AAS Economics
From Money Supply to Markets

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WEEKLY MACRO

NOTES FROM OUR WEEKLY STRATEGY MEETING

01 FEBRUARY 23

Bonds Revisited

- **Government debt had an horrendous year last year during a period when central banks around the world raised rates sharply**
- **Our overall picture for 2023 is for economic slowdown and inflation reduction in the advanced economic world**
- **Also for many countries we see defensive or very defensive asset allocations emerging from our business cycle asset allocation models**
- **These allocations would see high weightings to bonds and defensive equities sectors**
- **These conclusions derive from our monetary analysis and are based on the assumption that historical relationships will continue to apply**
- **How valid is that assumption?**

Background

As is now well-known by clients, we have argued a pretty clear view as to how we think 2023 is likely to unfold. The outlook, for us, is characterised by declining economic growth and declining measured inflation.

In a "normal" cycle these predictions would lead inexorably to the reasonable expectation of declining nominal bond yields, which in turn would imply an increased attractiveness of bonds within a portfolio.

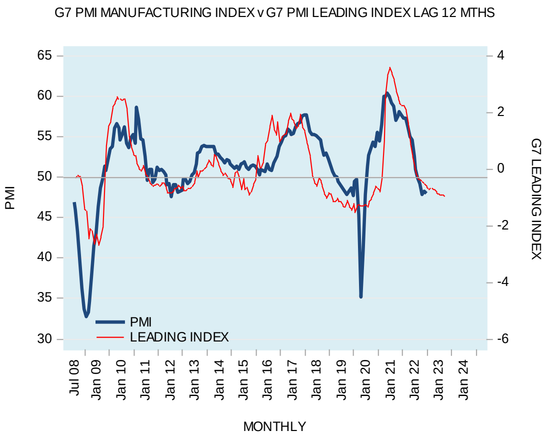
Is there a case that "this time it's different" – that we may not have a normal cycle this time around?

In this edition of the *Meeting Notes* we examine this question.

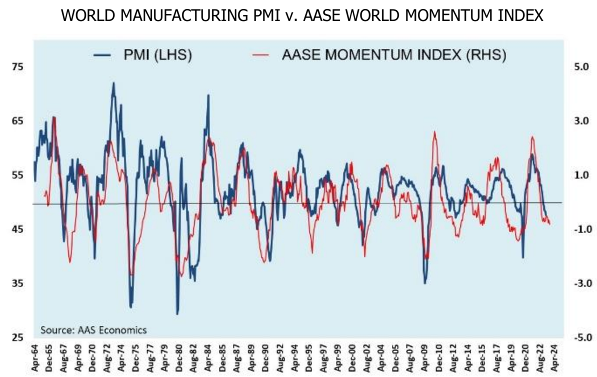
Recap on growth

To begin, we examine the outlook for global economic growth.

Here is our outlook for the G7 Manufacturing PMI.



Here is our outlook for the World Composite PMI.



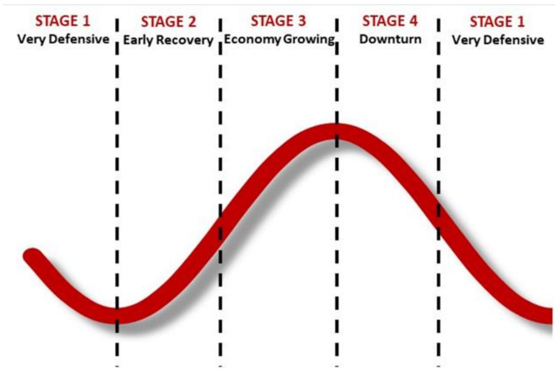
The picture is pretty clear: slowdown.

Here is our business cycle table for several major economies.

	USA	EUROZONE	JAPAN	UK
Oct-22	3	1	1	4
Nov-22	3	1	1	4
Dec-22	4	1	1	1
Jan-23	4	1	1	1
Feb-23	4	1	2	1
Mar-23	4	1	2	1
Apr-23	4	1	2	1
May-23	4	1	2	1
Jun-23	4	1		1
Jul-23	4	1		1
Aug-23	1	1		1
Sep-23	1	1		1
Oct-23	1	1		2
Nov-23	1			2
Dec-23	1			2

We see a preponderance of Stages 1 and 4, which is generally (according to our cycle roadmap below) characterised by economic stagnation or even recessionary conditions.

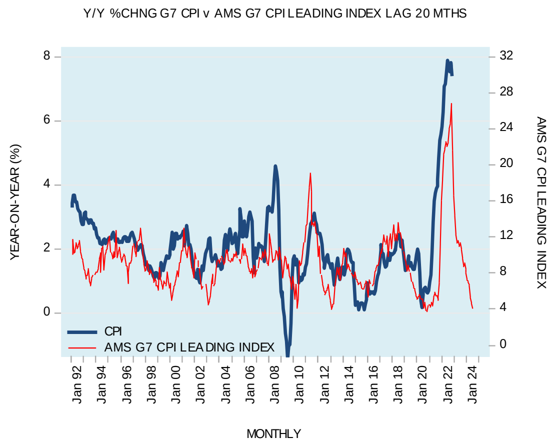
The Lagged AMS Cycle



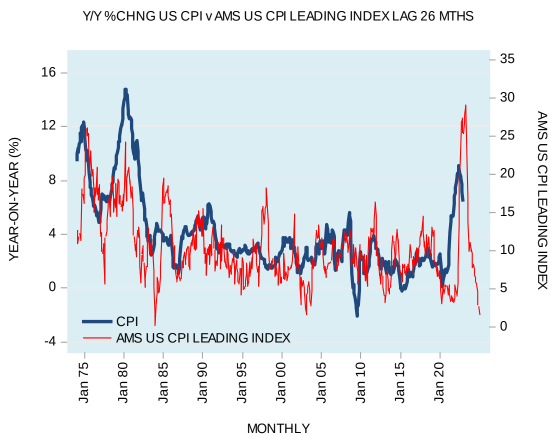
It is not surprising that the cycle framework delivers this outlook because it is driven by the same core driver: AMS growth. In any event the picture is for generalised growth slowdown and with the generalised slowdown the expected asset allocation would favour higher allocations towards bonds.

Recap on inflation

Next we revisit the likely inflation scenario for the year ahead. Here is our G7 CPI modelling.



Here is the outlook for the US.



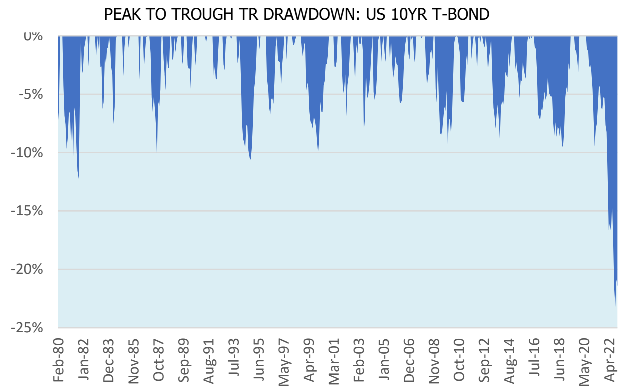
As with the growth environment, the inflation outlook is pretty consistent: disinflation in the near term. Indeed, given the longer forecasting window that we have in our inflation modelling as compared to our growth modelling, we could even see outright deflation in 2024 in some countries.

In any case, once again we would see this downward pressure on price inflation to result in strong performance in nominal bond prices and the upshot is a preference for bond allocations.

Mean reversion analysis

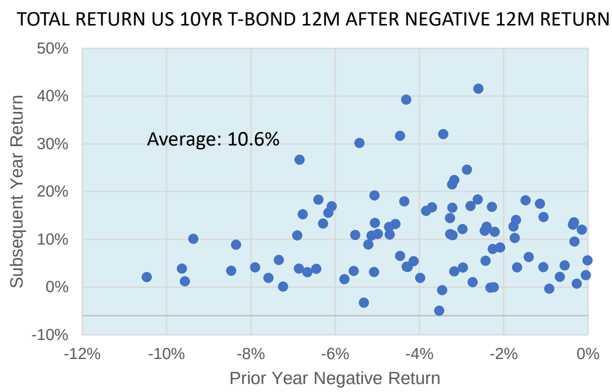
There is another argument in favour of increased cyclical allocations in favour of bonds. This is the mean reversion argument.

Below is a monthly chart of peak-to-trough drawdowns in total returns to US benchmark 10yr T-Bonds from January 1980.



This shows the extraordinary nature of the losses suffered in the US treasury market during 2022.

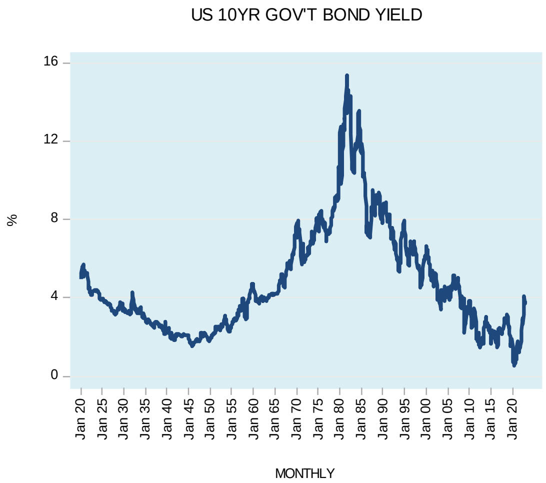
If we attempt to mechanistically look forward 12 months from months of negative total return for these bonds then we see the following picture:



This tells us that, on average over all months since 1980, there have only been a handful of months where the rolling subsequent 12 month total return was negative. The average 12 month nominal total return on US 10yr treasuries in the year following a negative 12 month return has been 10.6%.

There is a caveat to this observation, however: the time period of the analysis.

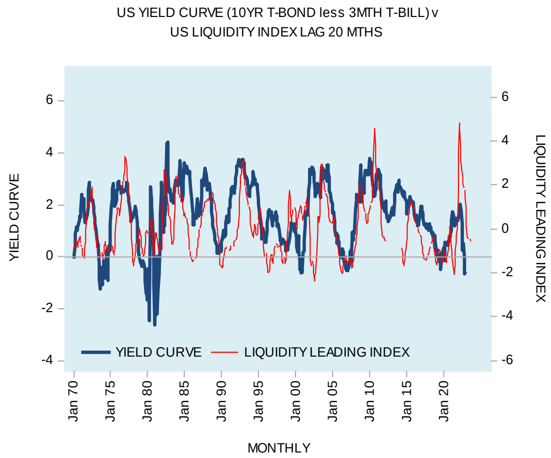
Here is a long term chart of nominal US 10yr T-bond yields:

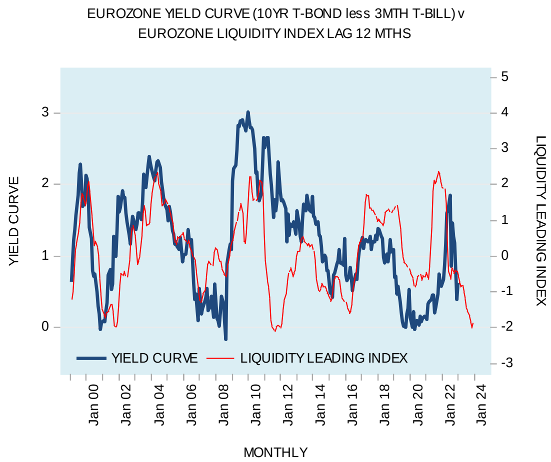


Notice that the massive bull market in nominal bond yields commenced after 1980 – the period of the mean reversion analysis above. In other words, the data sample above is skewed by the existence of a secular bull market. In ANY secular bull market there will be mean reversion towards positive returns after a period of negative returns – otherwise it would not be a bull market.

Yield curve analysis

A final piece of the bull case for bonds is our yield curve analysis. Clients will be aware of our work suggesting that yield curves should flatten over several markets in 2023.





In this context, whether central banks continue to tighten, cease their rate increases or indeed begin to ease, our expectation would be that *if previous relationships hold* then longer maturity yields should fall relative to shorter maturity yields.

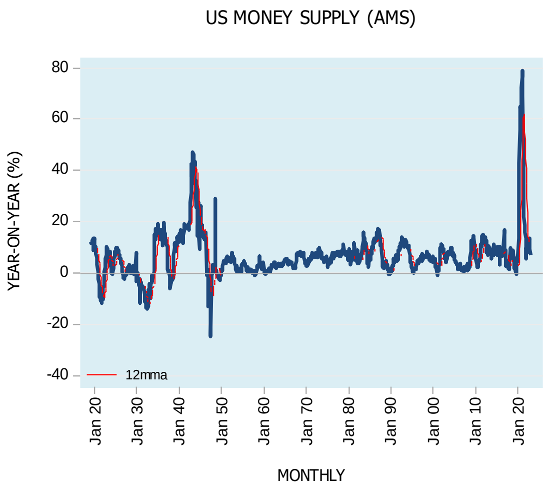
What's different this time?

What follows is an exploration of several features of the current "cycle" which question the notion that it is typical of previous cycles on which the preference for bonds would, quite naturally, be based. The discussion proceeds via certain themes:

- The extent of the prior bubble
- Time preference and the possible erosion of the pool of wealth
- Previous episodes where "normal" relationships did not hold
- Effects of lockdown

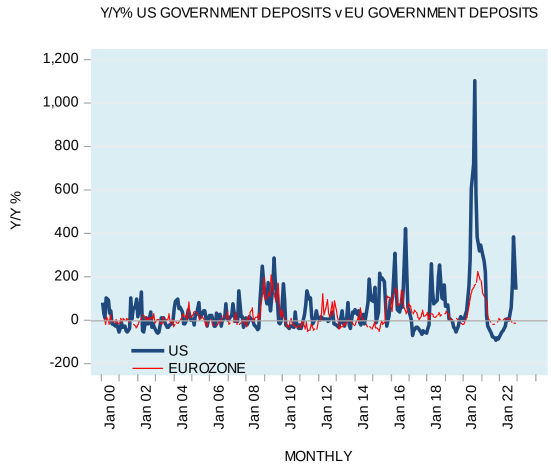
The extent of the bubble

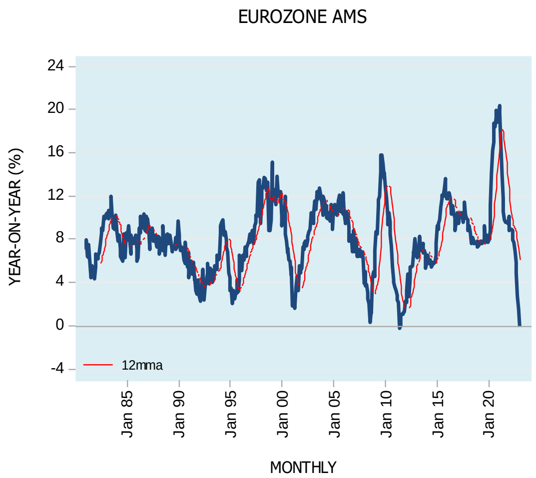
If we examine long term annual growth rates of US money supply (AMS) we see the context of the monetary bubble that has been created, firstly since 2008 and, secondly and perhaps more importantly, since 2020.



The chart shows that the recent explosion in AMS growth has only one remotely parallel period – WWII – and this was when the monetisation of government expenditure was extreme. Note that this debt monetisation was also extreme during the most recent 2020-21 cycle and explains in part why:

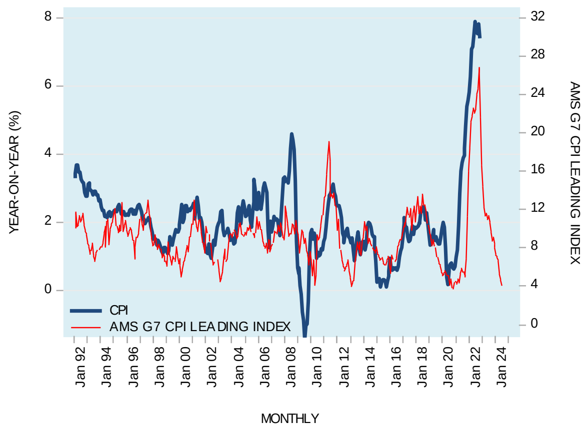
- The Eurozone AMS growth peak was lower than that of the US; and
- The more recent AMS growth trajectory of the EU has been so much more anaemic than that of the US (and therefore why the Eurozone's economy will be so much weaker)





Thus we have a seen a monetary boom (at least in the US and Eurozone) of genuinely extreme proportions. Driven by this we would expect similarly extreme responses in retail and/or asset prices. This is, indeed, what we have seen.

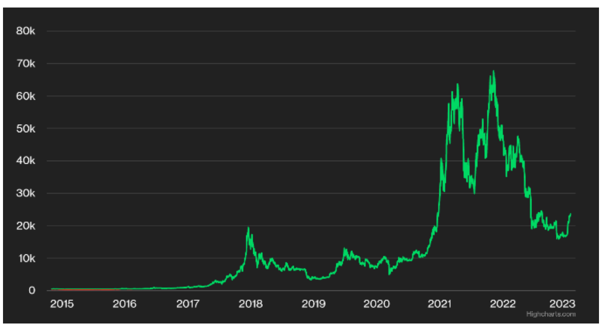
Y/Y %CHNG G7 CPI v AMS G7 CPI LEADING INDEX LAG 20 MTHS



CYCLICAL ADJUSTED P/E RATIO

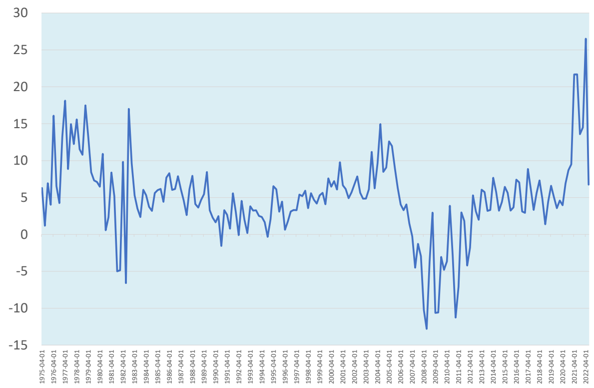
We saw rampant speculation in crypto markets, also driven by the monetary largesse.

BITCOIN PRICE (USD



Here is the continuously compounded annual rate of growth of US house prices from 1975 to mid-2022 (latest available data).

US HOUSE PRICE INDEX – CONTINUOUS CAGR

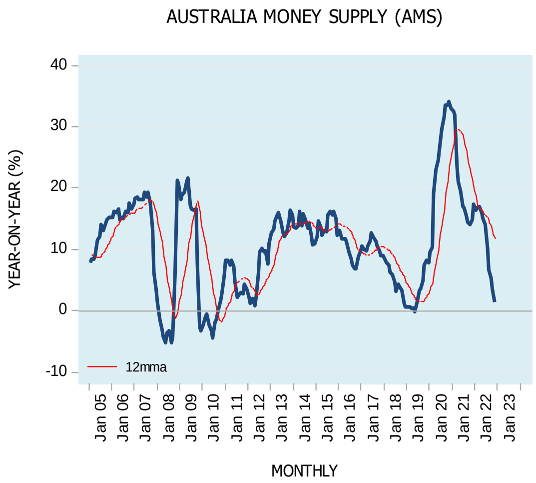


This growth rate during the most recent monetary explosion set new post-1975 records, even surpassing levels which led to the unwinding that manifested as the Global Financial Crisis. Note that this has already begun a sharp correction.

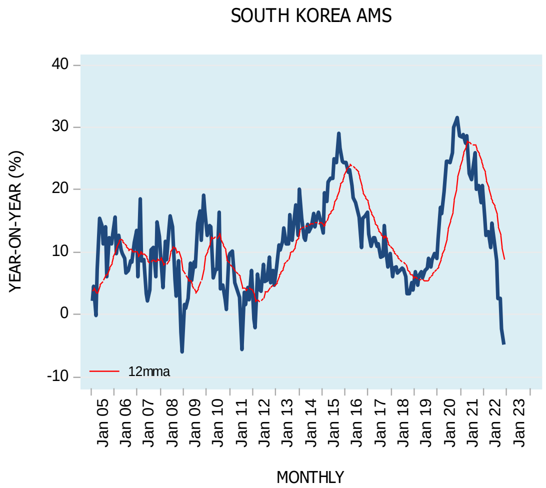
Thus it is quite possible that the most recent money-induced "everything bubble" has been one of the largest in the last century or so. If this is the case then the ensuing bust (as there is *always* a bust following a bubble) is likely to be very significant and we are entering that bust period now with significant corrections having appeared in stocks, bonds, property and crypto.

The AMS curve for the Eurozone, shown earlier, is ominous, but it is not the only one showing such a pattern of significant decline.

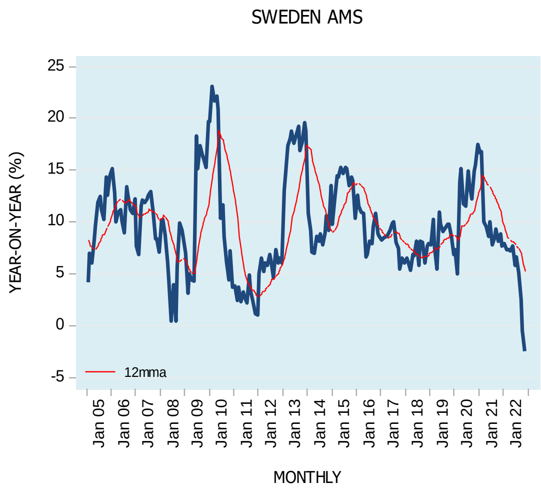
Here is Australia.



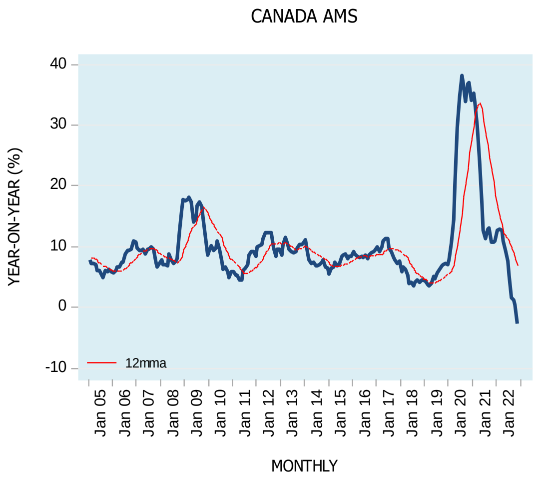
Below is South Korea.



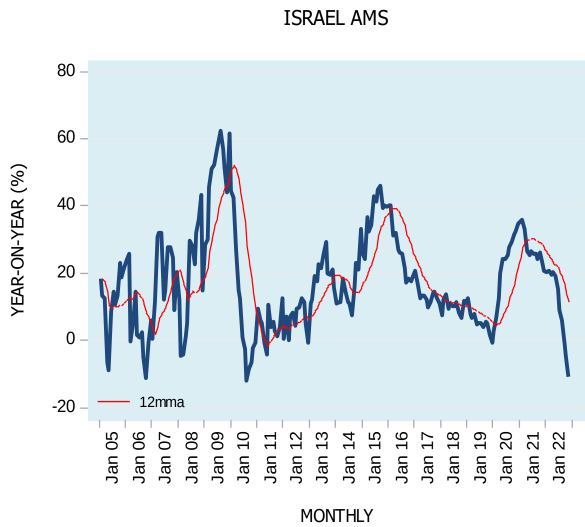
Here is Sweden.



Below is Canada.



Below is Israel.



We now have numerous countries where AMS growth is either negative or very close to negative and falling sharply. It must be remembered that the effects of these AMS growth declines are delayed – they will not be felt for months (in some cases up to a year) from now. Thus although we see these movements in the present we are not yet seeing their full impact.

Any one of these countries (or indeed another) could be the source of a market dislocation of some kind – a crisis which would not be containable because of the interconnectedness of global finanancial markets.

These periods of unwinding of bubbles generally place severe downward pressure on asset prices as people head for cash or other extreme safe havens. But surely US Treasury bonds would constitute a safe haven?

Time preference theory

One of the key concepts of Austrian economics is the time preference theory of interest rate determination. We have written about this before but the gist is as follows:

- People express a higher time preference for current consumption when their means are limited and a lower time preference when their overall pool of funding is large
- As people's wealth increases their time preference declines and their willingness to lend and invest for future consumption increases
- When time preferences *decline* there is more money to lend and invest and interest rates will, *ceteris paribus*, tend to fall
- Conversely, when time preferences *increase* then people tend to constrain their resources towards current consumption and, *ceteris paribus*, interest rates tend to rise
- Distortionary interventions in the monetary system result in misallocations of resources which shifts resources into activities which thrive and rely on this flow of new money – we call these activities "bubble activities"
- This shifting of capital into bubble activities reduces overall productivity growth and thus growth in real wealth, thus producing a tendency to slow or even reverse the decline in time preference that would normally allow falling interest rates
- Further, anything that threatens people's pool of resources will tend to increase "fear" and increase time preferences – i.e. raise interest rates
- Anything that increases people's pool of resources will make people more confident to lend and invest and this will result in downward pressure on interest rates

During a bust, two intertemporal forces act on the level of interest rates:

- In the period of the downturn, time preferences shorten and there is a natural upward pressure on bond yields
- When the bust ends there is a rebuilding of savings and time preference declines, leading to a decrease in bond yields

In a very real sense, the crash "cleanses" the system of bubble activities and creates an environment for lower interest rates and more productive investment – as long as the money creation process does not commence anew.

The important point for the current discussion is that a severe downturn can accelerate the shift in time preferences upwards such that, *despite actions by central banks*, the amount of real savings available shrinks and bond interest rates rise.

Therefore – and this is inevitable at some point with the current monetary architecture – there will be a bubble which is so large and the ensuing reaction so severe that economic agents feel so threatened and/or their wealth is destroyed so comprehensively that no amount of central bank intervention will prevent a rise in bond rates and generate a rebound in investment and activity.

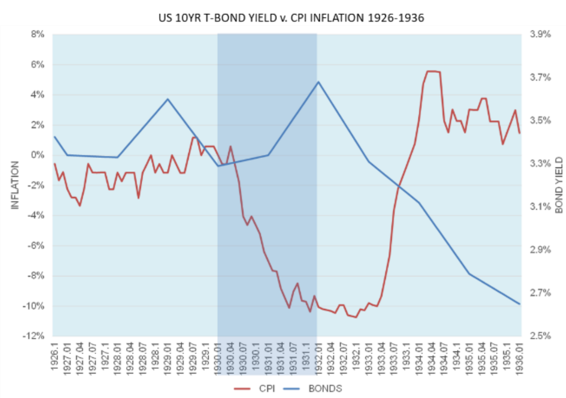
This is often referred to as the "pushing on a string" phenomenon, whereby government and central bank stimulus can fail to revive a moribund economy for a considerable period. It's also called a "liquidity trap".

Have we ever seen periods of declining growth, declining inflation, central bank policy stimulus but rising bond yields?

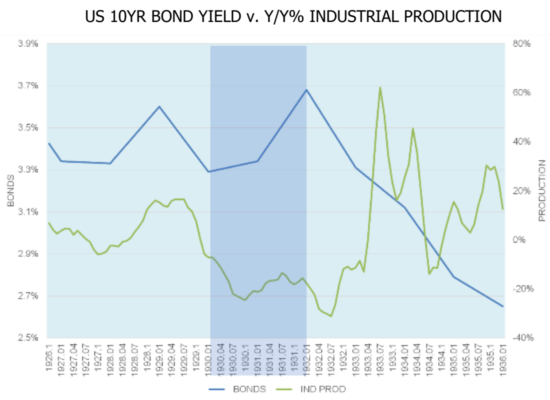
Historical parallels

We can look back through history and find a couple of examples of this situation having arisen.

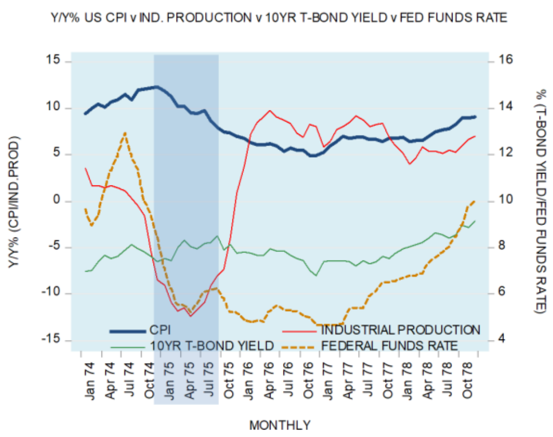
The first is during the Great Depression.



Here we saw the US CPI inflation rate declining for a year in 1931 but benchmark bond yields continued to rise. Inflation declined from just under 1% to minus 10% (outright deflation) while bond yields *rose* from 3.3% to 3.7%. Even more "perversely", bond yields then declined as inflation rose, again showing that it cannot always be assumed that inflation and bond yields move in parallel. This was also a time when industrial production growth was collapsing.



The second is during the 1970s.



Here we saw declines in inflation, industrial production growth and the Fed's target rate (i.e. the environment we foresee over the next year or so), and yet despite all of these developments bond yields rose. CPI inflation fell from 11% to 8% while bond yields rose from 7.4% to 8.4%.

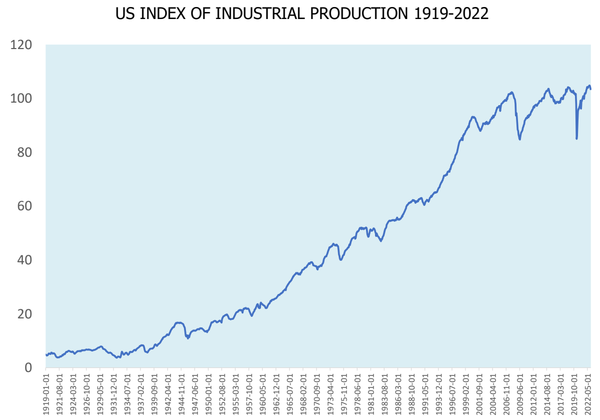
These were not big moves in bond yields but it shows that it is not *always* the case that in an environment of declining economic growth, declining inflation and even declining official target rates we see a decline in bond yields.

We put this down to changes in the time preferences of individual economic agents who experience and/or apprehended significant wealth destruction.

Lockdown damage

The catastrophic global economic shutdown that was the direct product of COVID lockdowns has significantly affected economic output. The aggregate level of US industrial production is essentially no higher – despite the massive monetary injections post-lockdown – than it was long before COVID.

Indeed, the damage from the previous massive boom and bust that delivered the GFC has been so severe that peak levels of industrial production have barely exceeded those of 2007.



Moreover the production structure of the economy has failed to revive from the previous crisis just as we are heading into a downturn of perhaps equal or even greater (in our view) magnitude. In this context it is likely that the real savings pool has already been damaged (as evidenced perhaps by the industrial production chart) and that there is the likelihood of even greater short term damage resulting from the downturn that is currently in progress.

If this is the case then we could well be in the situation described earlier whereby, despite falling CPI inflation and even central bank stimulus, the destruction of wealth causes such an increase in time preference that bond yields will not fall and may even rise, albeit not greatly if history is a guide. We could enter the classic "liquidity trap" while, coincidentally perhaps, in the background we see central banks preparing an entirely new monetary architecture: central bank digital currency.

Summary

We are now in a very difficult forecasting environment – perhaps the most challenging we have seen as a firm in several decades.

We have had numerous internal discussions as to whether the current cycle will be "normal" – in which case bond yields may be expected to decline – or, on the contrary, whether the wealth destruction this time around has been and will be so great that *all* major asset prices will decline, including bond prices.

We understand the importance of this discussion for clients. Last year was a very difficult one across most asset classes and investors are hungry for returns, placing enormous pressure on investment managers to get asset allocations correct this year.

When we review the AMS growth charts for various economies the environment looks very threatening. We are now seeing negative AMS growth for the first time since the debt crisis and the GFC and there is no sign of a reversal. If there is to be a crisis then any one of a number of economies could be the epicentre.

We are of the view that this time may indeed be different and that our standard modelling may not yet be capturing all of the risks to asset markets.

Yes, in our view continued tightenings and AMS growth reductions are likely to lead to an economic/financial crisis, probably greater than that of 2008.

Yes, more economies appear vulnerable this time around than ever before.

Yes, there may be an initial recovery in asset markets such as we have seen over very recent months but we see this as being relatively short-lived. The destruction of wealth that has already happened and will continue to unfold will shorten time preferences for a time and drain capital markets (not just bonds) of capital. In this environment we see the likelihood that bond prices may not respond as they would in a typical cycle – the cycle identified in our usual modelling.

In the later stages of the crisis, assuming that it is deep enough, there is the likelihood that interest rates will fall again as wealth rebuilds and time preferences decrease, but there is the risk that central banks may once again commence a cycle of "monetary mischief" that engineers more damage. The CBs will of course claim that any reduction in rates was of their own making, and in a perverse sense they are correct.

Note again that this is a view that is not yet evident in our normal AMS analyses – excepting perhaps the serious AMS growth patterns that are presenting for the countries shown. Our liquidity indicators do not show a stock market crash, for example, and our yield curve analysis does not predict Armageddon for bond markets. Our business cycle asset allocations are defensive but there is nothing that says "collapse" except that quite a few economies are in or approaching Stage 1.

Thus, based on the likelihood that the accumulated effects of numerous cycles of monetary inflation and deflation have damaged the real savings base of the global economy, we believe that this damage will be reflected soon in the possibility of rising – or at least not declining – bond rates as well as falling stock, property and other asset prices. Continued declines in AMS growth will exacerbate – in the short term – the bursting of the "everything bubble" but accelerate its resolution.

We should also note the impact of negative feedback loops. At least in the early stages of a crisis the falls in prices in some asset markets result in widespread declines in prices in other asset classes as market participants begin to understand the true nature of systemic risk. This can start with property prices, for example, and can and does affect time preferences and the rush to safety among economic actors as other asset prices react to property market movements. Witness 2008.

Thus we may see a situation where time preferences have already begun to shorten but the shortenings have not yet been widespread enough to stop bond yields from falling or to drive them higher. As the damage spreads, however, this fear will broaden and then bonds may be more significantly impacted.

In any event it may be time to take precautions. These could include:

- *Examine counterparty risk*. This includes banking, broking and custody. If a contagion begins then it will not be containable and will go global, very quickly.
- *Review OTC and illiquid products* versus exchange-traded.
- *Consider whether T-bills, cash and gold* should form a larger part of the portfolio and who will have custody of those assets. Physical gold would be preferred to paper gold such as gold ETFs.
- *Review portfolio insurance possibilities.* These may include option strategies but these may still carry counterparty risk.
- *Be prepared to sacrifice return* in order to protect assets. The heroes of 2008 were those who were not crushed.

We are currently in the very early phase of the downturn and *measured* deflation as such has not yet appeared. In this phase yields have declined somewhat and may fall a little further as measured inflation and economic growth begin to fall and central banks become less hawkish. This yield decline may be arrested for a time in our view.

In the ensuing stage things will decline rapidly and this will mean further short term wealth destruction along with more widespread increases in time preferences. Central banks may slash policy rates but this may have limited effect. Stocks, property and perhaps bonds will suffer and cash and perhaps gold and short term government bills may be king.

This is likely to be followed, finally, by a transition towards the rebuilding of wealth and productive investment as bubble activities are destroyed during the deflation and recession. The reconstruction process can commence as long as the money printers do not resume their activities.

Our models are defensive, as clients know, and normally this would imply heavy bond allocations. Perhaps, however, clients should also consider to what extent they should be *ultra*-defensive.