

# Global Strategy Weekly

As the Ice Age turns bond yields deeply negative, what happens next?



The plunge in long-dated government bond yields below zero has confirmed to many clients that the next phase of the Ice Age thesis has arrived. Clients know from long experience that despite my depressing forebodings being unerringly premature, my outlandish visions can suddenly come to pass very quickly indeed. So, by popular demand, we are reprising the main ideas behind the Ice Age thesis and explaining why investors should be alert to the potentially dire consequences, particularly for equities.

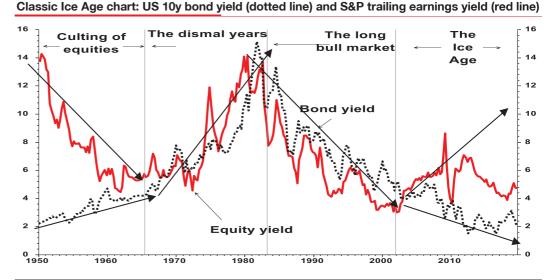
- The latest hyper-rally in government bonds has taken most European 10y yields deep into negative territory. In this context, many clients have requested an Ice Age update.
- The Ice Age was born out my experience of following Japan's lost decade in 1990s. We understand now that Japan's inexorable slide into the outstretched arms of deflation and subzero bond yields was in fact just a rehearsal for the Japanification of Europe. It is no longer a peculiar Japanese disease born of policy incompetence according to western economists at the time. My then colleague Kleinwort's Japanese Strategist Peter Tasker, was instrumental in shaping my Ice Age thoughts. In his recent blog he notes that Japanification has gone from disease to epidemic and sees "Galactic Japanification" link. The US is most certainly next in line for negative bond yields. But the Ice Age theory is not just about negative yields.
- It is also about the changing relationship between government bond and equity valuations. By 1996, investors were imbued with the close positive correlation between bond and equity yields which had been falling together since 1982 (the long bull market) after rising together from 1965-1982 (the dismal years, see chart below). This produced distinct investment phases for investors. What we said in 1996 was that the Ice Age would be a new investment phase, where the close 30-year positive correlation between bond and equity yields would break down. It was a strange call, widely ridiculed at the time. Bond yields would carry on falling, but equity yields would now de-couple and inexorably rise in a secular valuation bear market. I expected we would return to early 1950s relative valuations before "The Culting of the Equity" phase, with PEs around 7x. That has not happened... yet.

Global asset allocation

%	Index	Index neutral	SG Weight
Equities	30-80	60	30
Bonds	20-50	35	50
Cash	0-30	5	20

Source: SG Cross Asset Research

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Source: Datastream



Last week my colleague Andrew Lapthorne asked me for a recent review of my Ice Age thesis. We leafed through my A4 ring binder and had to go all the way back to the autumn of 2016 when I wrote a 20th anniversary edition! Doesn't time fly? But Andrew says I don't look any older than I did when I first turned bearish, just after he joined Kleinwort's – Link.

By popular client demand I thought I should go through some of the key Ice Age arguments and review some of the favourite charts I have used over the years to express the concept.

Let me just emphasise that the Ice Age thesis is not just about the Japanification of western economies with inflation and bond yields sliding to zero in the face of increasing policy impotence. When I framed my thesis in 1996, I envisaged the US and Europe soon experiencing a Japanese-style secular de-rating of equities, both in absolute terms and more importantly relative to government bonds. Bonds would also re-rate in absolute terms.

The anticipated breakdown in the then 30-year positive correlation between bond and equity yields was a subtle nuance of the Ice Age which, if correct, had important investment ramifications for pension funds.

For in the same way insurance companies are currently grappling with solvency issues from the emergence of negative bond yields, I thought back in 1996 that pension funds would face similar solvency issues if my outlandish Ice Age thesis turned out to be correct.

I toured the client base in the late 1990s warning UK balanced pension funds that their then extremely heavy 80% exposure to equities would leave them vulnerable to solvency issues if western financial markets replicated the experience of Japan and equity yields de-coupled from falling bond yields.

I warned pension funds that this heavy exposure to equities would leave them with a yawning asset/liability mismatch that could threat their solvency if liabilities continued to rise sharply as bond yields fell, but their assets, heavy with equity, struggled to perform. My advice at the end of the 1990s was for pension funds to switch strategic asset allocations away from the then typical 80% exposure to equities, rather than wait for the Ice Age to set in and be forced reactively to do so by pension fund plan sponsors disturbed by the underfunding of liabilities.

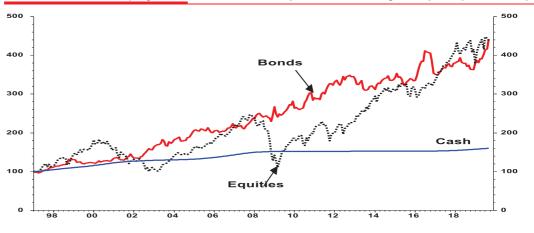
As I began marketing my Ice Age thesis in 1997, it quickly caught a wave as first the Asian crisis and then in 1998, the Russian/LTCM crises roiled financial markets. Most specifically these crises led to a wave of fear over global deflation, which caused US 10y bond yields to plunge from 7% in early 1997 to 4¼% by October 1998 at the height of the Russian/LTCM crises. This move was primarily driven by deflation fears with 10y implied inflation expectations collapsing from 3% at the start of 1997 to just over 0.8% in October 1998 (a level of deflationary fear only surpassed a decade later in the chaos of the 2008 GFC, Global Financial Crisis).

But as the Fed responded to the 1998 crisis and the impending Y2k problem by flooding the economy with liquidity in 1999, this ultraloose money policy triggered a bubble in the Nasdaq and TMT stocks generally (TMT = technology, media and telecoms, for those who don't remember). Hence in 1999 I was touring the client base not just telling them that tech was a bubble that would burst, but that we were entering a new structural investment phase that required slashing their strategic equity weightings in favour of government bonds. You can imagine how that went down! I had gone from 1998 hero to 1999 zero. Oh well, plus ça change.

Hence the launching platform for the Ice Age was not as I had originally thought, from valuations during the 1997/98 crises, but instead it came from the extremes of early 2000 as the Nasdaq/TMT bubble burst. By that time Fed Chair Alan Greenspan's concerns about excessive equity market valuations, expressed during his famous December 1996 Irrational Exuberance speech, had become a faded memory. At that time the Ice Age thesis properly began to unfold, as both equity valuations and bond yields had ascended to an even higher peak from which to plunge!

Let me start off with the performance of global 10y+ government bonds compared to global equities (actually the bond series now available to me is G7, but I think that is fine). We can see clearly that end-1996 wasn't a great starting point to go strategically underweight equities, but even taking that into account you can see that the latest surge in bond prices means that since end-1996, the total return on global 10y+ government bonds has exactly matched the total return on global equities (in US dollars). Had pension funds switched at end-1996 to being strategically overweight government bonds, they would have exactly matched global equity returns with far less volatility. An Ice Age balanced portfolio, heavy in 10y+ G7 government bonds would have been performance enhancing on a risk (volatility) adjusted basis.

Performance of G7 10y+ government bonds and equities since Ice Age inception (total return)



Source: Datastream

The current situation reminds me of 2007 when investors began to sniff out the end of the global economic cycle. Global equities had pulled ahead of global bonds then too (see chart above), but then years of equity gains were wiped out in a matter of months and a huge gap opened up in favour of global bonds. That is the nature of equity bear markets (see chart above).

Now I want to be totally transparent about the series I have used above, for on a couple of occasions clients and commentators have not been able to recreate them. Early this year I took a bit of a battering from one particular blog because they struggled to recreate the chart above, but mainly because they queried whether I had been right about my bullish bond call.

They wrote, "The thing is, he hasn't been consistently bullish on bonds. Unless the following is from a different Albert Edwards. In August 2011 he told Reuters 'Be sure to lock in a low-rate mortgage while you can, though...a period of hyper-inflation will push bond yields into double digits and send the S&P 500 stock index tumbling to 400, only a third of its current value... On a 10-year view I think government bonds are a horrible investment...My view is that the end game for all this is monetization and trade war and very rapid inflation.' Maybe it's just me but this does not sound like somebody who has been consistently über-bullish on western government bonds." Apparently, I "reek of bullshit"! Eww.

They then followed up with a spectacularly chippy video blog. If I had not become incredibly thick-skinned after the years of abuse and ridicule (and not just from my ex-wife), it might have hurt my very sensitive Bertie-Bear feelings.

On page 7, I come back to their point that in 2011 I was saying that government bonds were toxic on a 10-year view - and regular readers will know that I am very transparent when I get things wrong. One reason for this is that when I was on the buy-side at Bank America Investment Management I used to find it very irritating when brokers moved seamlessly from one view to another without flagging a change. But my calls are usually so extreme that there is nowhere to hide when I am wrong in any case. What I would say is that the 2011 quote above that "My view is that the end game for all this is monetization and trade war and very rapid inflation." remains my view and seems to be playing out – albeit much later than I anticipated. More on that later.

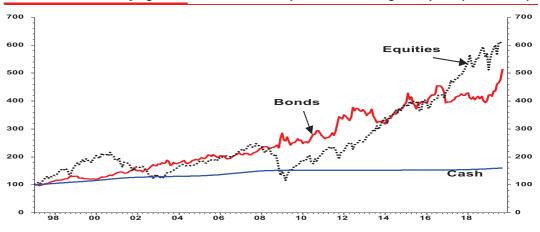
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As far as transparency on the chart above, for the equity series I am using the MSCI Global Equity Index (Datastream mnemonic is MSWRLD\$(RI). And the bond series is the ICE BoAML 10y+ G7 Government Index MLGGO10(RI).

For a US investor in the US market the same sourced series are shown below where the total return of US equities – S&PCOMP(RI) – still exceeds the total return on 10y+ US Treasuries, MLUS10L(RI) – but perhaps for not much longer if the cycle is close to ending.

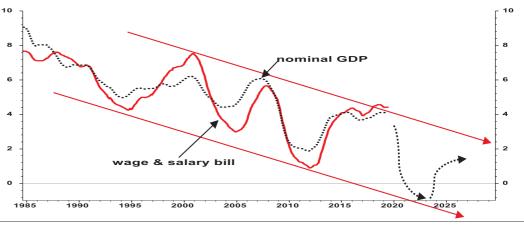
Performance of US 10y+ government bonds and equities since Ice Age inception (total return)



Source: Datastream

I wanted to focus more on the market implications of the Ice Age rather than the economics. The chart I used in last week's *GSW* shows the key idea (see below) – namely that the last few cycles have seen a sequence of lower lows and highs for nominal quantities (along with bond yields and Fed Funds). I have used a 4-year moving average and added arrows where I think we may be heading in the next downturn and rebound – and more importantly that is where I think the market is now thinking we are heading.

US nominal GDP and wage bill: lower highs and lows in each cycle (dotted arrows = market fears)



Source: Datastream

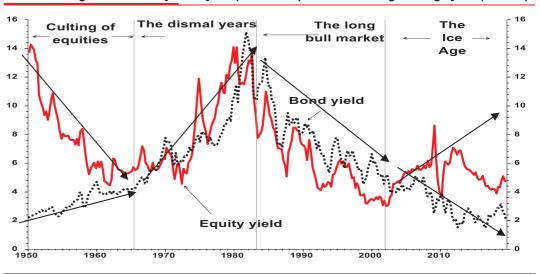
One key lesson from Japan during its own Ice Age transition was that each economic recovery also brought hope of a return to 'normality'. But as the end of the economic cycle came into view and nominal quantities (eg GDP growth), inflation and interest rates all fell short of the previous cycle high, panic set in as investors realised we were likely heading to new lower lows in nominal quantities. Just the anticipation of the above, ahead of the reality, was usually enough to trigger a decline in bond yields to new lows and the end of the short-lived, cyclical equity bull market that would regularly occur within the prolonged structural valuation bear market.

I repeat below the front-page chart showing the US equity earnings yield (reciprocal of the trailing PE) below, and directly under it is the performance of the Dow over the same period. It doesn't take an eagle eye to spot that things haven't quite played out in the Ice Age as I had anticipated. Equity yields have not continued to follow the arrow pointing upwards.



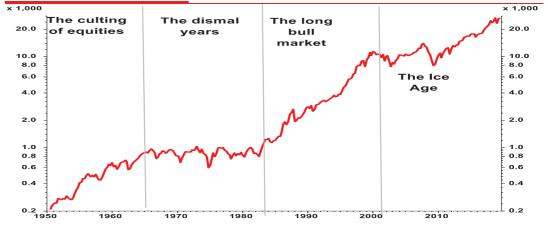
I had told clients that this chart would be a mirror image around 1982, as the Ice Age would see equity yields return to the mid-double digits of the early 1950s (PEs in single digits). Instead the trailing S&P PE currently stands at over 20x and the 12m forward PE above 16x. What went wrong? Why has my bear call on equities been one of the worst market calls this century?

Classic Ice Age chart: US 10y bond yield (dotted line) and S&P trailing earnings yield (red line)



Source: Datastream

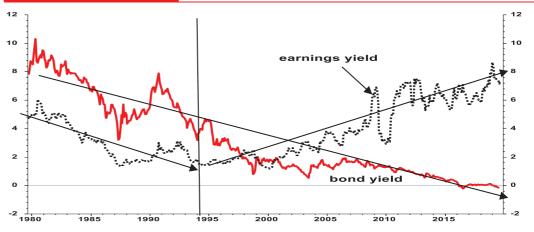
#### **Dow Jones Industrials**



Source: Datastream

My mistake was that I had expected Japan's Ice Age experience to be fully replicated in the US. We can see below that from a point a few years after the economic bubble burst in 1990, the divergence in Japanese yields persisted through many economic cycles.

In Japan the Ice Age secular rise in equity yields has persisted through economic cycles



Source: Datastream



By contrast we can see on the front cover chart that US equity yields *re-engaged* with falling bond yields around 2012, driving equity prices to record highs only last month. In the US we are back to the pre-Ice Age scenario where anything that is good for bonds, is good for equities.

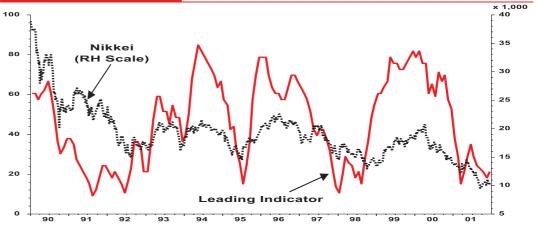
My own explanation for this breakdown in the secular de-rating of US equities (around 2012) is that it is *primarily* due to QE, but also to the record length of this US economic cycle. For, it might have been one of the weakest economic recoveries in history, but it has been sufficient to provide a consistent tailwind for profits growth – however anaemic at times. But Japan in the 1990s and 2000s also enjoyed decent cyclical recoveries, albeit much shorter lived – more on that later. Those Japanese cyclical recoveries were much stronger than anything we have seen in the US over the last decade, in part because the rest of the world was growing strongly in the 1990s and Japan was intermittently able to ride on the coat-tails of the robust 1990s global cycle.

Despite Japan's strong cyclical recoveries during its Ice Age, the accompanying cyclical equity bull markets did not match or exceed the accompanying profits surge, so the secular rise in equity yields (ie fall in PEs) continued unabated through both upturn and downturn.

One thing that was very notable in Japan's Ice Age is that equity rallies never took the equity market to new highs. Each cyclical recovery saw lower highs in PEs at the peak of the cycle and a collapse in PEs to lower lows near the bottom of each subsequent recession.

Another key lesson from Japan's Ice Age was that despite the secular bear market in equities, equity investors could still enjoy the cyclical rebound while it prevailed as it would produce a short-lived cyclical surge in both profits and equity prices.

And when inevitably the leading indicators turned back down, one would hear from equity strategists saying equity valuations were much cheaper than the peak of the previous mini-cycle and any economic downturn was always "priced in". **That would constantly prove to be disastrous advice.** For as the cycle peaked the Nikkei would enter the next phase of the secular valuation de-rating with a vengeance, taking equity prices to ever lower lows (see chart below).



In the 1990s and 2000s, as each Japanese economic cycle ended it was time to get out of equities

Source: Datastream

But if there was one mistake that I have made, above all others, it was my near certain prediction that in the wake of the 2008 Global Financial Crisis (GFC), US economic cycles would return to a normal, shorter length. That, I believe, is the main reason why my prediction of the US equity market falling to a new lower low (Japanese-style) has been proved wrong – or as I prefer to say, delayed!

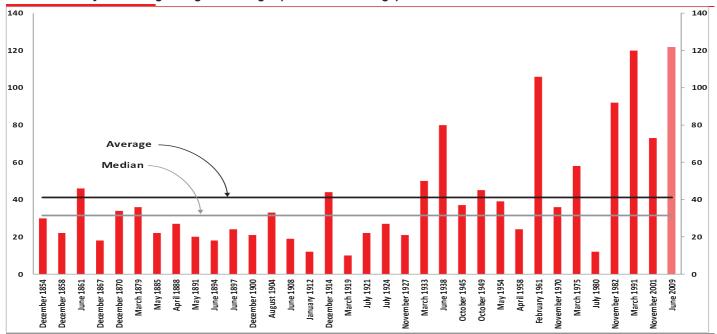
In the wake of the 2008 GFC I had emphasised that the so-called *Great Moderation* was an aberration – a freak of nature. The Great Moderation was a term coined to describe the extremely long economic cycle during the 2000s, which was accompanied by minimum financial market volatility. This period was seen by investors as an economic and investment nirvana with central bankers patting themselves on the back for 'abolishing' the economic cycle. Of course we now know how that ended in 2008!



Yet at only 73 months the Nov. 2001-Dec. 2007 Great Moderation economic cycle (trough to peak) was nowhere near as long as the previous cycle from March 1991-March 2001, which lasted an extraordinary 120 months.

The increasing tendency for the US to enjoy longer economic cycles (see chart below), has been attributed by economists to successful economic policy intervention, mainly by the Fed. I, on the other hand, have described these cycles as perversions of nature, artificially extended by excessively loose monetary policies that created credit bubbles which inflated a combination of the economy and financial markets. Yes, the Fed can artificially lengthen the economic cycle and smooth volatility with loose money, but when the credit bubbles eventually burst, as they surely do, the economy is taken into a far deeper recession than if policymakers had just left things alone. This compunction to intervene to lengthen the cycle has dramatically increased the depth of recent economic busts, albeit not the magnitude of the boom, only its length. Despite my not being a laissez-faire Austrian Economist, this seems patently obvious to me from my observations of the US economy over the last three recessions, all of which have occurred because financial/asset market credit bubbles have burst.

# US economic cycles have got longer and longer (months from trough)



Source: NBER

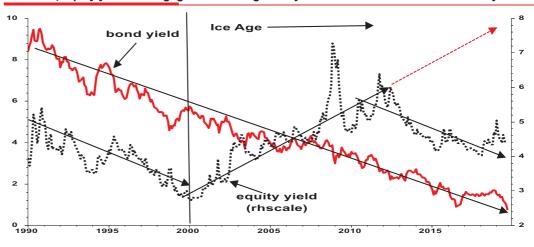
So my biggest Ice Age mistake was to assume that the US would be like Japan and that subsequent to the 2008 GFC, US policymakers would find it much harder to manipulate the economic and credit cycles. I thought we would return to 'normal' economic cycles with lengths nearer to 40 months (see chart above). And if I was right, perceptions of increased eps volatility would cause the equity or cyclical risk premium to rise – ie the increased volatility of the economic cycle would cause PEs to decline for any given level of bond yield.

But rather than seeing shorter cycles of around 40 months, the US is still enjoying the longest economic cycle in its history of 122 months and counting! How wrong can one be? Yes, I know it is also one of the weakest in history, but that's not the point.

For I had pencilled in the next US recession as the time when we see the next intensification of the Ice Age (as occurred in Japan), where equity prices and PEs would fall to new lower lows and where new and unprecedented monetary measures would need to be taken in the face of outright deflation. That is why I have been so wrong for so long – and that also goes for my bearish view on bonds, articulated in 2011 (see reference to blog criticism, page 3). I had by now expected the helicopters to have already dropped hundreds of trillions of confetti dollars onto the US economy and CPI inflation to have already begun to twitch into life like Frankenstein's monster.

So where are we now? Although the bond part of the Ice Age thesis has played out very much as expected, US equity yields failed to follow the dotted red line upwards as Japan did (see chart below). I attribute the equity yield disconnect from its upward Ice Age path to one thing and one thing only – QE. Indeed, the asset price inflating properties of QE started up just ahead of the reconnection of equity yields with bond yields. It was, to a large extent, Fed policy.

In the US, equity yields re-engaged with falling bond yields from 2012 - QE has been a key driver



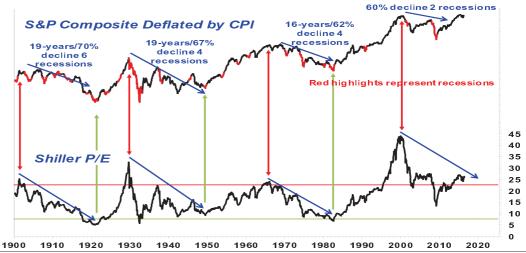
Source: Datastream

So, what might happen in the next recession? Will equity yields continue to grind lower (PEs higher) in line with US bond yields falling into negative territory, and as the printing presses are started up again and running at such a frenzied pace you will be able to hear them from Mars?

Or will, as I suspect, a slide into recession again be accompanied by the bursting of credit and asset bubbles and the ensuing recession be as surprisingly deep as the 2008 GFC? I maintain my view that the US equity market will fall to a new low in the next recession as investors witness yet another credit-induced, economic implosion. And, at the same time as the economy implodes, expect President Trump to explode with rage. Indeed, even before his election I felt it very unlikely that the Fed would be able to maintain its independence if it is the midwife for yet another credit-induced deep recession.

We don't only have the template of Japan to see that the worst part of a secular equity bear market comes during each successive recessionary phase. The US has suffered three secular valuation bear markets in history. The chart below is out of date, but since it is the history that interests me I still think it is important, Here we can see that it has previously taken 4-6 recessions for secular valuation bear markets to fully play out – equity valuations going from extreme of expense to extreme of cheapness. Since 2002 we have seen only two recessions.

It takes a minimum of 4 recessions for previous US equity valuation bear markets to play out



Source: Pring Turner, Shiller website

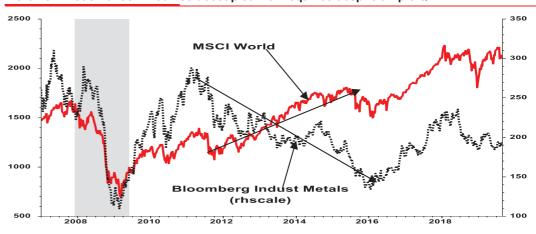


My own view is that just as in 2000, at the height of the Nasdaq bubble, all that has happened over the last few years is that equity valuations have climbed up to a higher and higher diving board before throwing themselves off into a swimming pool drained of liquidity.

But what about all this helicopter money I expect to be thrown like confetti over the economy in the event of a deflationary bust (as well as negative Fed Funds)? Won't that fill the swimming pool and cushion the equity market's descent? Won't an activist Fed, with President Trump screaming with rage in the background, be able to prevent any potential collapse in the equity market? I believe not. Why will the next recession be any different from the last one, which saw equities collapse despite massive monetary stimulus?

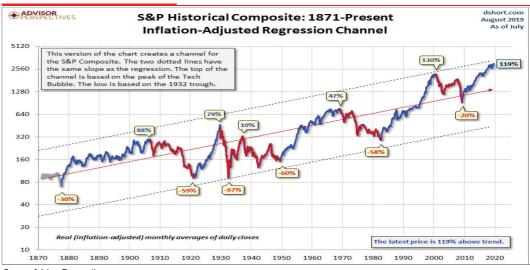
I would expect renewed rounds of QE, and/or helicopter money, as MMT is embraced as a desperate solution to the next slump. But this liquidity is not guaranteed to flow into equities or indeed any risk asset while the economic downturn is in full force. I use the example of commodity prices after the GFC, which initially behaved just like equities, benefitting massively from QE. Then, as you can see in the chart below, industrial commodities de-coupled from rising equity markets, primarily because the fundamental backdrop deteriorated as the Chinese economy slowed. Ample liquidity cannot be guaranteed to flow into any particular risk asset if its fundamentals turn negative. Liquidity will initially flow into whatever momentum trade is still standing at the time, backed by fundamentals, and that will most likely be government bonds.

# Note how industrial commodities decoupled from equities despite ample QE



Source: Datastream

If I am correct, then it is particularly problematic that US equity valuations are stretched to extreme highs on so many different measures. One of my favourite sources of data is the Advisor Perspectives website which carries some great up-to-date, long-term valuation charts – see link.



Source: Advisor Perspectives

I can even reproduce some of those great charts on Datastream (see below), albeit with not as long a history. But on various measures of cyclically adjusted valuations, US equities are at valuation levels only exceeded during the 2000 bubble (see charts below). If I am right, investors are set to suffer yet another spectacular equity market collapse in the next recession that will see the S&P Composite fall below the March 2009 low of 666.

Tobin's Q (stock market value/asset replacement cost)



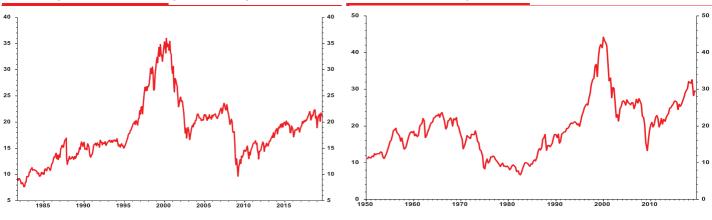




Source: Datastream

S&P Composite stock market price/trend eps

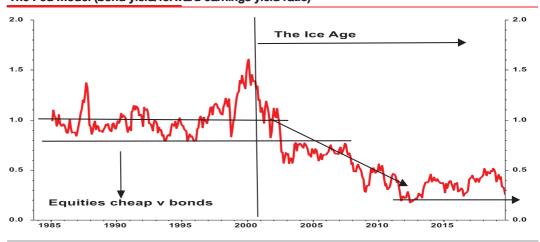
Shiller PE - commonly referred to as CAPE, or PE 10



Source: Datastream

We are on the home straight now with just a few more quick charts. The Ice Age charts above showing equity and bond yields re-engaging against my prediction are more familiar to investors as a ratio such as the one below.

The Fed Model (bond yield/forward earnings yield ratio)



Source: Datastream

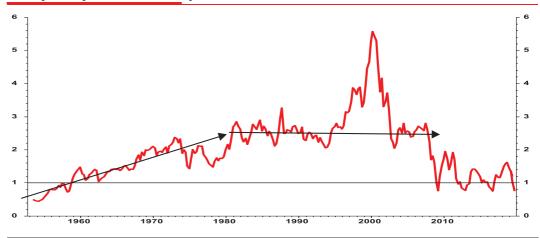
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The so-called Fed Model (above) was an essential asset allocation reference tool in the 1980s and 1990s. It was thought that this ratio of 10y US bond yield and forward earnings yield (inverse of PE) enjoyed some sort of 'equilibrium' level at 1.0, as for most of that period the ratio oscillated above and below 1.0 (until the Nasdaq/TMT bubble). We said in 1996 that there was no fundamental reason why there was any mean-reverting properties to this valuation ratio, and that indeed in the Ice Age the ratio would fall lower and lower as equities de-rated versus bonds. And indeed it did, with valuation support at 0.8 prior to 2000 becoming valuation resistance to the upside after the Nasdaq bubble burst. Then we saw another lurch down in the ratio until Fed QE stabilised the situation in 2012. We expect yet another vicious lurch downwards in this ratio during the next recession.

Indeed you see from the chart below that the nominal bond yield/equity yield was not ever stable in the long run if you go back to the 1950s (this chart uses dividend rather than forward earnings yield). The 1982-2000 period was an anomaly in the longer-term context. A fundamentally important Ice Age forecast was that we were going to return to a world where the equity dividend yield would rise above the bond yield and stay above it. It was the 1965-2000 period that I thought was the anomaly. So while market commentators have recently noted that the US 30y bond yield has fallen below the dividend yield – I believe that is the natural order.

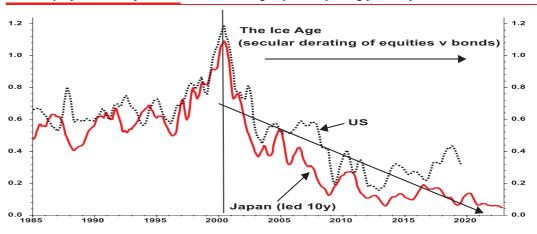
# US 10y bond yield/S&P dividend yield



Source: Datastream

I continue to draw on the parallels with Japan's Ice Age despite there being huge differences such as demographics, the Fed being more aggressive than the BoJ, and the dollar's reserve currency status. But the strange thing is that the ratio below, which uses MSCI trailing cashflow yield, sees Japan leading the US ever downwards. The only clear break has been recently with the impact of QE, but the recent rapid downturn in the US series is notable - also note the scale is the same on the left- and right-hand sides. This ratio is the same for US as it was for Japan!

## Bond/equity cashflow yield ratio: US following Japan surprisingly closely



Source: Datastream

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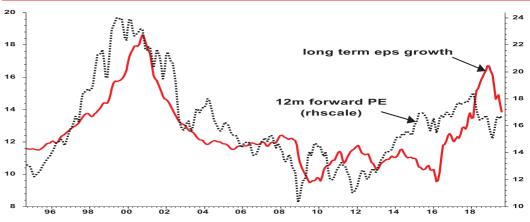
My key Ice Age contention was that lower bond yields that had pushed PEs higher during the 1990s (all else equal), would no longer do the same job. In a post-bubble Ice Age world, **despite** continued falls in bond yields, PEs would decline on a secular basis.

In a nutshell, from a simple discounted cash flow calculation, a more volatile and uncontrollable post-bubble economic cycle would drive the equity (cyclical) risk premium higher (driving PEs lower) and deflationary conditions would drive long-term eps expectations to be more in line with anaemic nominal GDP growth (also driving PEs lower). In the Ice Age the PE compressing force from falling long-term eps expectations and rising cyclical risk premiums would outweigh the PE expanding influence from falling bond yields. That is it in a nutshell.

But experience has shown us that in a post-bubble world a cyclical recovery could lead to a pause or even reversal of the two PE depressing drivers. And the longer the economic recovery continues the more the markets will believe there is a return to Great Moderation 'normality' and the more it can ignore the Ice Age. **That is exactly what has happened, aided by QE.** 

Indeed the chart below shows that US long-term earnings expectations have done exactly what they did during the late 1990s Nasdaq bubble. The echoes of that time are unerringly similar. Belief in this equity market has been centred around the new large technology, growth stocks typified by the large-cap FAANGs (Facebook, Apple, Amazon, Netflix and Alphabet's Google), rather than TMT generally.

In the late 1990 Nasdaq bubble, Greenspan justified high PEs by high long-term eps expectations



Source: Datastream

Due to the extraordinary length of this economic cycle, any worries about the volatility of the cycle have been temporarily vanquished. They will undoubtedly reappear with a vengeance in the next recession. The same goes for long-term eps expectations that are sustaining high market PEs, just as they did in the late 1990s.

The normal refrain is that because the US equity market is heavy with growth stocks like the FAANGS this justifies high PE premiums. Yeah right, that's what they said in 2000 too!

The premiums of growth stocks over cyclical stocks are at extremes not seen since 2000. The market has re-rated what it considers safe and non-cyclical in line with falling bond yields. My colleague Andrew Lapthorne recently wrote this, "Growth stocks, which we often refer to as simply stocks too young to have experienced a recession, can also hide previously unseen downside. Indeed, during the TMT bubble there were many cyclicals masquerading as growth stocks and today there is a long list of (sometimes very large) companies that were not around during the last recession. Their sensitivity to an economic downturn is then often unknown.

The chart below is Andrew's and is based on the FT World universe of developed stocks. It measures the age of the stock market based on the number of years the individual shares have been listed (see chart below). So many listed stocks have never experienced a recession.

Age of the market based on date of first listing (% of stocks with less than 10 years of price history)

Source: SQ Quant

We will find out in the next recession which of the currently designated growth stocks are simply deep cyclicals masquerading as growth stocks. We just don't know and neither do they! But one thing I know from our experiences in the 2000 Nasdaq collapse: if a company valued as a growth stock on eye-wateringly high multiples gets found out to be a deep-cyclical imposter, that stock collapses as both its earnings and cyclical risk premium get rapidly reappraised.

Despite the recent downtick, S&P Composite long-term eps expectations are still way out of line with both nominal GDP and particularly whole economy profits growth (see chart below, both 5y trailing to match the 5y projection for long-term eps expectations). In a recession, expect the dotted line in the chart below to lurch down sharply as it did in both the last two recessions (shaded areas). That is when you will see equity prices melt away.

30 30 national pre-tax profits (with IVA and CCadi) 25 25 IBES L/T EPS forecasts 20 20 10 10 o **Nominal GDP** 2005 1995 2000 2015 2010

US S&P L/T eps way above both nominal GDP growth and whole economy profits growth

Source: Datastream

And finally...you will be pleased to know. How can we possibly believe that the S&P could fall back below its 666 March 2009 low. Simple: I believe the 12-month forward PE will decline to a new lower low compared to the profits nadirs of 2002 (15.5x) and 2009 (10.5x). At the height of a bear market, during the eye of the storm, the equity market does not trade like an auto stock or a copper stock. It does not go to peak PEs of infinity at the bottom of the earnings cycle. **Quite the reverse – the market in its panic goes to trough PEs on close to trough earnings.** 

In the next recession, as the secular forces of the Ice Age thesis combine with the cyclical chaos of another deep GFC-like event, I would expect the S&P 12m forward PE to collapse from a QE inflated 16½x currently to around a 7x trough eps – while forward earnings fall something like 40% to \$100/sh, just as they did in the last recession. Add in the impact of a loss of confidence in the Fed (just as there was a loss of confidence in the BoJ and MoF in Japan), and there is a realistic prospect of a decline below the March 2009 666 low. And with that I must stop. Once again, I hope I am wrong, but fear I will be proved right.



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