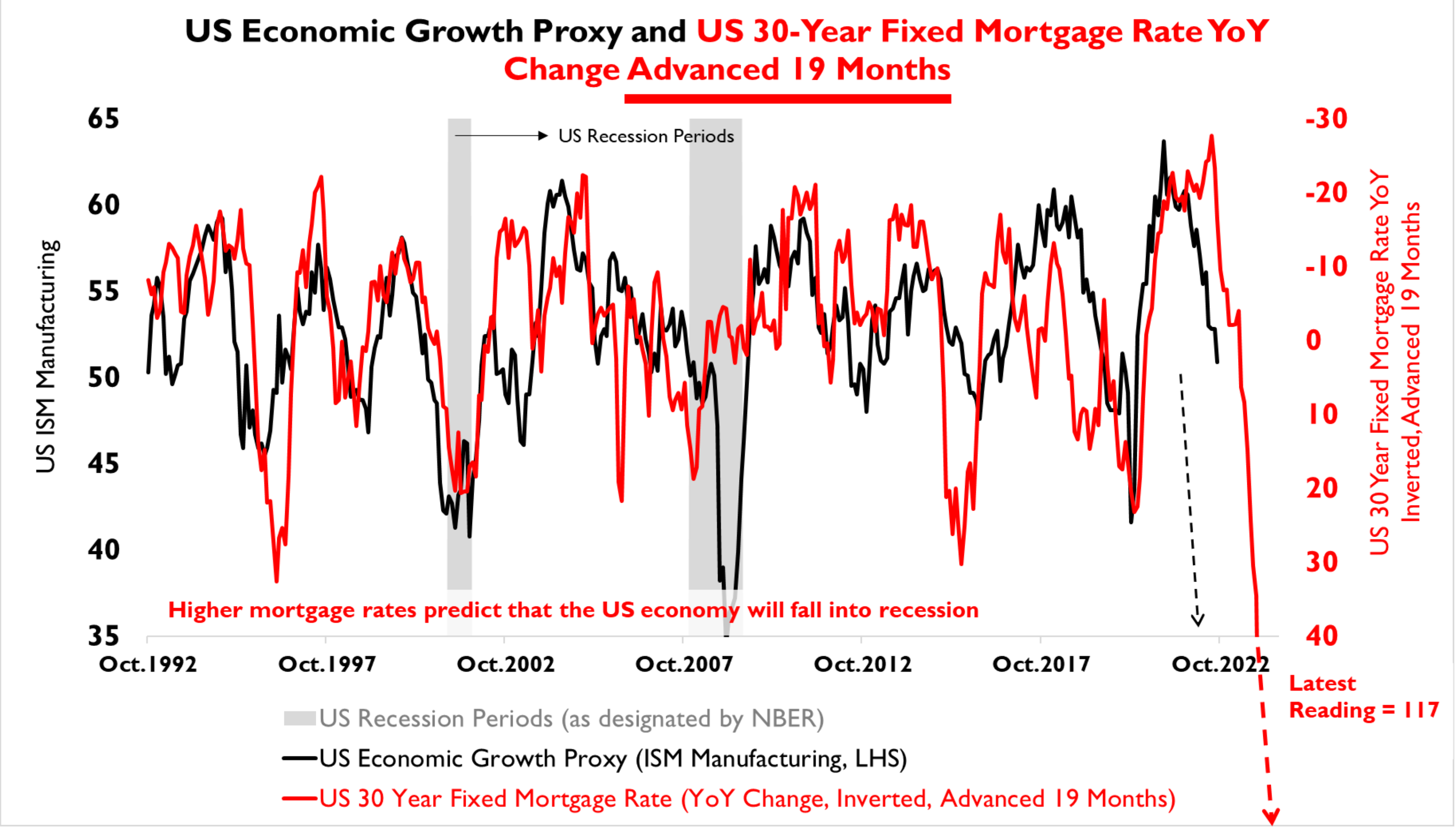
(b)



Source: ByteTree, UnderOrion.se, Refinitiv Datastream

US Mortgage rates tend to lead the US economy by around six quarters. This lead should not come as a surprise as the US housing market is very sensitive to changes in mortgage rates, and thus gyrations in US Mortgage rates impact the US Housing market, which in turn impact the dynamics of the broader economy. We can show this by plotting the US 30 Year Fixed Mortgage rate on an annual rate-of-change basis with a widely used proxy for US economic growth, the ISM Manufacturing series (Figure 2). As can be seen, the two series broadly trend together, albeit with US Mortgage rates leading by 19 Months. **The level of economic weakness suggested by the rise in US Mortgage rates is disturbing.** In effect, it suggests there is significantly more downside for US economic growth – so much so, that we had to cut off the series to make it fit on the chart!

► Figure 2: US Mortgage Rates lead US Economic growth dynamics by around six quarters and suggest that the US Economy will fall into recession next year



Source: ByteTree, UnderOrion.se, Refinitiv Datastream

Not everyone agrees with our view, however we are standing by our conviction. Predicting a recession is a very difficult job and few people have a good track record of getting it correct. In fact, the joke goes that "Economists have correctly predicted all nine of the past five recessions." The US economy is so large and complex that different bits perform at different times. You only have to look at the range of estimates, regarding the probability of a recession over the next year, to appreciate the enormity of the task (Figure 3). The spread is quite extreme, ranging all the way from 1% to 100%. Personally, **we side with Bloomberg, the Conference Board and CEOs in proclaiming that the odds of a US recession over the next 12 months is a sure-fire bet.** Our view is very simple − the US Housing Sector is a very important component of the US Economy and is already in recession. **It will drag the rest of the economy down soon, especially as the Fed continues to hike interest rates.** It is probably going to be a deep one and may well last the whole year. We need more data to elaborate further.

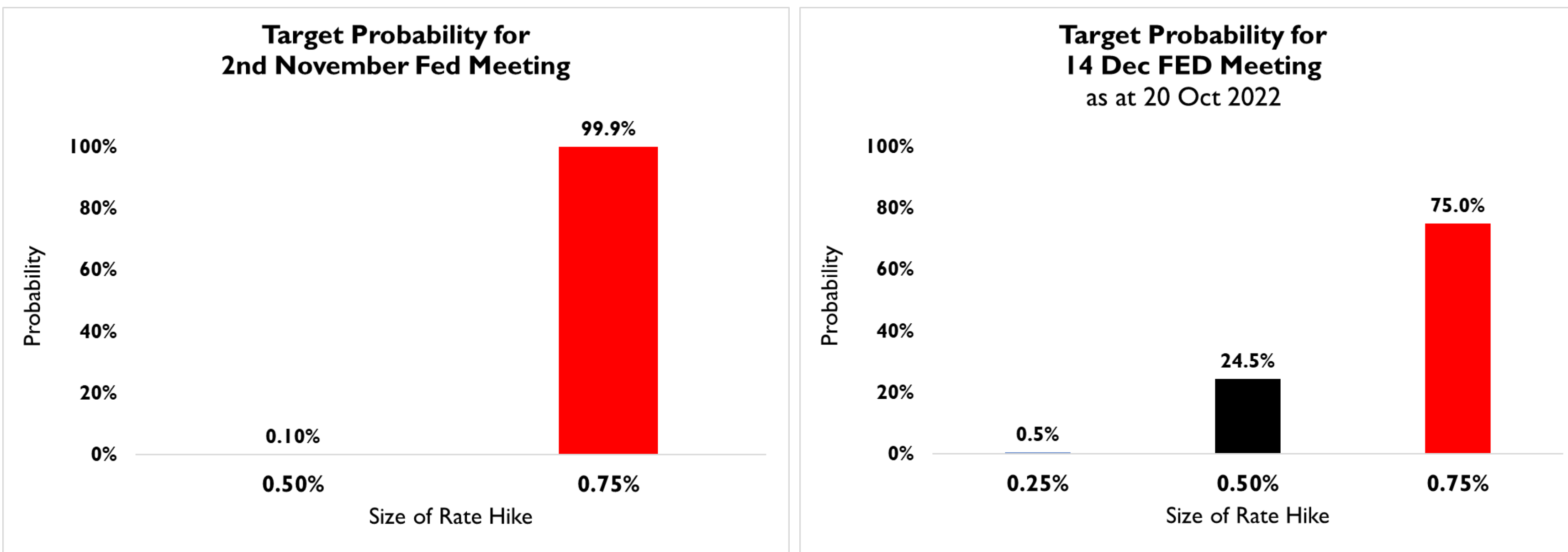
► **Figure 3: Predicting a recession is not easy as evidenced by the range of forecasts for a US recession over the next 12 Months**

Estimate by	Prediction Method	Latest Reading	Recession Probability Next 12 Months
Bloomberg	Survey of Economists	Oct-22	**100%**
Conference Board	US Recession Probability Model	Aug-22	**96%**
KPMG	Survey of CEOs	Aug-22	**91%**
Wall Street Journal	Survey of Economists	Oct-22	**63%**
Federal Reserve Bank of New York	US Recession Probabilities - Estrella and Mishkin	Sep-22	**25%**
Capital Economics	Composite US Recession Model	Sep-22	**12%**
Univerity of Oregon	US Recession Probabilities (Chauvet and Piger)	Aug-22	**1.20%**
Median			**63%**

Source: ByteTree, Bloomberg, Conference Board,KPMG, Wall Street Journal,Federal Reserve Bank of New York, Capital Economics and FRED

The Fed has made it crystal clear they are not done hiking rates. They have one mission and that is to bring inflation down, no matter what it takes. **The market has understood this and as a result is pricing in two more sizeable rate hike this year – in November and December.** The probability of a 75-bps rate hike in November is nearly 100%, whilst the same odds for a similar-sized hike in December is 77% (Figure 4). It is also possible that early next year there could be one more hike. However, it does not look likely that the trend will run on much further than that, especially if inflation starts to trend lower, taking the heat off the Fed.

► Figure 4: The market is pricing in two more US rate hikes in November and December of 75bps each

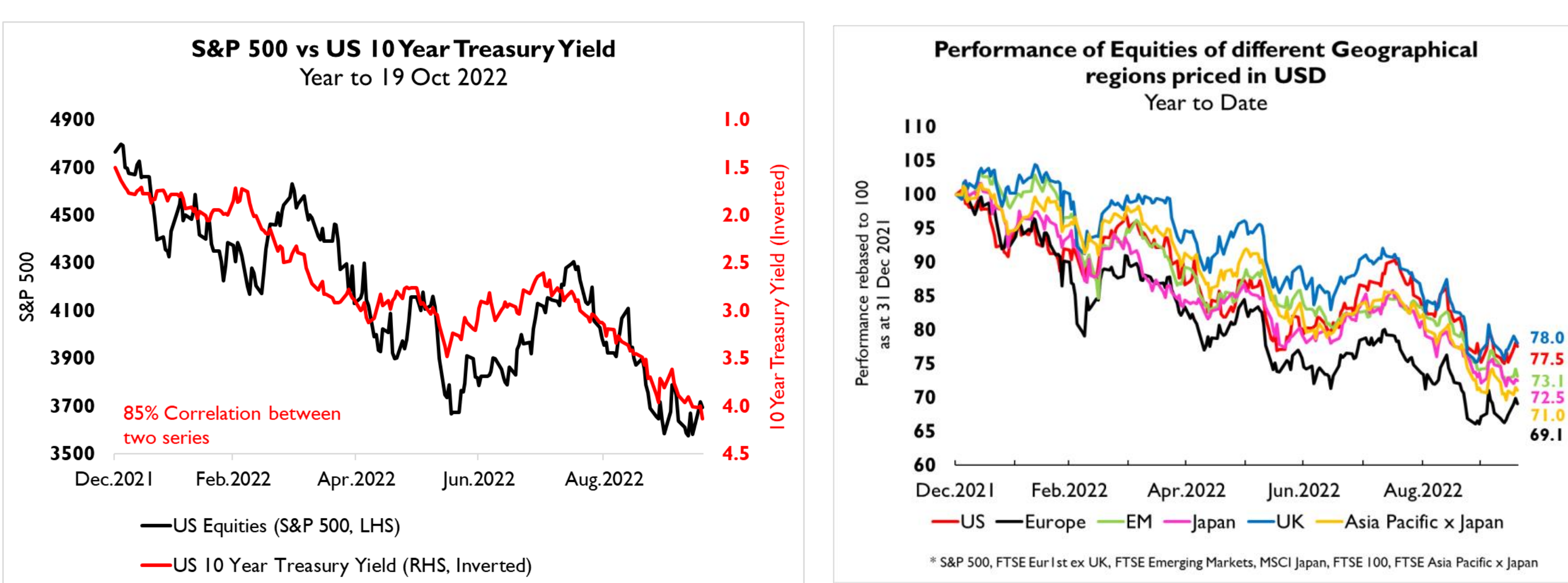


Source: ByteTree, CME Fed Watch Tool

Interest rates have been one of the strongest drivers of equity markets this year. The correlation between the US Equity Market and the benchmark US government bond yield this year is very high indeed (Figure 5a). Rising interest rates have increased the yield on cash and low duration fixed income securities – making them more attractive for investors. At the same time, higher rates have made it more costly for companies to borrow money and service their existing debt. The net result is that markets have lowered their expectations for future earnings growth, causing US and global stock markets to sell off this year (Figure 5b). **As long as interest rates continue to rise, we can expect further falls in global equity markets.** The Fed is not done hiking interest rates, and neither is the Global equity bear market over.

► Figure 5: Interest rates have been one of the most important drivers of equity markets this year causing US and global stock markets to sell off this year

(a) **(b)**

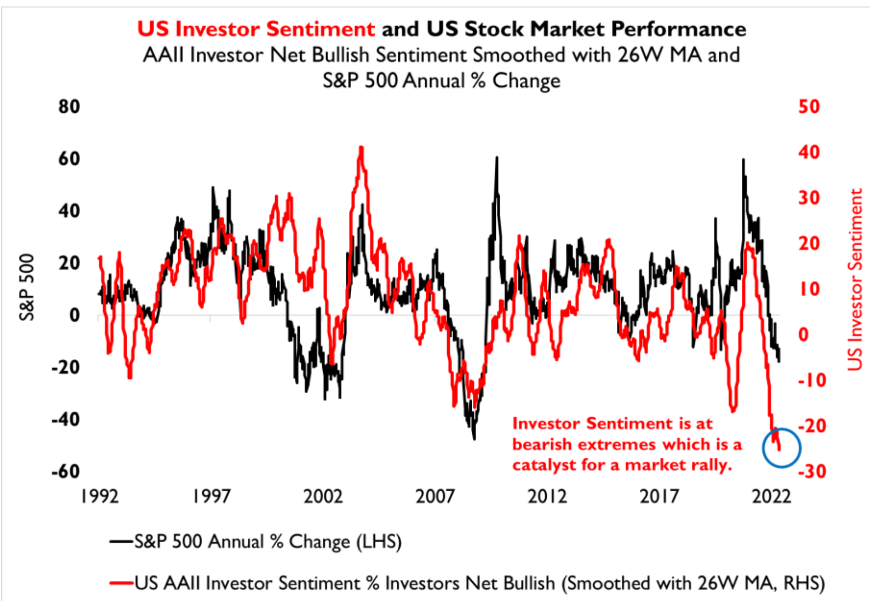


Source: ByteTree, Refinitiv Datastream

However, this negative forecast is unlikely to unfold in a linear fashion. Whenever equity investor sentiment has been as weak as it currently is, a counter-trend rally has been in the offing (Figure 6a). This is the very season of the year when such rallies occur. Historically, the months of November and December have delivered positive returns 70% of the time (Figure 6b) for both the US and World equity market. April is statistically stronger, but this period is also good for a bounce. The US and global equity market have already staged four rallies this year. **There is a good chance of another rally within the context of a continuing bear market**. We must hedge our bets.

► Figure 6: Investor sentiment has become extremely negative making a short-term relief rally extremely likely especially since we are in the seasonally positive part of the year

(a)



(b)

S&P 500 MONTHLY RETURNS FROM 2000 - 2022; AVERAGES EXCLUDE 2022

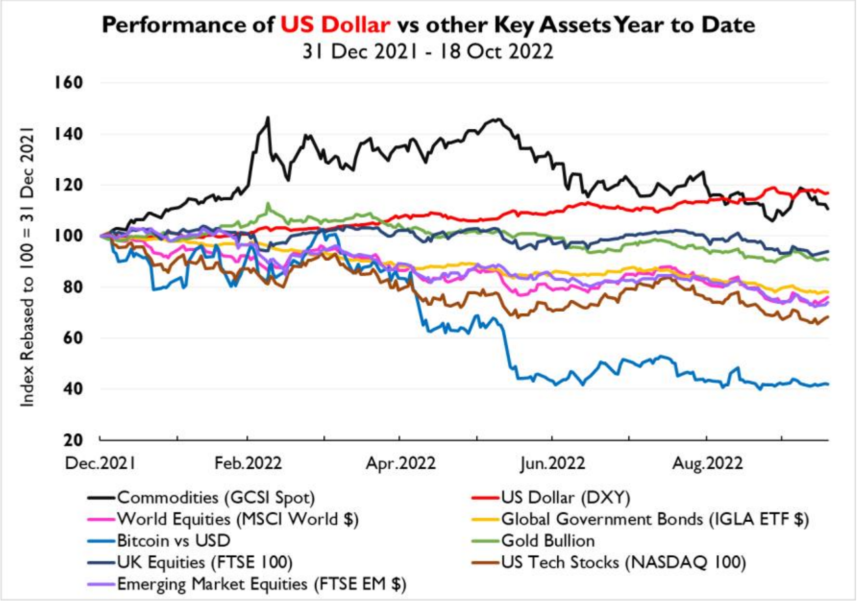
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	-5.1	-2.0	9.7	-3.1	-2.2	2.4	-1.6	6.1	-5.4	-0.5	-8.0	0.4
2001	3.5	-9.2	-6.4	7.7	0.5	-2.5	-1.1	-6.4	-8.2	1.8	7.5	0.8
2002	-1.6	-2.1	3.7	-6.1	-0.9	-7.3	-7.9	0.5	-11.0	8.6	5.7	-6.0
2003	-2.7	-1.7	0.8	8.1	5.1	1.1	1.6	1.8	-1.2	5.5	0.7	5.1
2004	1.7	1.2	-1.6	-1.7	1.2	1.8	-3.4	0.2	0.9	1.4	3.9	3.3
2005	-2.5	1.9	-1.9	-2.0	3.0	0.0	3.6	-1.1	0.7	-1.8	3.5	-0.1
2006	2.6	0.1	1.1	1.2	-3.1	0.0	0.5	2.1	2.5	3.2	1.7	1.3
2007	1.4	-2.2	1.0	4.3	3.3	-1.8	-3.2	1.3	3.6	1.5	-4.4	-0.9
2008	-6.1	-3.5	-0.6	4.8	1.1	-8.6	-1.0	1.2	-9.1	-16.9	-7.5	0.8
2009	-8.6	-11.0	8.5	9.4	5.3	0.0	7.4	3.4	3.6	-2.0	5.7	1.8
2010	-3.7	2.9	5.9	1.5	-8.2	-5.4	6.9	-4.7	8.8	3.7	-0.2	6.5
2011	2.3	3.2	-0.1	2.9	-1.4	-1.8	-2.2	-5.7	-7.2	10.8	-0.5	0.9
2012	4.4	4.1	3.1	-0.8	-6.3	4.0	1.3	2.0	2.4	-2.0	0.3	0.7
2013	5.0	1.1	3.6	1.8	2.1	-1.5	5.0	-3.1	3.0	4.5	2.8	2.4
2014	-3.6	4.3	0.7	0.6	2.1	1.9	-1.5	3.8	-1.6	2.3	2.5	-0.4
2015	-3.1	5.5	-1.7	0.9	1.1	-2.1	2.0	-6.3	-2.6	8.3	0.1	-1.8
2016	-5.1	-0.4	6.6	0.3	1.5	0.1	3.6	-0.1	-0.1	-1.9	3.4	1.8
2017	1.8	3.7	0.0	0.9	1.2	0.5	1.9	0.1	1.9	2.2	2.8	1.0
2018	5.6	-3.9	-2.7	0.3	2.2	0.5	3.6	3.0	0.4	-6.9	1.8	-9.2
2019	7.9	3.0	1.8	3.9	-6.6	6.9	1.3	-1.8	1.7	2.0	3.4	2.9
2020	-0.2	-8.4	-12.5	12.7	4.5	1.8	5.5	7.0	-3.9	-2.8	10.8	3.7
2021	-1.1	2.6	4.2	5.2	0.6	2.2	2.3	2.9	-4.8	6.9	-0.8	4.4
2022	-5.3	-3.1	3.6	-8.8	0.0	-8.4	9.1	-4.2	-9.3			
Average	-0.33	-0.50	1.05	2.40	0.27	-0.35	1.11	0.28	-1.16	1.27	1.59	0.87
% +ve	45%	55%	59%	77%	68%	59%	64%	64%	50%	64%	73%	73%

Source: ByteTree, Alpine Macro, Refinitiv Datastream

The USA is still in a fortunate position, in that the US dollar is considered a safe-haven during times of global economic uncertainty. Whilst the vast majority of assets continue to succumb to economic gravity this year, the US Dollar is up nearly 20% (Figure 7a) measured against a basket of currencies. Egypt, Turkey, India and many other countries don't like this situation because it makes their imports costlier at a time when prices are already soaring globally. As a result, most global central banks have little choice but to continue slavishly hiking interest rates this year. The options are to stay put and see your currency depreciate – like the Japanese Yen – or raise interest rates and give your currency a fighting chance. **History shows that whenever the dollar has strengthened to the levels that it has, it has normally resulted in some kind of economic or financial crisis** (Figure 7b). The dollar's strength is a wrecking ball to the global economy and increases the likelihood of a recession next year.

► **Figure 7: The US Dollar has strengthened significantly this year owing to Fed rate hikes and its reputation as a safe-haven asset in times of economic uncertainty. Historically a very strong dollar has resulted in economic or financial crisis**

(a)



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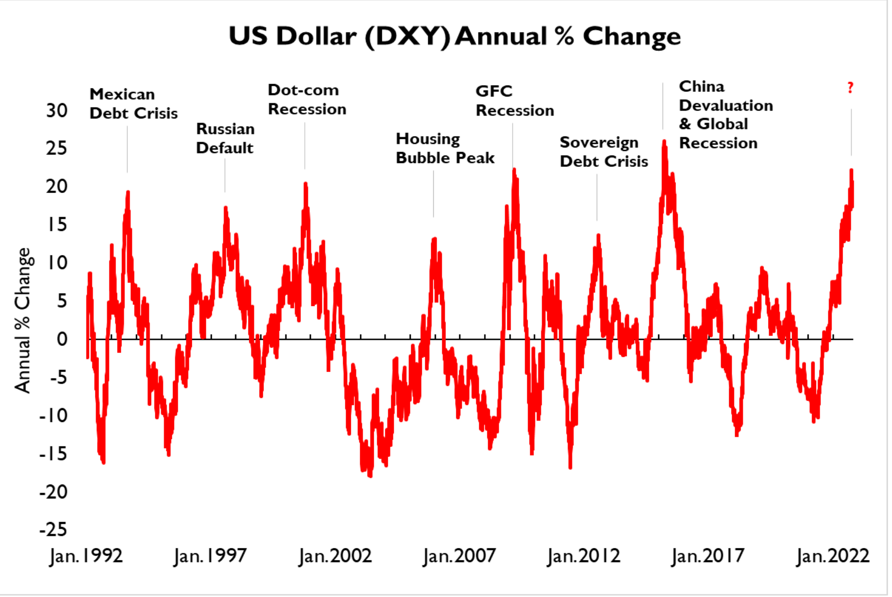
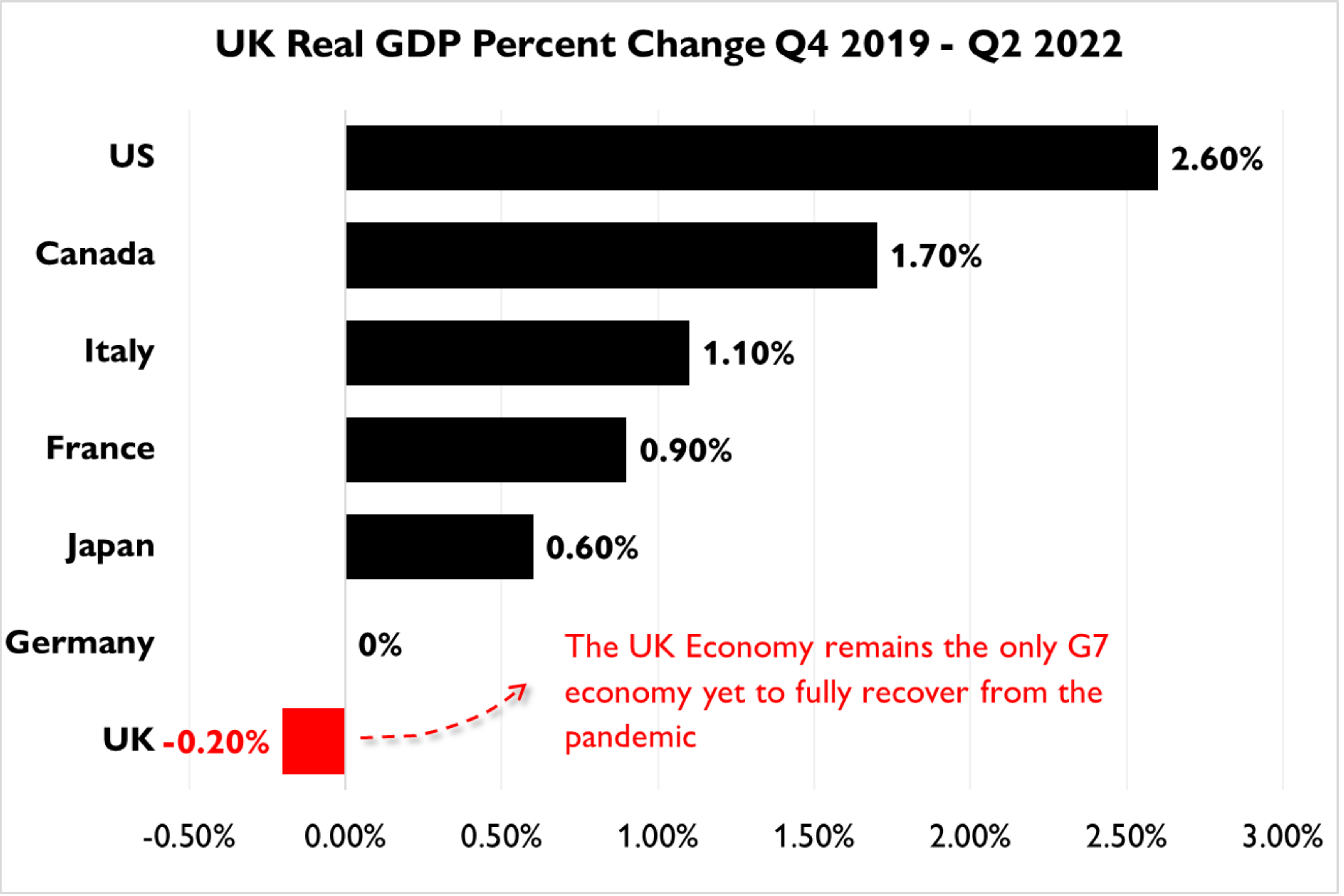


Source: ByteTree, Refinitiv Datastream, Morgan Stanley

The situation in the United Kingdom is a complete and utter Omnishambles. The UK economy is the only G7 economy yet to fully recover from the pandemic (Figure 8). After Liz Truss's very brief term as Prime Minister, the economy is in even worse shape and the outlook continues to deteriorate by the day. **Ironically, Liz Truss's pro-growth policies ("Trussonomics") have only made a recession more likely.** We can now look forward to a longer and deeper recession after she pledged to dampen the recession. Whilst we always felt her policies were doomed from the start, in the end the markets broke Trussonomics. What they were particularly worried about is that the support measures would have to be funded via new debt, at a time when debt levels are already at eye-watering levels.

► **Figure 8:** **The UK economy is the only G7 economy yet to fully recovery from the pandemic**



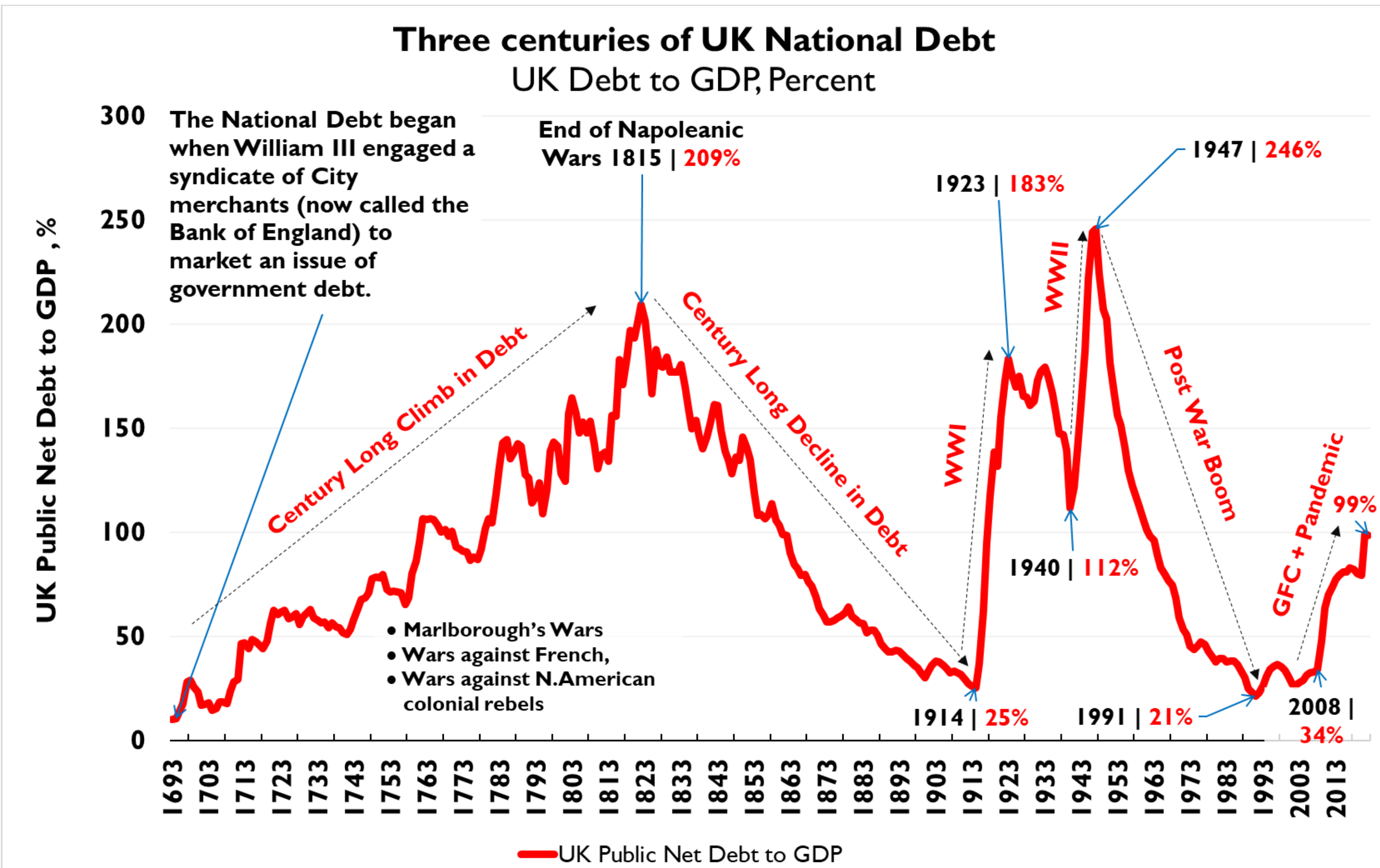
Source: ByteTree, Financial Times

This economic storm has been brewing for decades but recent events have brought it to the fore, in plain sight for everyone to see. Disastrous economic policies of successive UK governments are at the heart of this crisis. A fiscal crisis morphed into a market crisis and a political crisis. Figure 9 shows a story of three centuries of UK national debt, ever since the national debt begun when William III engaged a syndicate of City Merchants to market an issue of government debt.

Admittedly, UK national debt is nowhere near as high as it's historically been (Figure 9) – notably the levels visited at the end of the Napoleonic Wars and World War II. Nonetheless, **national debt relative to the size of the economy has been steadily creeping up ever since the Great Financial Crisis** as successive governments have resorted to keeping the economy afloat through successive bailouts, handouts and now tax cuts.

Moreover, **the UK economy belongs to the infamous 100% debt-to-GDP club**; laden with as much debt as the size of the economy. Only a handful of countries belong to this notorious club (Figure 10). Japan is at the top of the list, but in its defense, it owns most of its own debt and is not dependent on foreign buyers. The USA also ranks at the top of this list but has the advantage of owning the World's de facto currency for now.

► **Figure 9: A story of three centuries of UK National Debt. Whilst UK Debt as a percentage of GDP is nowhere near as high as it was at the end of the Napoleonic Wars or World War II, it has nonetheless been on an upward trajectory since the Great Financial Crisis**



Source: ByteTree, www.ukpublicspending.co.uk

► **Figure 10: The United Kingdom has one of the highest national debt levels relative to the size of the Economy**

Countries Ranked by Government Debt: % of GDP

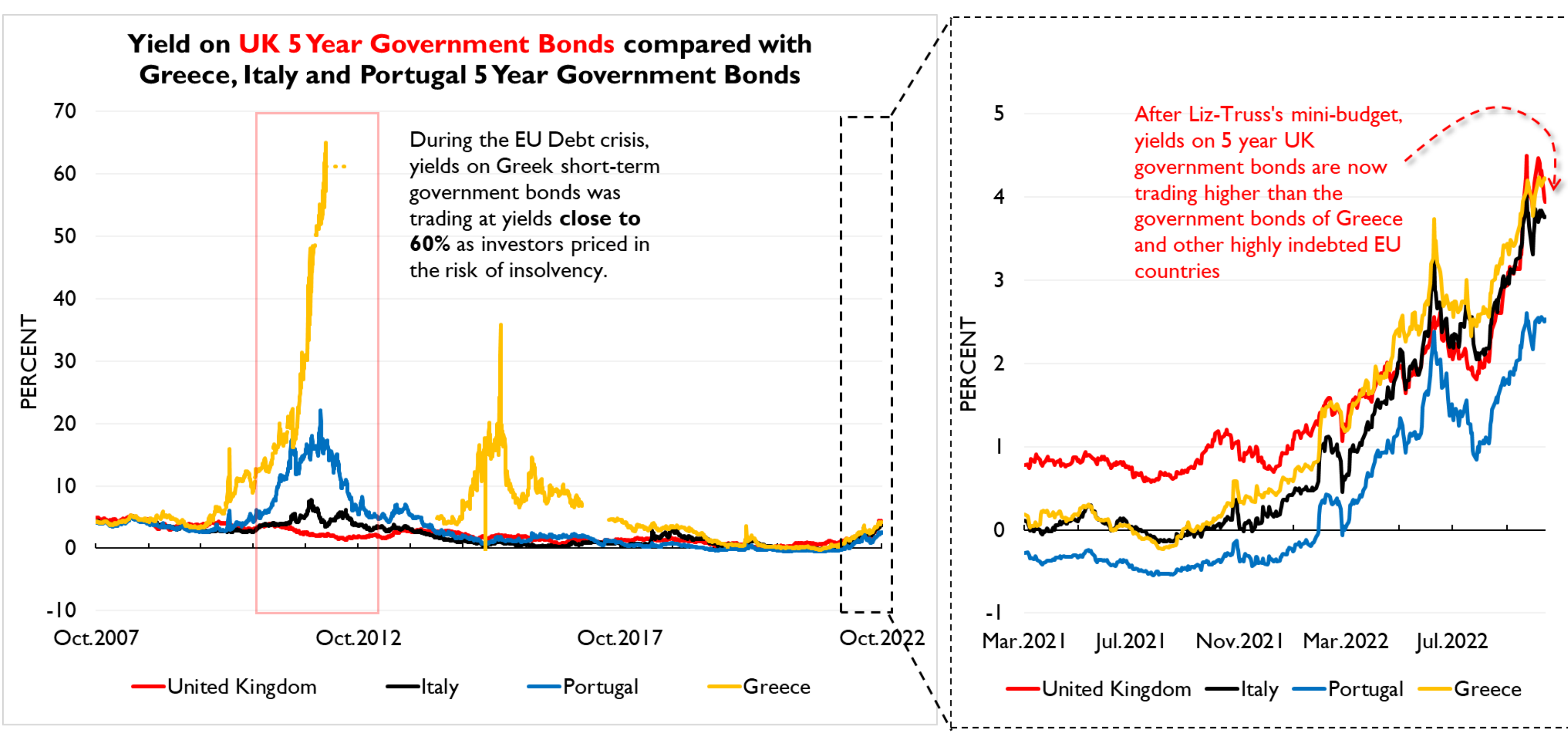
Rank	Country	Debt % GDP	Rank	Country	Debt % GDP	Rank	Country	Debt % GDP	Rank	Country	Debt % GDP
1	Japan	231.1	28	Slovenia	73.5	55	Ireland	53.7	82	New Zealand	33.1
2	Greece	188.4	29	Finland	71.6	56	Thailand	53.7	83	Denmark	31.7
3	Singapore	176.2	30	Canada	71	57	Poland	51.6	84	Paraguay	31.6
4	Italy	152.6	31	South Africa	70.1	58	Mexico	51.3	85	Moldova	30.6
5	Lebanon	150.6	32	Pakistan	69.1	59	Netherlands	50.9	86	Taiwan	30.2
6	Portugal	127	33	Morocco	68.9	60	North Macedonia	48.6	87	Bolivia	27.2
7	United States	126.7	34	Egypt	68.6	61	Romania	48.3	88	Nepal	27.2
8	Sri Lanka	122.4	35	Kenya	67.4	62	Australia	48	89	Saudi Arabia	26.4
9	Spain	116.1	36	Germany	67.2	63	South Korea	47.4	90	Switzerland	24.7
10	France	113.3	37	Israel	67.1	64	Hong Kong SAR, China	46.1	91	Bosnia and Herzegovina	24.5
11	Belgium	107.9	38	Kyrgyzstan	67.1	65	Ukraine	43.3	92	Kosovo	23.3
12	United Kingdom	99.6	39	Malawi	66	66	Norway	43.2	93	Kazakhstan	23.1
13	Cyprus	97.7	40	Albania	65.6	67	Czech Republic	42.8	94	Bulgaria	22.9
14	Bahrain	95.3	41	Panama	63.5	68	Georgia	42.8	95	Luxembourg	22.3
15	Jordan	87.8	42	Colombia	63.2	69	Latvia	42.8	96	Uzbekistan	21.8
16	European Union	87.6	43	Oman	63.1	70	Turkey	42.6	97	China	20.3
17	Austria	82.7	44	Malaysia	62.7	71	Lithuania	39.6	98	Nigeria	20.3
18	Ghana	80.1	45	Slovakia	62.4	72	Tajikistan	39.2	99	Bangladesh	19.2
19	Tunisia	79.7	46	Philippines	62.1	73	Vietnam	39.1	100	Botswana	19.1
20	Montenegro	79.6	47	Ecuador	61.9	74	Indonesia	39	101	Estonia	16.7
21	Brazil	78	48	Mongolia	59.4	75	Chile	37	102	Qatar	15
22	Mauritius	76.1	49	Yemen	58.8	76	Belarus	36.7	103	Russia	13.8
23	Argentina	75.7	50	Malta	57.5	77	Algeria	36.4	104	Iran	8.8
24	Hungary	74.8	51	India	56.3	78	Zambia	36.3	105	Ivory Coast	8.6
25	Iceland	74.6	52	Serbia	55.3	79	Cambodia	35.2	106	Azerbaijan	6.4
26	Croatia	74.3	53	Armenia	54	80	Sweden	35.1	107	Venezuela	3.5
27	Palestinian Territory	74.1	54	Uruguay	53.9	81	Peru	33.8	108	Kuwait	3.2

Source: ByteTree, CEICData

Whilst the markets have blindly supported the UK Government's policies for years, things have now changed. The UK economy faces a crisis of confidence, and the next administration will be compelled to overdo fiscal tightening over fears of the market's reaction. The yield on short term UK government bonds is now trading at similar levels to those of other highly indebted countries (Figure 11) including Greece and Italy – both of which have significantly higher debt-to-GDP levels than the UK economy.

What lies ahead is big fiscal tightening. Cuts will have to be made and a return to a version of austerity awaits. Higher inflation and interest rates will also hit the economy hard. Interest rates could peak at 5% before the rate-hike cycle is over and **the UK Economy could contract by as much as 2% from peak-to-trough.** It does not matter who becomes the next Prime Minister; unfortunately, there is no magic wand to break out of the high-tax, low-growth and never-ending money printing cycle we are stuck in.

► Figure 11: The yield on short term UK government bonds is now trading at similar levels to those of other highly indebted countries including Greece and Italy



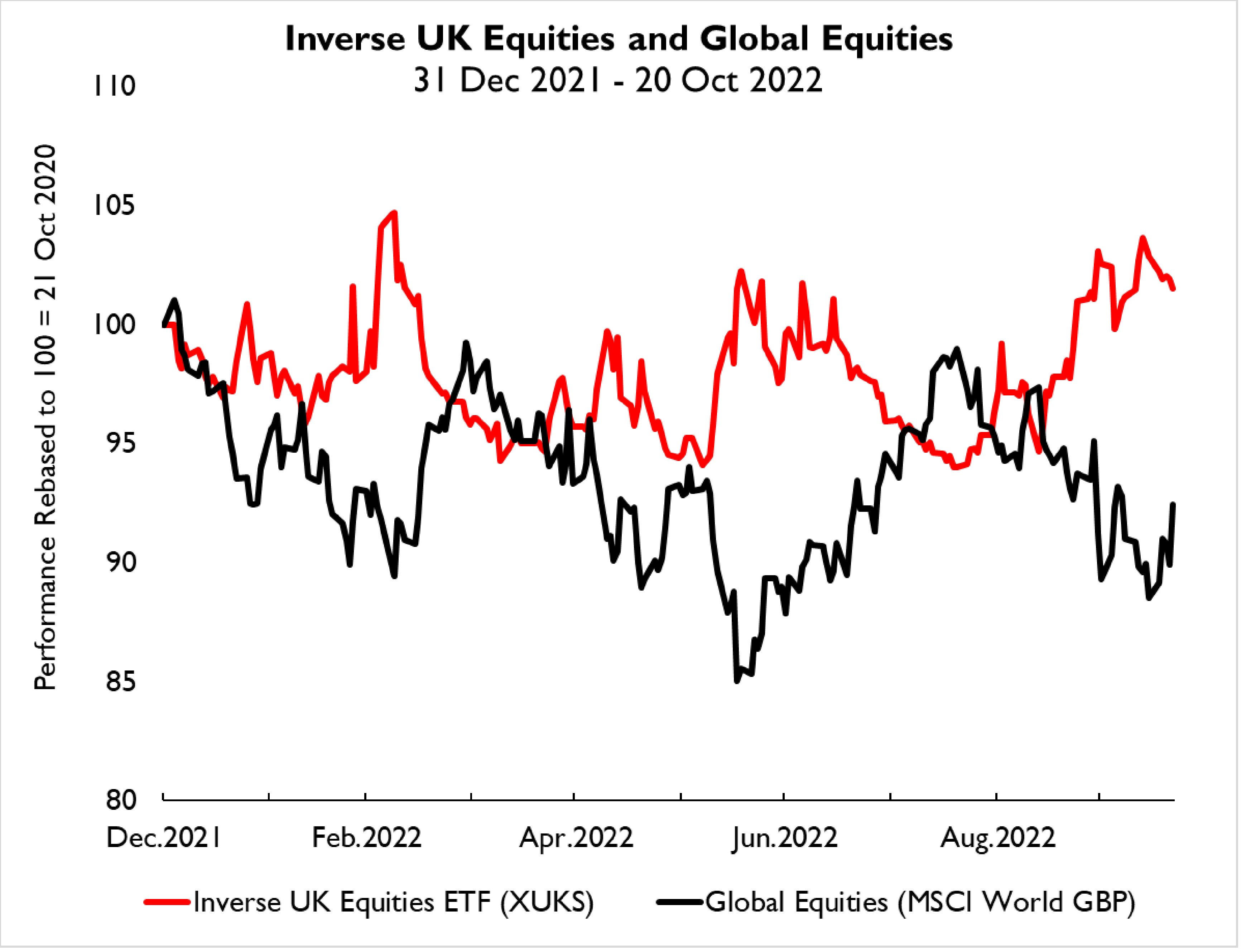
Source: ByteTree, Refinitiv Datastream

The AAA model has clearly adopted a more bearish stance. It sees things getting tougher as the economy rolls over into a further downswing. However, **we see technical grounds for a short-term rally.** We have to hedge our bets using what is called a "barbell position". We **own the short FTSE 100 index** in case equities fall (Figure 12). We **own the Indian Equity Market** in case they rise and **own some Global low volatility equities** as a defensive equity play. We have scaled back on commodities. They have done us well, but that game is now almost over. However, **we keep Agricultural Commodities** as these are still trending strong. The US harvest of corn, wheat and soybean has fallen short of previous years whilst the heavy rains in India and droughts in Europe have destroyed food crops over there.

In the Strong Asset group, we notice that Gold and Cash come out ahead of the US stock market. This is the case even allowing for the super-strength that the dollar has shown. Taking huge risks now is not the game to play. Hedging risk and avoiding losses is top priority.

It is clear to us that sometimes the changes may occur between our publishing dates. To help with this we can put emergency notes out on the website if we fell action needs to be taken. So, stay in touch on the web as you read future documents. Good luck.

► **Figure 12: Inverse UK Equities serve as a hedge against the risk of Global Equity markets falling further**



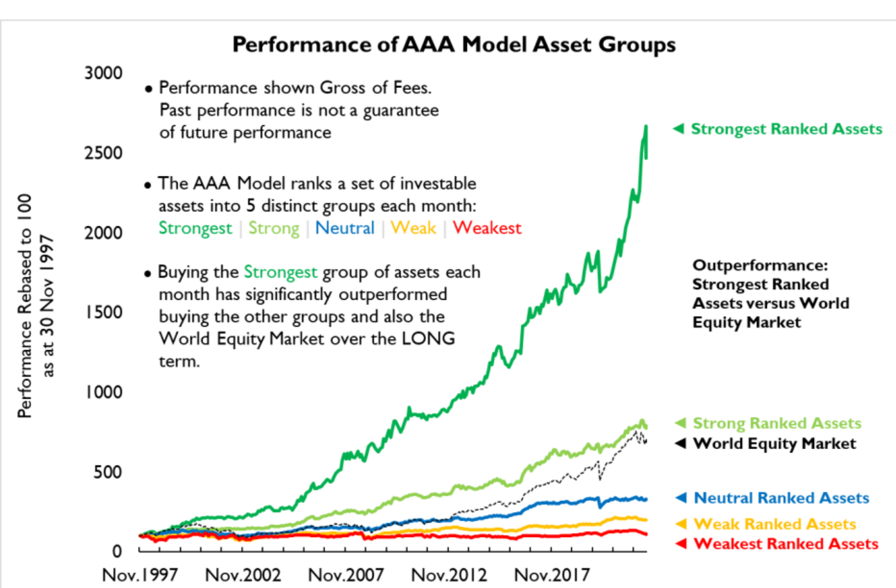
Source: ByteTree, Refinitiv Datastream

►Model Guide: What is the AAA model and how to use it?

- The AAA model is a technical model which ranks a list of important assets using our proprietary *Business Cycle Adaptive Trend* ranking algorithm.
- As different assets outperform at different stages of the business cycle*, the AAA model aims to identify which are the strongest and weakest trending assets at each phase of the business cycle.
- The model is run monthly and outputs the complete list of ranked assets divided into 5 distinct groups based on their trend-strength: Strongest, Strong, Neutral, Weak and Weakest.
- Whilst we will show the complete list of ranked assets as a table in the Appendix (Figure B), the assets to buy each month are the ones labelled as "STRONGEST".
- The chart below (Figure A) shows the difference in performance between buying the assets labelled as Strongest each month compared to buying the others [Strong, Neutral, Weak and Weakest]. The main point to take away from this chart is that the Strongest trending assets significantly outperform the other groups over the long term hence are the ones to buy. Of course, investors also need to bear in mind that **past performance is never a guarantee of future results.**
- The rankings are done in GBP, updated monthly and any changes to the rankings need to be mirrored in your portfolio [buy any assets that are promoted to the Strongest asset group each month and sell any that have left the group]. These trends do not change as rapidly as those for individual shares and typically means holding four assets each month.
- The strongest assets can be purchased using Exchange Traded Funds (ETFs) or Managed Funds. A representative sample of the former is shown in the Appendix for illustration purposes however this list should not be considered recommendations.

* Greed assets [risk assets] generally do better in times of economic expansion and investor risk-adoration. Conversely, Fear assets [defensive assets] generally do better in times of economic contraction and investor risk-aversion.

► Figure A: Buying the Strongest ranked assets has significantly outperformed the other groups over the long term



► Figure B: The AAA Model ranks a list of key assets each month but only the Strongest assets should be bought

	October 2022	Representative ETF Name Distributing ETF Name; Accumulating ETF Name	Representative ETF Ticker Distributing*	Representative ETF Ticker Accumulating*
Strongest	India Equities	No Distributing ETF ; DB X-TRACKERS MSCI India Index UCITS ETF ACC	-	XCX5
	World Low Volatility Equities	No Distributing ETF ; iShares Edge MSCI World Minimum Volatility UCITS ETF	-	MVOL
	Agricultural Commodities	No Distributing ETF ; ETFS Commodity Securities Agriculture Dow Jones UBS CI	-	AGAP
	Inverse UK Equities	No Distributing ETF ; DB X-TRACKERS FTSE 100 SHORT DAILY ETF	-	XUKS
Strong	US Equities	iShares S&P 500 UCITS ETF USD DIST ; ISHRS Core S&P 500 UCITS USD (ACC) ETF	IUSA	CSP1
	Gold Bullion	No Distributing ETF ; ETFS Physical Gold	-	PHGP
	Energy Commodities	No Distributing ETF ; ETFS Commodity Securities Energy DJ-UBSCI	-	AIGE
	UK Cash	No Distributing ETF ; No Accumulating ETF	-	-
	World Equities	iShares MSCI World UCITS ETF USD DIST ; iShares Core MSCI World UCITS ETF USD ACC	IWRD	SWDA
Neutral	Global High yield	iShares Global High Yield Corp. Bond UCITS ETF DIST ; iShares Global High Yield Corp. Bond UCITS ETF ACC	IGHY	HYLA
	World Quality Equities	No Distributing ETF ; iShares Edge MSCI World Quality Factor UCITS ETF	-	IWFQ
	Japan Equities	iShares MSCI Japan UCITS ETF DIST ; iShares Core MSCI Japan IMI UCITS ETF ACC	IJPN	SJPA
	UK Equities	iShares Core FTSE 100 UCITS ETF DIST ; SPDR FTSE UK All Share UCITS ETF	ISF	FTAL
	Global Govt Bond	iShares Global Govt. Bond (USD) DIST UCITS ETF ; iShares Global Govt Bond UCITS (ACC) ETF	SGLO	IGLA
Weak	Industrial Metals	No Distributing ETF ; ETFS Industrial Metals ETC	-	AIGI
	EM Govt. Bonds ($)	iShares J.P. Morgan USD EM Bond UCITS ETF DIST ; iShares J.P. Morgan USD EM Bond UCITS ETF ACC	SEMB	JPEA
	EU Equities	iShares MSCI Europe ex UK UCITS ETF EUR (DIST) ; iShares MSCI EMU UCITS ETF ACC	IEUX	CEU1
	EM Equities	Vanguard FTSE Emerging Markets UCITS ETF USD ; No Accumulating ETF	VFEM	-
	UK Corporate Bonds	iShares Core £ Corp Bond GBP UCITS ETF ; No Accumulating ETF	SLXX	-
Weakest	UK Gilts	iShares Core UK Gilts UCITS ETF GBP ; No Accumulating ETF	IGLT	-
	UK Index Linked Gilts	iShares Index Linked Gilts UCITS ETF ; No Accumulating ETF	INXG	-
	Global Corporate Bonds	iShares Global Corp Bond UCITS (USD) DIST ; iShares Global Corp Bond UCITS (USD) ACC	CRPS	CRPA
	China Equities	HSBC MSCI CHINA ETF ; No Accumulating ETF	HMCH	-

* *Distributing* units pay out dividends and income whilst *Accumulating* units reinvest it. Please select the ones that suit you. In some cases only one option is available.

Appendix

AAA Model Rankings GBP Portfolio with representative ETF Tickers

	October 2022	Representative ETF Name Distributing ETF Name; Accumulating ETF Name	Representative ETF Ticker	
			Distributing*	Accumulating*
Strongest	India Equities	No Distributing ETF ; DB X-TRACKERS MSCI India Index UCITS ETF ACC	-	XCX5
	World Low Volatility Equities	No Distributing ETF ; iShares Edge MSCI World Minimum Volatility UCITS ETF	-	MVOL
	Agricultural Commodities	No Distributing ETF ; ETFS Commodity Securities Agriculture Dow Jones UBS CI	-	AGAP
	Inverse UK Equities	No Distributing ETF ; DB X-TRACKERS FTSE 100 SHORT DAILY ETF	-	XUKS
Strong	US Equities	iShares S&P 500 UCITS ETF USD DIST ; ISHRS Core S&P 500 UCITS USD (ACC) ETF	IUSA	CSP1
	Gold Bullion	No Distributing ETF ; ETFS Physical Gold	-	PHGP
	Energy Commodities	No Distributing ETF ; ETFS Commodity Securities Energy DJ-UBSCI	-	AIGE
	UK Cash	No Distributing ETF ; No Accumulating ETF	-	-
	World Equities	iShares MSCI World UCITS ETF USD DIST ; iShares Core MSCI World UCITS ETF USD ACC	IWRD	SWDA
Neutral	Global High yield	iShares Global High Yield Corp. Bond UCITS ETF DIST ; iShares Global High Yield Corp. Bond UCITS ETF ACC	IGHY	HYLA
	World Quality Equities	No Distributing ETF ; iShares Edge MSCI World Quality Factor UCITS ETF	-	IWFQ
	Japan Equities	iShares MSCI Japan UCITS ETF DIST ; iShares Core MSCI Japan IMI UCITS ETF ACC	IJPN	SJPA
	UK Equities	iShares Core FTSE 100 UCITS ETF DIST ; SPDR FTSE UK All Share UCITS ETF	ISF	FTAL
	Global Govt Bond	iShares Global Govt. Bond (USD) DIST UCITS ETF ; iShares Global Govt Bond UCITS (ACC) ETF	SGLO	IGLA
Weak	Industrial Metals	No Distributing ETF ; ETFS Industrial Metals ETC	-	AIGI
	EM Govt. Bonds ($)	iShares J.P. Morgan USD EM Bond UCITS ETF DIST ; iShares J.P. Morgan USD EM Bond UCITS ETF ACC	SEMB	JPEA
	EU Equities	iShares MSCI Europe ex UK UCITS ETF EUR (DIST) ; iShares MSCI EMU UCITS ETF ACC	IEUX	CEU1
	EM Equities	Vanguard FTSE Emerging Markets UCITS ETF USD ; No Accumulating ETF	VFEM	-
	UK Corporate Bonds	iShares Core £ Corp Bond GBP UCITS ETF ; No Accumulating ETF	SLXX	-
Weakest	UK Gilts	iShares Core UK Gilts UCITS ETF GBP ; No Accumulating ETF	IGLT	-
	UK Index Linked Gilts	iShares Index Linked Gilts UCITS ETF ; No Accumulating ETF	INXG	-
	Global Corporate Bonds	iShares Global Corp Bond UCITS (USD) DIST ; iShares Global Corp Bond UCITS (USD) ACC	CRPS	CRPA
	China Equities	HSBC MSCI CHINA ETF ; No Accumulating ETF	HMCH	-

* *Distributing* units pay out dividends and income whilst *Accumulating* units reinvest it. Please select the ones that suit you. In some cases only one option is available.

Source: ByteTree, Refinitiv Datastream

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