WHAT WE NEED TO KNOW

Understanding the timeline of Western economic developments that shaped investment returns from 1945 is highly illuminating.

Providing a much clearer picture of how to invest going forward.

HOW DID WE GET TO WHERE WE ARE?

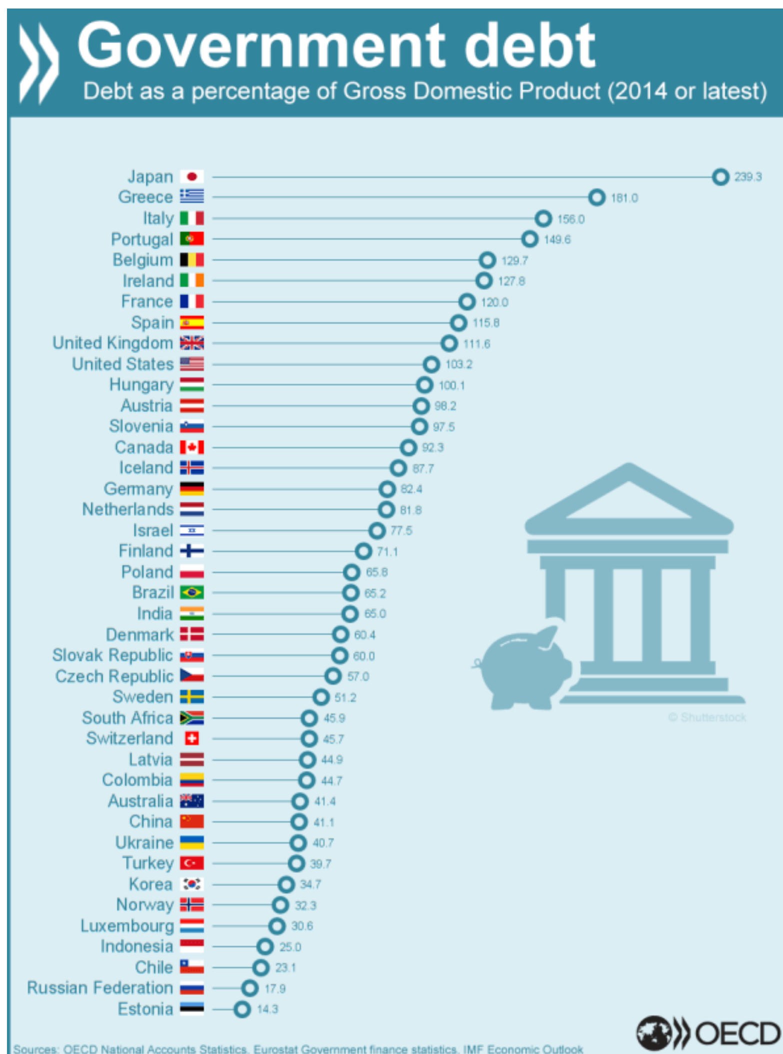
To track how it all fits together we would need to go back to 1945 and follow the incremental stages forward. But to understand where it goes next we can really just jump in from 2008 with a bit of backstory.

1982-2008

The Western world by 2008 had for more than 25 years, been supporting economic growth (GDP) by massively increasing debt levels, with country and individual debts rising to over 100% of GDP.

In 2008 this debt binge blew up in 'The Great Financial Crisis'.

THE BIG RETHINK POST 2008



GDP is the gross domestic product of a nation; the total earnings from goods and services produced and sold. It's like the nation's wages. GDP is influenced up or down by 3 main elements:

Productivity, population growth and debt.

Governments and Central Banks realised two things in 2008/9,

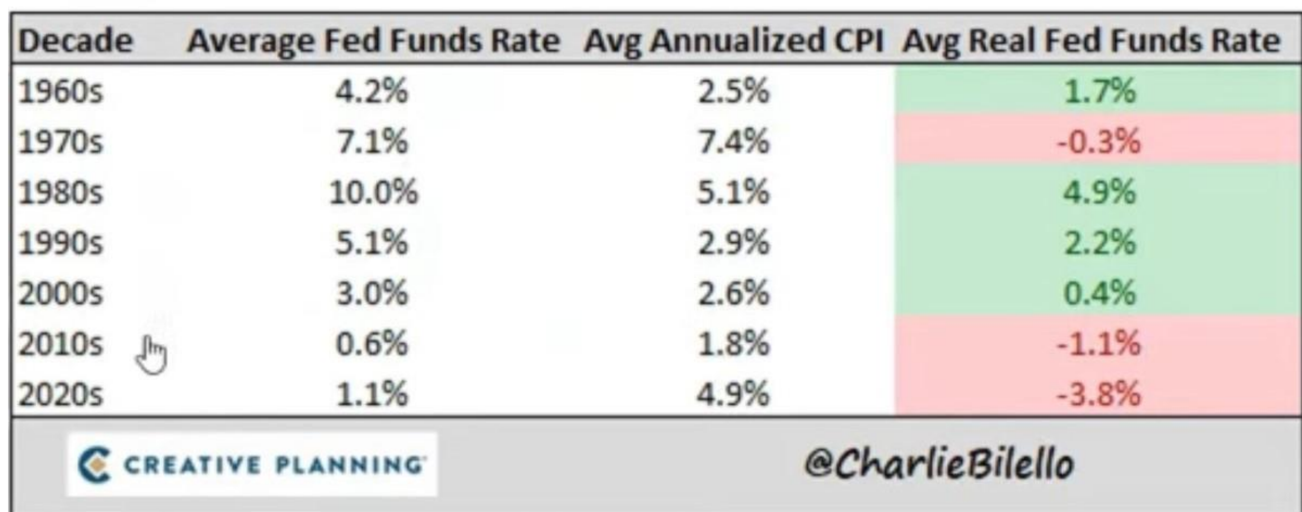
1) The interest cost of servicing debts had to be lower than the growth rate of GDP or economies would shrink.

In 2008 GDP was 2% and debt servicing costs around 6%. With debt to GDP @ 100% that's 4% negative economic growth annually.

This is exactly the same as a single person's interest servicing costs on their loans. If increasing more than their income every year they get incrementally poorer.

2) The way to have GDP growth and debt costs stop being a net negative:

- Use central bank balance sheets for adding new debts
- Keep interest rates below GDP growth if possible (certainly below the inflation rate)
- Use QE to push down interest rates.



Decade	Average Fed Funds Rate	Avg Annualized CPI	Avg Real Fed Funds Rate
1960s	4.2%	2.5%	1.7%
1970s	7.1%	7.4%	-0.3%
1980s	10.0%	5.1%	4.9%
1990s	5.1%	2.9%	2.2%
2000s	3.0%	2.6%	0.4%
2010s	0.6%	1.8%	-1.1%
2020s	1.1%	4.9%	-3.8%

CREATIVE PLANNING @CharlieBilello

CENTRAL BANKS POST 2008 AND QUANTITATIVE EASING (QE)

QE was therefore created to put future debts on the Central Banks' balance sheet and provide yield curve control.

This meant in practical terms central banks issued bonds into the market (Treasuries in US, Gilts in the U.K., Bunds in Germany) and bought them back themselves. So monetising debt but an asset still exists so not directly. It's a way of printing additional money and pumping it into the system.

The outcome being the financial system had plentiful new liquidity and this supported better growth ongoing.

WHY WAS THIS NOT INFLATIONARY?

The simple answer is it was. But only to certain parts of the economy and those parts were not of concern to Central Banks.

Inflation is fundamentally caused by a mismatch between supply and demand. The price of something goes up if more demand encounters restricted supply. Deflation happens when more supply hits less demand.

The great inflation surge of the 1970's was exactly this phenomenon.

- Huge demographic uptick as the baby boomer generation entered the workforce and started buying houses, cars, having children etc.
- Artificial oil restrictions.
- Artificial labour relations problems due to strength of Unions.
- Primitive supply chains and global trade.

There has to be a change to the supply demand balance initially for inflation to spike.

All the above were changes to either supply or demand.

But it's vital to know that inflation is not a continuous state. Imbalances will correct over time in free markets. For inflation to remain persistently high prices must keep going up each year.

If you have prices go up 10% in year 1 but stay the same in year 2, The inflation rate is then zero.

So, QE did cause inflation in assets such as equities, houses, art, classic cars etc; rare desirable items with finite supply and increased liquidity producing more demand?

LIQUIDITY

A key metric that predicts asset price movements is whether liquidity is rising. Liquidity really just measures all types of money in the system. More is good as increased economic activity creates growth and profit. The relationship between liquidity and asset prices can be observed over recent times to be highly correlated.

If we look at asset price appreciation in relation to the increased money in the system due to QE then it's over 90% correlated. In essence the rise in values of most assets just broadly mirrored the rise in overall liquidity.

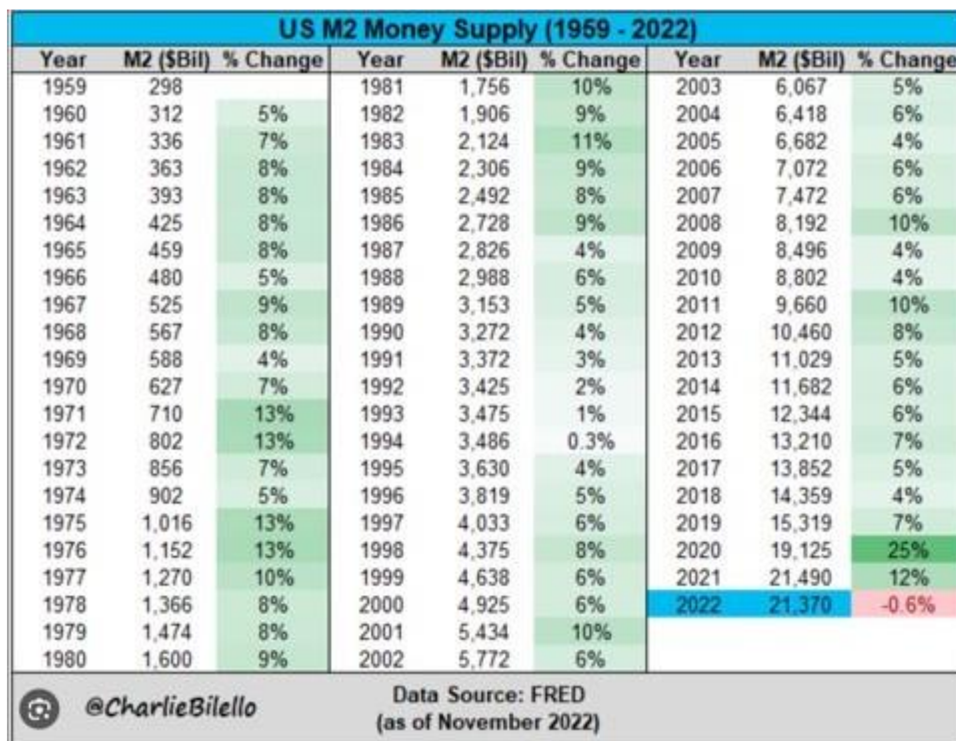
This partly explains why the wealth divide between those that 'have assets' and those who don't has widened so rapidly.

Interestingly the two asset classes which have risen in value much more than overall liquidity levels (this can also be seen as currency debasement) are

Technology stocks: because the majority of profit growth has been in these companies.

Crypto: Bitcoin being seen as digital gold by enough people and because it's a fixed supply of 21 million not vulnerable to debasement.

The market struggles in 2022 were significantly worsened by the historically high withdrawal of liquidity. Central Banks took back a lot of the funding they pumped in with pandemic assistance. You can see from the figures below that money supply increases by around 6% pa on average, then the explosion in '20 and '21. The '22 number is negative, that's never happened before.



US M2 Money Supply (1959 - 2022)

Year	M2 ($Bil)	% Change	Year	M2 ($Bil)	% Change	Year	M2 ($Bil)	% Change
1959	298		1981	1,756	10%	2003	6,067	5%
1960	312	5%	1982	1,906	9%	2004	6,418	6%
1961	336	7%	1983	2,124	11%	2005	6,682	4%
1962	363	8%	1984	2,306	9%	2006	7,072	6%
1963	393	8%	1985	2,492	8%	2007	7,472	6%
1964	425	8%	1986	2,728	9%	2008	8,192	10%
1965	459	8%	1987	2,826	4%	2009	8,496	4%
1966	480	5%	1988	2,988	6%	2010	8,802	4%
1967	525	9%	1989	3,153	5%	2011	9,660	10%
1968	567	8%	1990	3,272	4%	2012	10,460	8%
1969	588	4%	1991	3,372	3%	2013	11,029	5%
1970	627	7%	1992	3,425	2%	2014	11,682	6%
1971	710	13%	1993	3,475	1%	2015	12,344	6%
1972	802	13%	1994	3,486	0.3%	2016	13,210	7%
1973	856	7%	1995	3,630	4%	2017	13,852	5%
1974	902	5%	1996	3,819	5%	2018	14,359	4%
1975	1,016	13%	1997	4,033	6%	2019	15,319	7%
1976	1,152	13%	1998	4,375	8%	2020	19,125	25%
1977	1,270	10%	1999	4,638	6%	2021	21,490	12%
1978	1,366	8%	2000	4,925	6%	2022	21,370	-0.6%
1979	1,474	8%	2001	5,434	10%			
1980	1,600	9%	2002	5,772	6%			

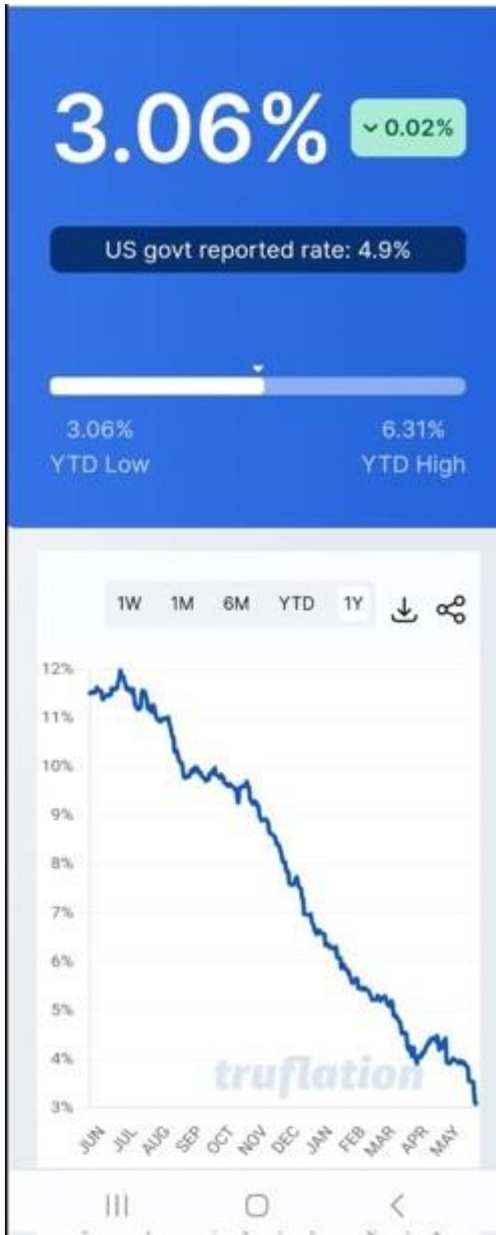
@CharlieBilello

Data Source: FRED
(as of November 2022)

WHY THE BIG INFLATION SPIKE IN 2022?

This was caused (as all inflation spikes are), by mismatches between supply and demand.

They were pandemic related and then war related but not one is still rising. We can run through a ton of examples, but all are normalising now.



Charlie Bilello
@charliebilello

Commodity price changes over the last year...
Sugar: +41%
Silver: +16%
Gold: +11%
US CPI: +4.9%
Copper: -9%
Soybeans: -14%
Coffee: -15%
Corn: -26%
Zinc: -28%
Brent Crude: -31%
WTI Crude: -34%
Gasoline: -35%
Heating Oil: -38%
Cotton: -45%
Wheat: -46%
Lumber: -56%
Natural Gas: -71%

INFLATION, YEAR-OVER-YEAR PERCENT CHANGE

Month	CPI	Core CPI	PCE	Core PCE	Updated
May 2023	4.14	5.34	3.86	4.65	05/10

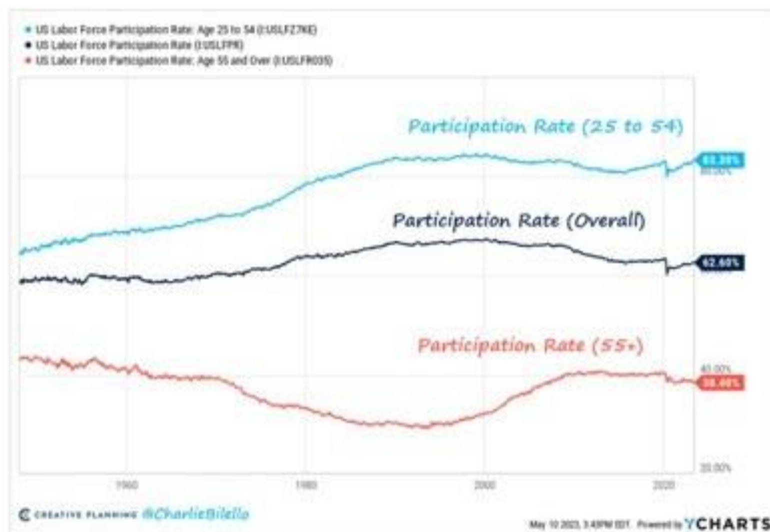
Data Source: Cleveland Fed

Inflation by the end of 23 will be much lower. *see separate inflation report*

WAGES AND EMPLOYMENT

The post pandemic rise in wages especially in the service sector has been inflationary. The recent figures suggest the mismatch between labour supply and demand is mostly normalised with wages to April '23 increasing by an annualised 1.2% pa.

The overall participation rate remains below the pre-covid level (63.4%), however, as many older workers (55+) have left and not come back.



Jobs have now grown for 28 consecutive months.

WHERE ARE WE NOW?

ECONOMIES

* Inflation is falling everywhere.

* Interest rate rises are either at an end (US) or coming to an end (EU)

* Energy costs are back to pre-war levels or below

* Company profits are still positive

* Likelihood of economic slowdowns as higher interest rates and lower lending (banking crisis) bite into economic activity.

* Economies are being reorganised post pandemic to 'friendshore' supply chains especially with China concerns in the US. This will be inflationary.

* ESG is inflationary.

POLITICS

* The world is now more obviously bipolar. The two axes of power being the US and China.

China will in the next decade become the world's largest economy. It wants its stature reflected by influence with the US trying to stymie that. Look for the Chinese to continue exploiting disruptions to increase power and influence as it has recently with Russia, Saudi Arabia, Europe and Iran.

But also, China is not Russia. It's a trading nation and needs the world's biggest markets open to it. It won't want to fight physical wars. It will concentrate on leveraging its power, access and trade to disrupt and reorder.

WHERE ARE WE GOING?

In answering this question, we need to know

1 What interest rates will be?

2 What will inflation be?

3 What will growth be?

But there is a new factor emerging which is going to completely change the outlook for productivity, employment, inflation and growth going forward.

It's a game changing, deflation creating, productivity boosting bomb.

AI (Artificial Intelligence)

AI has been unleashed and it's already having profound effects in a relatively short time.

Just in the last week as examples,

B.T announced it will have 40% fewer employees by 2030. AI can do those jobs

IBM announced it has stopped hiring in 30% of its operations. AI can do those jobs

This will happen everywhere.

THE KNOWLEDGE ECONOMY

The higher paid workers are those with knowledge. They are paid for years of intensive specific study to perform what they've learned. So, doctors, lawyers, accountants, architects, designers, computer programmers etc.

AI is knowledge at super scale. It's the most knowledgeable on any subject because it has instant access to all the accumulated knowledge. It's happy to help anyone and it's free. It works 24 hours, 7 days a week for no pay.

If you are sceptical, the following quote from the CEO of Octopus, a U.K. company, is the tip of the AI iceberg.

On integrating AI into Octopus Energy's operations post-Chat GPT

"We started trialling [AI] with a handful of customer emails with a person supervising it [in] February. By the end of April, it was answering 34% of all customer queries. That's the work of 250 people in the UK alone — and it is doing it with an 80% satisfaction rating. Humans get 65%.

A PRODUCTIVITY BOOM, A DEFLATION BOMB, AN EMPLOYMENT HURRICANE.

If we look at AI alone, the reality is it's only one of a number of transformative technologies getting ready for prime time.

The effects on economies are going to be profound…

PRODUCTIVITY- AI is going to create a productivity boom. GDP will rise. Profits will rise. Companies producing the most usable AI tools will grow very rapidly.

DEFLATION- It will be the most deflationary single change the western world has possibly ever seen. It will reduce costs across most sectors by large chunks. Forget current inflation worries.

EMPLOYMENT- It will transform the knowledge economy. If whatever isn't better than the AI alternative, then it will be replaced by AI.

BACK TO THE 70's

It is ironic (don't you think) that given the 'Cambrian explosion' we are about to see in technology advancements that 2022 felt like we revisited the 1970's.

Raging inflation, strikes, transport shutdowns and a Russian created crisis.

As much as anyone who said 'transitory' about what was taking place got pilloried, it was/is transitory. 2022 was a very weird year which followed two equally weird and surreal years.

WHAT DO WE DO NOW?

We invest going forward being confident of the likelihood of the following

- Inflation will not continue as the same issue
- Central banks will reduce rates because inflation craters and employment is weaker.
- Technology innovations will be transformational and deflationary
- For economies not to shrink rates still need to be the same or lower than GDP growth. We are still over 100% borrowed to GDP.

- QE (or something similar with a new name) will be used to keep rates lower (yield curve control) and subdue the debt to GDP ratio. So, more liquidity which is good for asset prices.
- Ideally for economies, interest rates continue to be lower than inflation. If a 2% differential exists, total debts can then increase 2% per annum at no extra servicing cost.

Essentially we go back to the 2019 playbook (before the pandemic) but with AI as new.

Nvidia which is the leading designer of the most advanced micro chips needed to power Ai compute is up 113% YTD.

What worked best as investments?

ASSETS WITH CONSISTENT ABOVE AVERAGE PROFITS AND GROWTH TRAJECTORIES

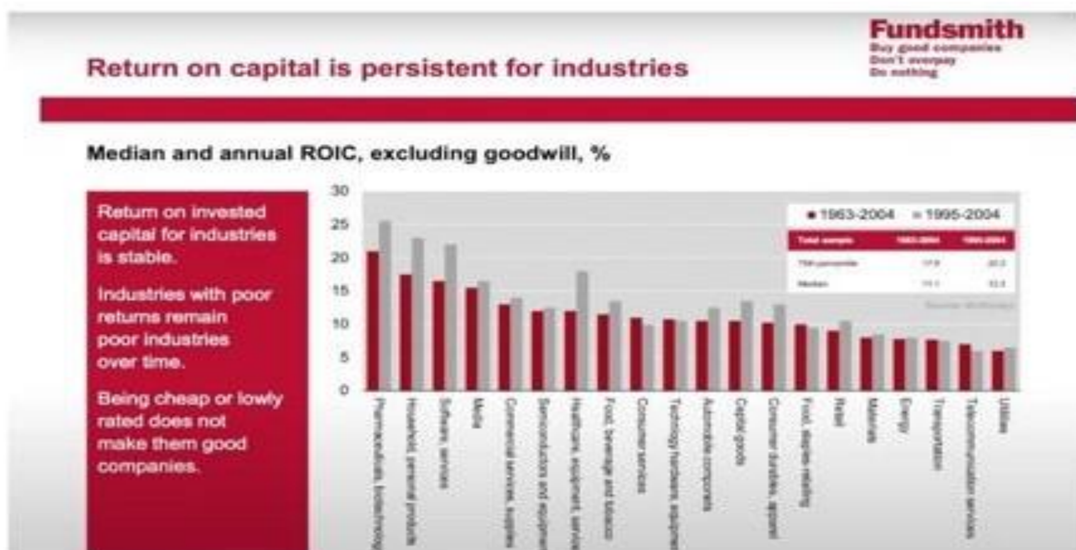
So that's what we focus on moving forward.

3. Invest in companies with a high Return on Invested Capital (ROIC)

The higher the Return on Invested Capital (ROIC) of a company, the better.

> "Over the long term, it's hard for a stock to earn a much better return than the business which underlies it earns. If the business earns 6% on capital over 40 years and you hold it for that 40 years, you're not going to make much different than a 6% return—even if you originally buy it at a huge discount. Conversely, if a business earns 18% on capital over 20 or 30 years, even if you pay an expensive looking price, you'll end up with a fine result." – Charlie Munger

Subscribe



Note: This is written in a personal capacity and reflects the view of the author. It does not necessarily reflect the view of LWM Consultants. The post has been checked and approved to ensure that it is both accurate and not misleading. However, this is a blog, and the reader should accept that by its very nature many of the

points are subjective and opinions of the author. Individuals wishing to buy any product or service as a result of this blog must seek advice or carry out their own research before making any decision, the author will not be held liable for decisions made as a result of this blog (particularly where no advice has been sought). Investors should also note that past performance is not a guide to future performance and investments can fall as well as rise.