Understanding the US Business Cycle

By John Calverley 5 September 2018

Summary

- A ‘normal’ US business cycle lasts 7-11 years. This is backed by research going back to Joseph Schumpeter (1939) and before. Five out of the last six decades have conformed to the pattern (60s, 80s, 90s, 2000s, 2010s)
- Shorter cycles arise only if there are very severe shocks or monetary policy mistakes (eg the first oil shock in 1974 or credit controls in 1980)
- We identify 5 stages – Recovery, Early Upswing, Late Upswing, Slowdown, Recession
- It is vital to understand which stage of the cycle we are in for two reasons
    - To put incoming data into perspective
    - To know what to expect
- The cycle has 6 main drivers – Monetary policy, inflation, pent-up demands (or absence of), inventories, business investment and credit.
- It normally lasts at least 7 years because it takes time for inflation to build up, monetary policy to respond, pent-up demands to become exhausted and financial fragility to grow
- Historically 11 years has been the maximum because these drivers make the economy increasingly vulnerable to higher rates, an oil shock or a financial crisis over time.

Why the business cycle is crucial

I believe that we need a strong sense of where we are in the business cycle to understand the economy and markets. Only then can we understand the interactions between economic variables at different phases in the cycle and what to expect as each phase unfolds.

Unfortunately, academic economics downplays business cycles, preferring to use the word fluctuations. The typical textbook has a short chapter on cycles only towards the end. In fact many academics don't believe there is a natural cycle: they believe the economy would grow steadily left to itself, but periodically gets knocked off course by unexpected shocks such as jumps in oil prices or monetary policy mistakes. These generate a path which looks like a cycle but is really just random fluctuations.

Many market participants don't put much weight on cycles either. This could be the influence of academic economics. Or it may be because many have only seen one or two cycles in their career. With the typical cycle lasting 7-11 years, you have to be over 40 to have seen more than a couple.

'It's a cycle stupid'

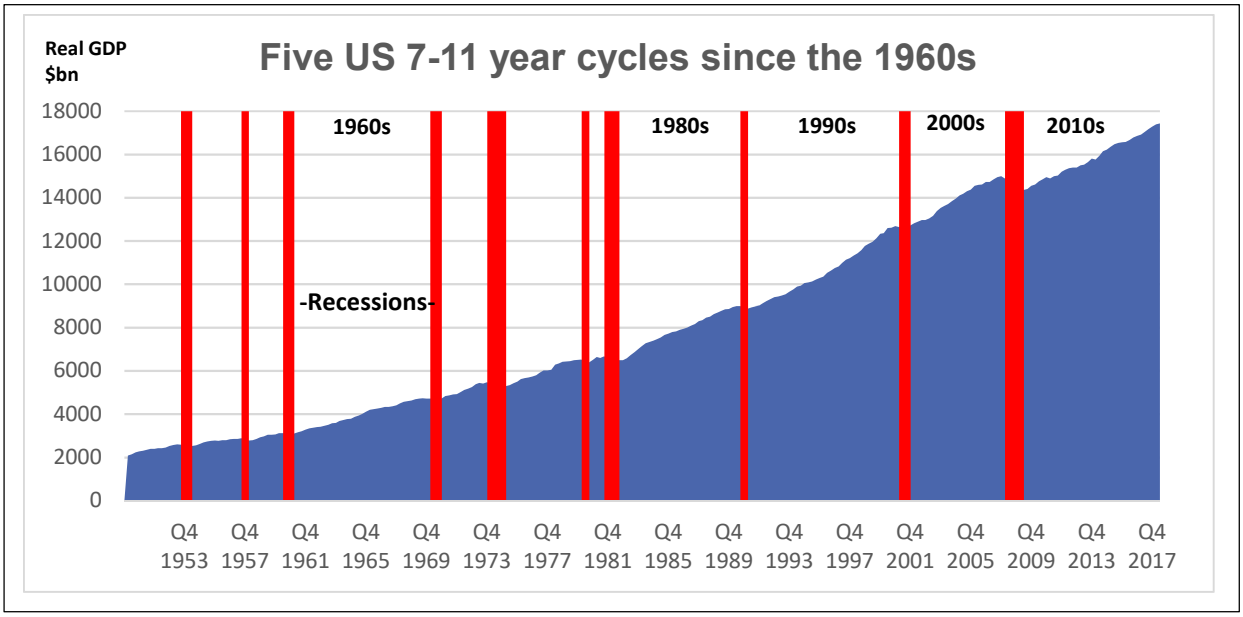
My research convinces me that the economy is not ever in equilibrium, nor is it on an equilibrium growth path. Rather it is always somewhere in a cycle, moving from recession to upswing and back to recession. This cycle is driven mainly by the interaction of monetary policy, inflation, pent-up demands, inventory adjustments, investment plans and financial fragility.

Shocks such as oil price hikes often play a key role, but crucially their effect varies according to where we are in the cycle. As the cycle matures it becomes increasingly vulnerable to a shock, which can tip it into recession. Once in recession, forces act to naturally pull the economy out after some months or a year, often with the help of easier policy. Mostly the cycle is internally generated, with these elements evolving and interacting through time.

The 'normal' cycle is 7-11 years

What about the length? This is another contentious issue, particularly in the US where many people have been brought up on the business cycle dating methodology used by the National Bureau of Economic Research. The NBER finds that the average length of a cycle since 1900 is 58 months, just short of 5 years. Quite a bit less than my claim of 7-11 years. And they find huge variation in the length of cycles, ranging from 17 to 128 months.

But consider this. In 1939, Joseph Schumpeter, a US economist famous in his day, published a two-volume study called Business Cycles where he looked at the US, UK and other major economies back to the 18th century as well as previous research in the field. He concluded that the typical business cycle lasts 9-10 years. OK, that's history. What's happened since? According to the NBER the US has seen 13 cycles with an average length of 6.5 years since 1933. But, crucially it identifies 5 cycles conforming to the 7-11 year 'normal' cycle, in the 1960s, 1980s, 1990s, 2000s and 2008 onwards. The average is pulled down by several short cycles in the 1950s, the 1974 recession due to the first oil shock which split up the 1970s and the 1980-81 mini-cycle caused by the sudden imposition of credit controls. My contention is that in the absence of a major shock the cycle will last the full length, at which point it tends to become highly vulnerable even to a small shock.



Business cycles are cut short early in the upswing only if they face a particularly large shock or set of shocks. Thus the 2001-8 cycle just barely met the 7-11 year norm as it was ended early by the doubling of oil prices in 2008 combined with the financial crisis. The European upswing which began in 2009 was almost immediately killed by the euro crisis which erupted in 2012. And the short cycles in the 1970s can be explained by the 1973-4 oil shock triggered by the Yom Kippur War which precipitated an extra recession in that decade.

By way of analogy consider US life expectancy in the 19th century. In 1850 life expectancy for white males at birth was 38 years, suggesting that the 'average person' lived 38 years. But infant and child mortality was high. Anyone who made it to age 20 could expect to live to 60. So talking of averages is misleading. It is more accurate and informative to say that the 'normal' life span was 60 unless life was curtailed by childhood illness. It is the same with business cycles. They can be curtailed early but this is not normal.

How do we know whether the current cycle will be 'normal'?

We don't of course. While we should usually expect a 7-11 year cycle, we must always be interrogating the data and watching events, in case something makes it diverge. This means considering the vulnerability of the particular current cycle, since all cycles are different in detail. It also means considering the potential for shocks, particularly from political events or from abroad.

At present it looks likely that this cycle could last longer than normal. The last US peak was in 2008 (technically December 2007) so if the current US upswing lasts into 2019 it too will be abnormally long. Arguably it has a good chance since the 2008-9 recession was particularly deep and the recovery was relatively muted for a long time. Whether the upswing can make it into the 2020s will depend on the extent to which vulnerabilities increase as time goes on, together with the potential for shocks.

Let's first look at how a typical cycle plays out. That helps us to see the drivers of the cycle, be clear on what to expect in each phase and to identify exactly where we are in the cycle.

Economic indicators at each stage of the cycle

	Recovery	Early upswing	Late upswing	Peak/Slowdown	Recession
Direction					
Activity	Picking up	Rising	Rising	Peaking	Falling
Confidence surveys	Weak	Improving	Rising and strong	Strong	Collapsing
Inflation	Falling	Falling/Stable	Rising	Rising	Rising/peaks
Unemployment	Rising/Stabilising	Falling	Falling	Troughing	Rising fast
Policy rates	Low, stable	Low/rising slowly	Rising	High	Falling fast
Bond yields	Rising	Stable	Rising	Peaking	Falling
Profits growth	Rapid	Rising	Slow/stable	Stable/down	Collapsing
Stocks	Rising fast	Rising	Rising	Falling	Turn up early
Levels					
Unemployment rate	High	Above 'natural'	At/below 'natural'	Below 'natural'	Rising above natural
Inflation level	Below target	Below target	Target or above	Above target	Above target
Output gap	Below full	Below full	Closed or negative	Negative	Opening up fast
Policy rate	Lowest	Below 'neutral'	Neutral or above	Above neutral	Low

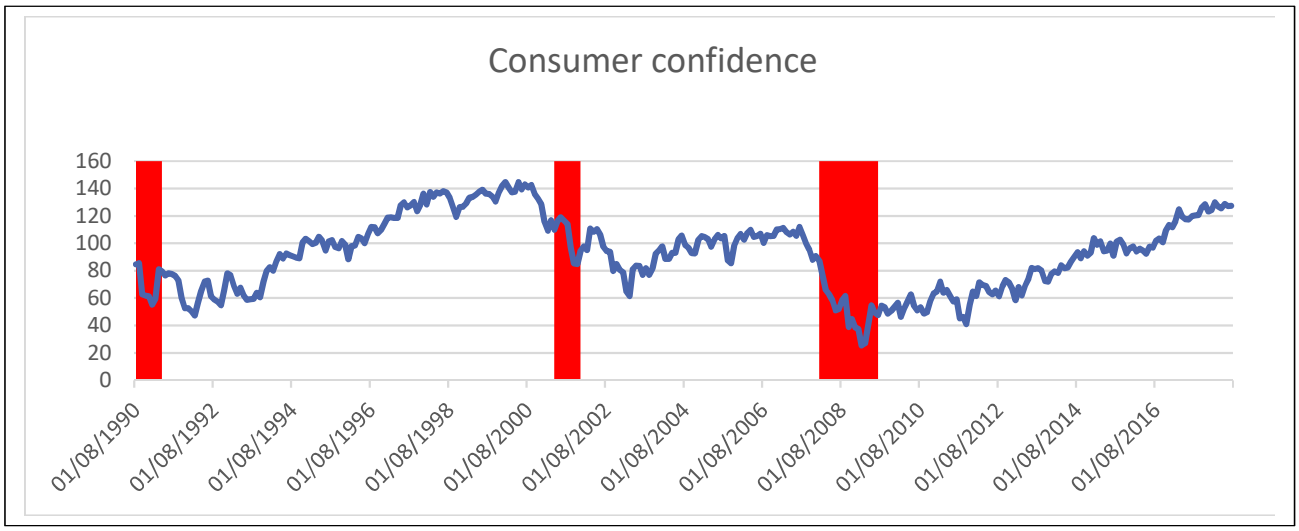
Stages of the cycle

1. Recovery

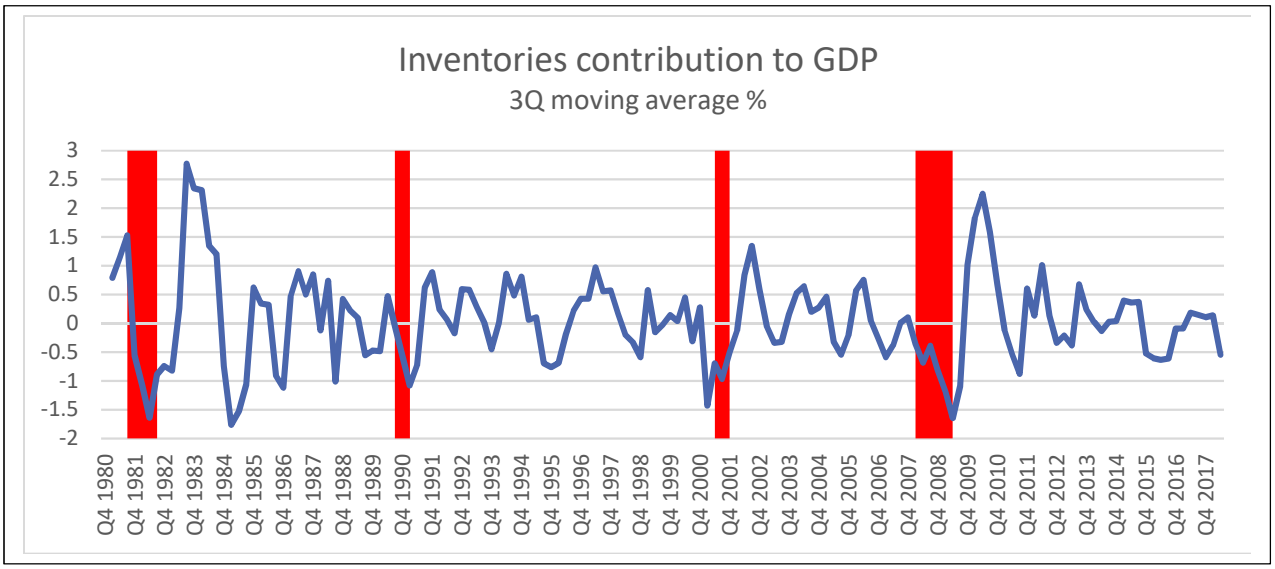
The business cycle is continuous, with each stage always providing the foundation for the next phase. But we have to break in somewhere and this is the easiest place to start. The Recovery stage (as I use the term) is a short period when activity begins to turn up and markets and the authorities gradually recognize that the recession is over. Unemployment is still very high and often still rising, businesses are still failing in large numbers and people are typically still gloomy. But activity is confirmed as expanding again and the worst fears of the recession are beginning to ease.

During a recession people live with fear of losing their job, their business or their savings (as stocks and often house prices fall). Sometimes, like in 2008, there are fears of financial or industrial collapses. In the recovery stage some of this fear eases. As it does lower borrowing rates combined with pent-up demand for consumer goods like cars, durables and houses can bring a rise in consumer spending (with a falling savings rate).

Consumer confidence usually picks up off the bottom at the end of the recession or beginning of the recovery period though it then remains relatively weak and volatile in the Early Upswing phase. Business investment may stop falling and pick up a little too, again reflecting lower borrowing costs, pent-up demand for capital goods such as vehicles and computers and reduced fear.



Inventory behavior is a major driver at the recession phase and again at the recovery phase. During the recession businesses cut orders, often repeatedly to try to work their inventories down. At some point inventories reach more comfortable levels and then, to prevent them falling further, businesses start re-ordering. The effect is often quite large over a short period, adding or subtracting 1-2% of GDP helping to provide a sudden lift to demand and kick-start the upswing.



Monetary policy usually plays a key role too. By cutting interest rates the central bank supports asset markets, lowers the cost of borrowing and signals that an upturn is due. Policy rates are usually cut sharply during the recession and are likely to be down to low levels. Typically the central bank is on hold now but if the recovery is long coming or weak, further stimulus is possible too.

The markets often see the Recovery early, sometimes before it even starts and certainly before data confirms it. Stocks typically soar, with double digit gains in the first year of gains. The Recovery phase is relatively short, less than a year. But it does take a while for all the data to turn up and for people to

realise that the economy is definitely improving and that the worst fears of the recession are over. Then the economy moves into the Early Upswing phase, which usually lasts several years.

2. Early Upswing

The Early Upswing stage sees a virtuous circle of increasing confidence and rising spending. Consumers are increasingly prepared to borrow and spend while business, facing increased demand and increasing capacity use, starts to raise employment and boost investment. Higher confidence pushes up asset prices which encourages consumer spending alongside the stronger labour market. Pent-up demand is a key driving force while, typically, monetary policy remains loose, although the Fed may begin a gradual tightening. The yield curve is steep.

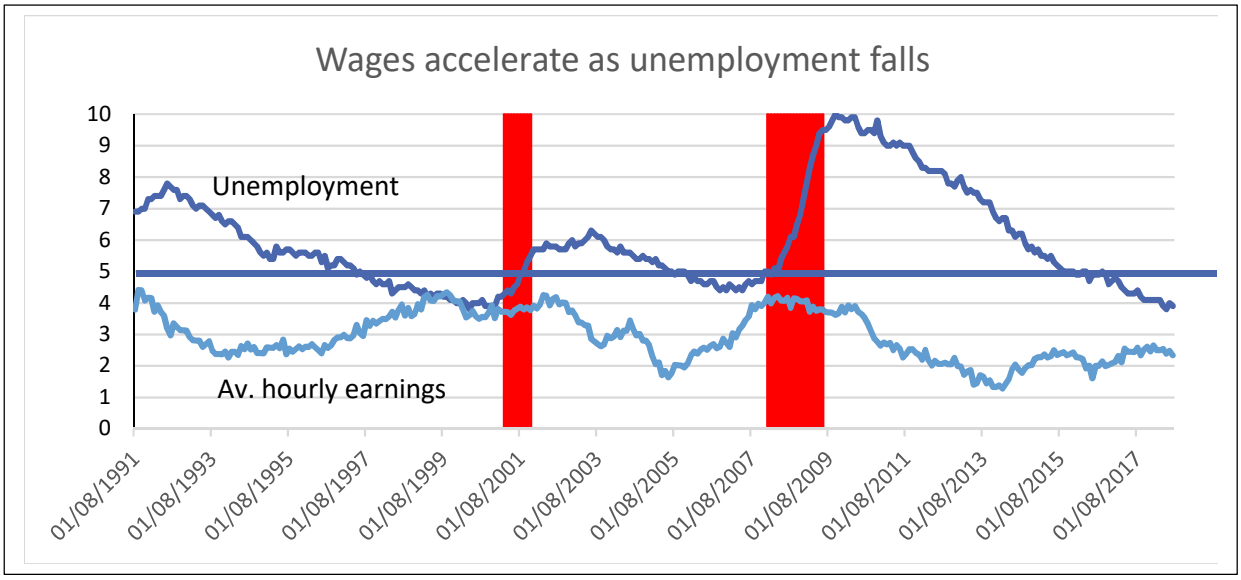
Meanwhile vulnerability to a downturn is typically low at this point and only a huge shock will derail the upswing. Inventories are typically still lean, business and consumers are still cautious and debts have not yet built up. Global oil prices are less likely to spike at this point because, with the US (and often the world) coming out of a recession, demand is still relatively modest so there is ample spare capacity among oil producers. Meanwhile pent-up demands and easy monetary policy provide a cushion to bumps in the road. The Fed is relaxed because ongoing spare capacity in the economy as well as still-high unemployment mean that inflation is typically well-behaved.

The 'neutral rate' provides a rough guide to the monetary stance

A simple way to understand Fed behavior during the cycle is to compare actual rates to an imaginary 'neutral' rate which would be neither stimulatory or contractionary. In the 1990s and early 2000s the neutral rate was reckoned to be about 4-5%, of which 2-3% is a real interest rate component with 2% to cover the inflation rate. Since the 2008-9 recession many have argued that the 'neutral rate' has fallen because of slower trend economic growth and this may be so. At the time of writing many would put the neutral rate at only 2.5-3% (including 2% inflation). Still, we can expect that in the Recession, Recovery and Early Upswing stage the official rate is typically below the 'neutral rate' while in the Late Upswing stages it rises above it, especially if inflation is above target.

3. Late Upswing

In the Late Upswing phase confidence increases further, sometimes generating a boom, that is a period of very strong growth with robust confidence and buoyant asset prices. But vulnerabilities begin to build. Strong confidence among consumers reflects the much tighter labour market – with unemployment down near or below the 'natural rate' (usually now taken to be around 5%, which is roughly full employment) - together with the strength of equity and housing markets. Wages are typically rising too, again due to the tight labour market. Typically wages begin to accelerate as unemployment falls through the 5-6% level. Business is more confident and more inclined to invest, reflecting strong demand and high capacity utilization as well as high equity values.



Behavioural economics provides clues to the cycle

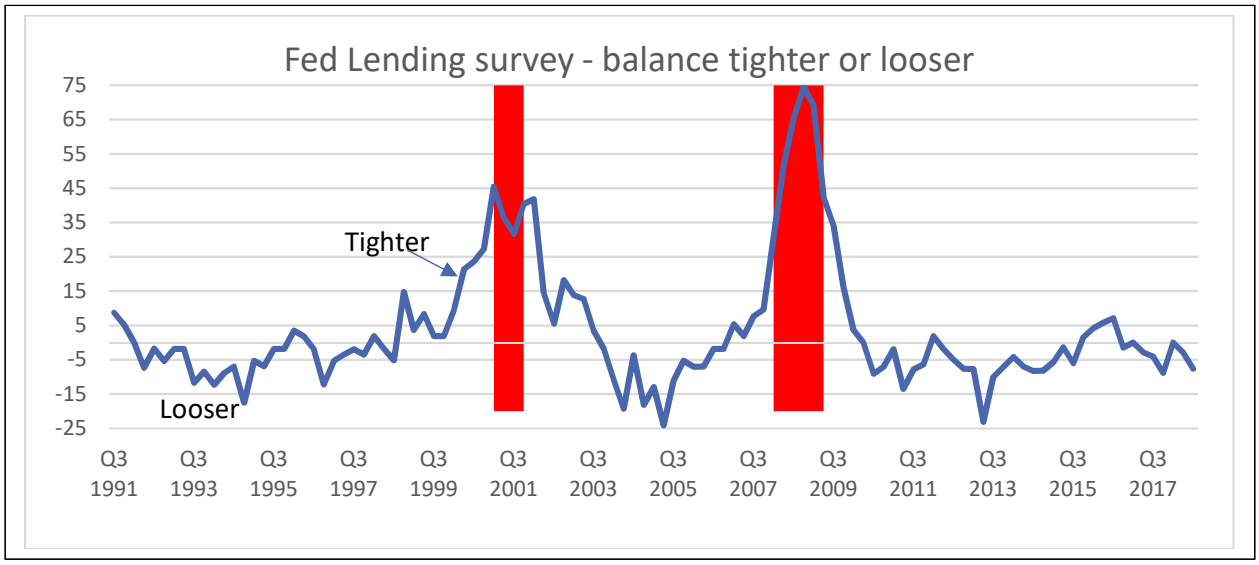
Confidence is also strong in this phase of the cycle simply because it is now a long time since the last recession, half a decade or more. Consumer confidence typically moves up considerably from the Early Upswing phase. Behavioural economics studies find that people tend to be 'anchored' by recent events. If somebody they know has just lost their job and they read about a recession in the newspapers they will go into cautious mode and stay there until a series of more positive events over time allow them to relax. By the Late Upswing phase of the cycle, when the good times have been going for a while, people are more relaxed and are more likely to exhibit 'over-confidence', a tendency to believe they can easily succeed. This is when people are more likely to ask for a pay rise, buy a larger house, speculate in stocks or start a business, all of which contribute to strengthening the economy further.

The central bank is usually raising rates during the Late Upswing stage, and will typically push them above the 'neutral rate' at some point as it seeks to moderate the upswing and avoid a boom. The key idea behind this is that the central bank must 'take away the punchbowl just as the party gets going' as William McChesney Martin, President of the Federal Reserve in the 1950s and '60s famously said. But higher rates have only a marginal impact on behavior since confidence is so strong. Bond yields are typically rising in this phase too as investors anticipate higher short-term rates and higher inflation. But the yield curve often inverts during the late upswing period, reflecting tight monetary policy. Stocks are usually still rising as well even though corporate earnings growth is slower, squeezed by rising wages.

Vulnerabilities build

During the Late Upswing stage vulnerabilities build. Higher wages will eventually push inflation above the Fed's comfort level, leading the Fed to raise interest rates above the neutral rate. At this point historically, Fed policy-makers have often talked of achieving a 'soft landing', i.e. a slowdown without a recession. In practice this is very hard to achieve as the effect of rising rates tends to be non-linear. A few rises may not have much effect since confidence is so high but, suddenly, another rise triggers a shift in expectations, the straw that breaks the camel's back.

Another rising vulnerability is increasing financial fragility which may leave consumers and business exposed in the event of a shock to confidence of any sort. Credit is often provided on increasingly risky terms for example with lower margin requirements, less stringent covenants (written in to contracts to constrain future behavior by borrowers). Leverage (i.e. debt relative to capital, assets or cash flow) rises both among borrowers and lenders. Banks typically start to relax standards during the Early Upswing stage and continue to do so in the Late Upswing stage, expanding loan books, often to increasingly marginal borrowers. Towards the end of the Late Upswing as interest rates rise, banks begin to tighten credit again. In the event of a shock, banks are likely to take fright and sharply tighten lending standards, cutting borrowers off. The extreme case is when the late upswing phase ushers in a property bubble, taking values to high levels and borrowing to extremes. Any reversal of the bubble can leave buyers and bankers highly exposed and desperate to cut back, as we saw in 2008.



The Multiplier-Accelerator process

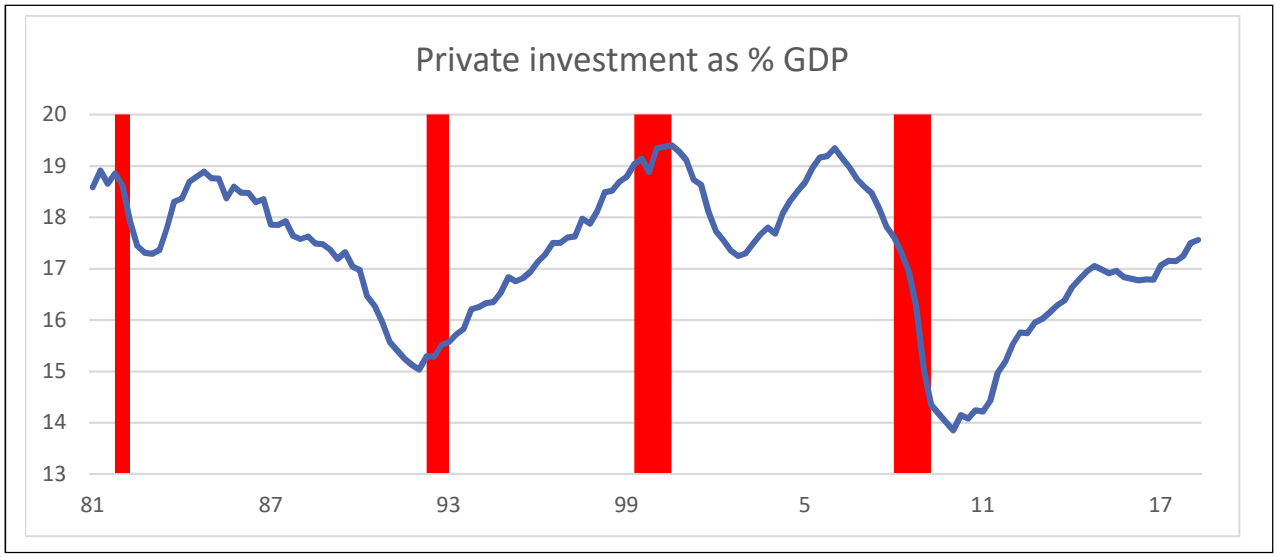
The final vulnerability arises from the 'multiplier-accelerator' process in investment which takes a little more explaining. In the Recovery and Early Upswing phase most new demand can be accommodated by just adding labour to existing capacity, perhaps with modest new investment. As the upswing continues there is often a need to add more capacity. But when a company decides to build a new factory, to make cars for example, that in turn leads to increased demand for machinery, steel, cement, glass etc. If the producers of those goods also lack the capacity to meet demand they too will need to build new factories adding further to demand for machinery, steel and cement etc. This process 'accelerates' investment, driving the economy at a faster pace.

It also 'multiplies' through the economy because the extra hires to build the factories spend money, raising demand for everything else, including more cars. The economy can easily enter a boom period for some years where demand keeps rising and investment in new capacity remains strong as firms struggle to catch up.

The sting in the tail is that, at some point, enough new capacity comes on stream that companies can meet the higher level of demand. They don't need another factory and they cut back on investment. But

this brings slower growth of employment and incomes and the economy itself begins to slow, making it vulnerable to a new shock taking it into recession.

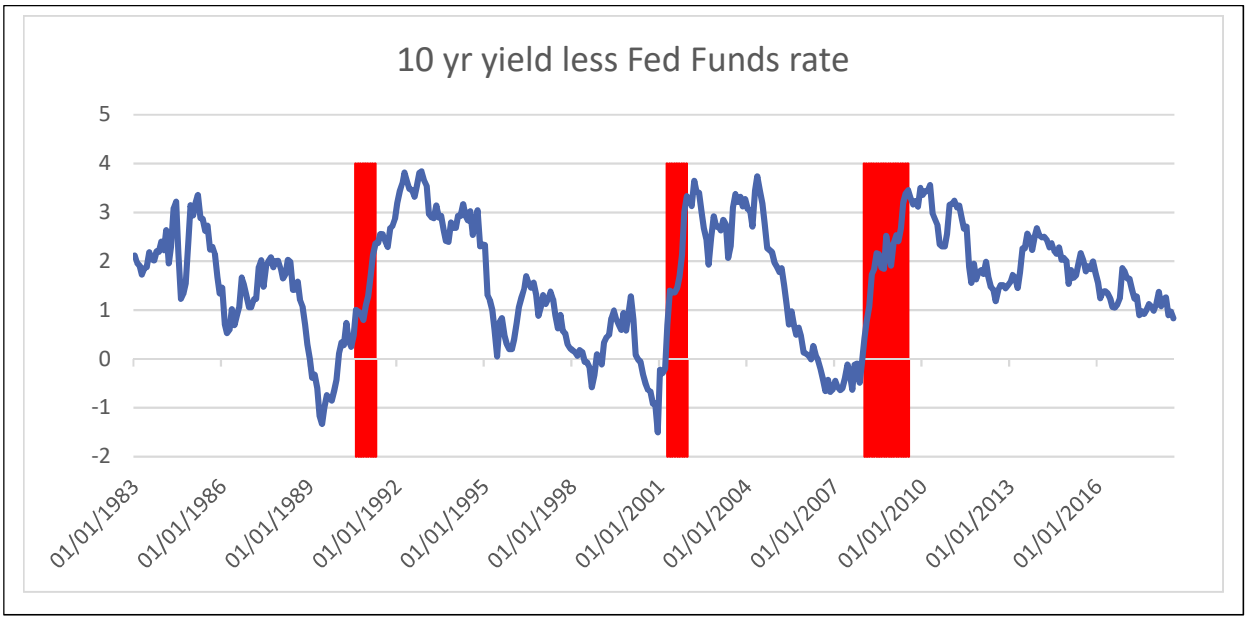
In the last decade it is China which has shown the most dramatic accelerator effects as its industrialization has created vast overcapacity in basic materials. But the accelerator also operates in a service economy, through the commercial property market. As growth and employment expand, offices and retail stores fill up, rents and capital values rise and new buildings are started. Over the years until they are completed the economy is stimulated by the demand for construction workers and materials and the resultant multiplier effects. But once supply starts to outpace demand new building tails off leading to layoffs and a negative impact on the economy. At this point any ongoing projects are often halted in the face of financing constraints or concerns over sales prospect, leaving a forest of idle cranes. A similar cycle often plays out in housing too, though mortgage rates often play a key role here.



A related vulnerability in the Late Upswing phase is that pent-up demand consumer is now used up. Car sales have been high for years while new demand for housing may be tailing off in the face of price rises and rising mortgage rates (as the Fed pushes up interest rates). At the slightest hint of coming trouble it is easy for consumers to cut back, for example holding off the new car purchase. Their car is not that old anyway, in contrast to the Early Upswing phase after the average age of the fleet has increased in the recession.

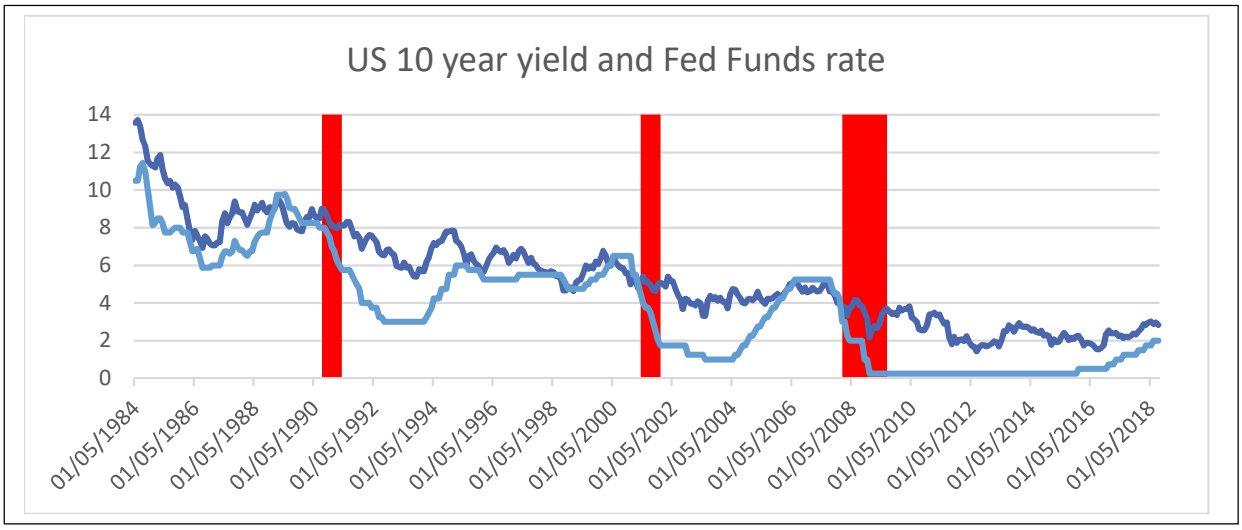
4. Peak or Slowdown

The peak or slowdown phase of the cycle is another brief period, even briefer than the Recovery phase. In retrospect it can usually be dated to one month or at most one quarter but I include it as a phase because, at the time, it unfolds only gradually and takes a while to be confirmed. Moreover, it too involves a process. There is usually a shock involved such as higher oil prices, higher interest rates, a financial collapse, a political shock or some combination. Banks tighten lending criteria. Consumer confidence typically declines abruptly. Interestingly consumer confidence is more of a guide to the Peak and Recession phases than to the Recovery phase when consumers are typically slow to gain confidence.



More commonly it is a gradual process as oil prices or interest rates rise over several months or even years, eventually interacting to cause the recession. An inventory correction typically plays a key role: Businesses find inventories rising as sales disappoint relative to expectations and so they start to cut back orders. Meanwhile lower confidence immediately impacts business and consumer spending because of the vulnerabilities built up during the late upswing phase described above. The stock market typically falls sharply, signaling and spreading the confidence shock, while providing negative wealth effects to consumers. Bond yields fall as investors anticipate a lower path for official rates and lower inflation.

Monetary policy usually responds with easing, though again, unless the easing is extremely large and rapid it will usually still leave policy relatively tight in the first few weeks at least. Typically, rates are above 'neutral' at the peak and are only cut gradually. Only once the recession is confirmed, will central banks usually ease aggressively by which time it is too late to stop the recessionary process, though it may help to shorten it.



5. Recession

Once the recession is triggered, it follows a process which typically lasts a few quarters. Cutbacks in business orders, layoffs and negative confidence effects curtail spending, often feeding back into yet more cutbacks, creating a negative circle of declining spending and confidence. Businesses and many consumers suddenly face a much more difficult future and, if they have over-extended with debt in the upswing, may be in real distress.

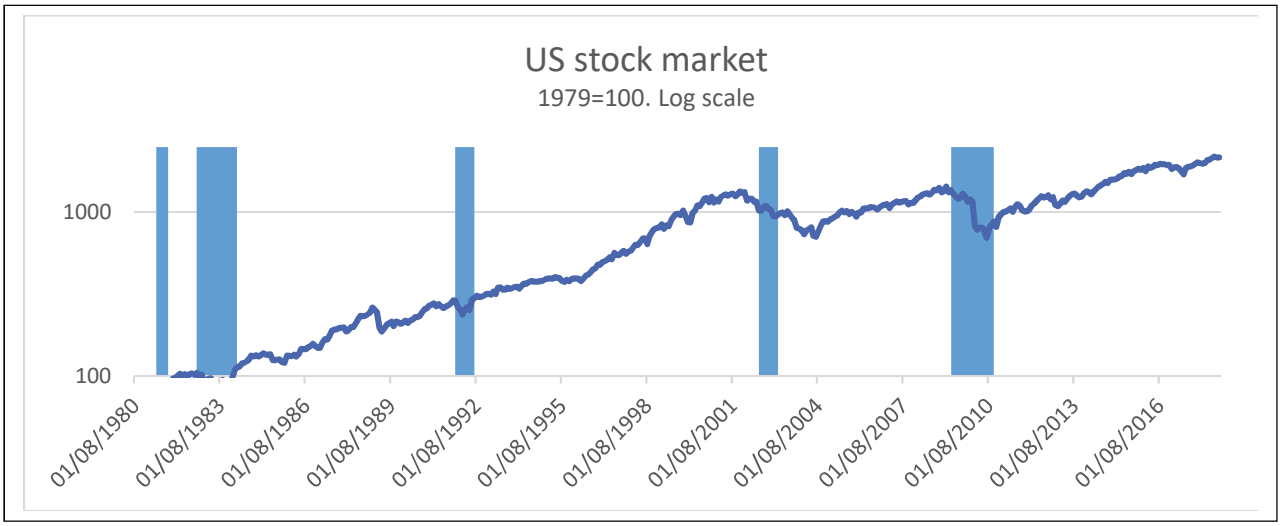
The recession tends to be particularly deep and long when it is preceded by a credit boom and/or asset bubble, particularly if financial instability follows. The recession may also be particularly bad if the central bank is slow to cut interest rates. The Great Depression in the 1930s was so bad primarily because the Federal Reserve *raised* interest rates in 1931 when the recession had been underway already for well over a year, because of its perceived obligations under the Gold Standard. The recessions in Ireland, Spain, Portugal and Greece in 2012 were similarly deep because their membership of the euro meant that lending rates went up when they needed to go down.

Absent these exacerbating effects, the processes work through to create a new Recovery phase, usually after 6-12 months or so. In particular the inventory correction eventually reverses, creating a potent stimulus, while the cutbacks on excess and the effects of pent-up demand gradually begin to provide a floor to spending.

Policy effects are important too. 'Automatic fiscal stabilisers' normally kick in as the government deficit naturally opens due to rising spending on unemployment benefits while tax receipts fall. Sometimes a new government fiscal stimulus may help, though this typically arrives only in time to support the Recovery phase or even the Early upswing stage, given the lags involved in fiscal spending, especially on infrastructure. Monetary policy helps more quickly by lowering borrowing costs (for existing and potential borrowers) as well as supporting asset prices. Before long the stage is set for a new Recovery phase.

Markets typically anticipate the turnaround and stocks will usually bottom several months before the end of the recession is dated. But the decline in stocks in the early part of the recession can be dramatic, especially if they were particularly highly valued at the peak. In the early 2000s, stocks did not find their trough until well into the Early Upswing phase, reflecting the high valuations in 2000 and the slow pace of recovery. In contrast in 2008-9 stocks fell precipitately but troughed about 3 months before the end of the recession, which is the more common pattern.

Bond yields usually fall right through the Recession and the beginning of the Recovery phase before stabilizing, though inflation trends will also impact, especially if the upswing is slow. The main reason for this is that inflation is a 'lagging indicator' in the cycle. It may even increase during the Recession stage but then it will decline typically well into the Early Upswing phase.



A checklist for vulnerabilities

I have emphasized that vulnerabilities tend to increase as the cycle moves along and particularly as it goes through the Late Upswing phase. But can we calibrate the increase? I find this easiest to do by listing a series of questions for investigation.

1) How much faster is credit growth than nominal GDP growth? The Bank for International Settlements publishes quarterly data on the credit-to-GDP gap, a measure of the extent to which the ratio of credit to GDP is growing faster than its long-run trend. The credit here is lending to the private non-financial sector.
2) Can we identify important parts of the financial sector which seem to be taking on extreme risks? Particular places to look include commercial property lending, housing lending, derivative exposures and non-investment grade corporate lending.
3) Can we see any bubbles? It is difficult for central banks to reliably identify bubbles in the early stages and so have the chance to prevent them. But I believe it is possible to reliably identify a bubble when it is well-advanced. Note that this does not mean it is possible to predict when it might burst: Bubbles often inflate much further than seems possible. I use a checklist of indicators. Bubbles in stock markets can play a role in triggering downturns as was seen in 1929 and 2001 though bubbles in real estate are the really dangerous problem.
4) Is there wide-spread over-investment? Monitoring investment booms and capacity utilization measures can help identify potential vulnerability to a natural slowdown as the multiplier-accelerator effect works through and goes into reverse.
5) How quickly is inflation rising? Central banks are wary of inflation higher than target but worry particularly about accelerations in wage inflation since the latter are hard to reverse. Full employment (or over-full employment) combined with rising wages is a warning signal that central banks are likely to raise interest rates well above 'neutral'.
6) Is spare capacity in oil supply dangerously low? Rising oil prices have played a role in most of the recessions of the last half century including 1974, 1980-82, 1990 and 2008. In all those cases it was the strength of the US (and world) economy after many years of upswing which tightened the oil supply and demand balance sufficiently to make a price rise likely in the event of even a small interruption to supply. So one element of vulnerability to an oil shock is the state of the supply/demand balance but clearly political events can play a role too.

7) What are the risks of a political shock? In practice shocks can come from nowhere due to a political event. For example Saddam Hussein's invasion of Kuwait in 1990 tipped an already weak economy in the last gasp of a Late Upswing period into recession. But it is also worth assessing 'known unknowns' to assess vulnerability, particularly in the late upswing stage.
8) What is the response to a financial shock? Financial collapses like Lehman in 2008 or, previously, Creditanstalt in 1931 occurred when the Recession stage was already well underway. Their effect was to exacerbate the recession. In contrast the rescue of Franklin National Bank in 1974 helped to avoid a general financial collapse back then and limit the recession. The quick response to the 1987 stock market crash and the crisis of Long Term Capital Management in 1998 avoided recessions. Both events occurred during the Late Upswing stage but the rapid cuts in interest rates and the rescue of vulnerable stock brokers in 1987 and of LTCM itself in 1998 defused the threat of a general panic and allowed the cycle to continue. The key is the policy response.

Identifying turning points

The holy grail of business cycle analysis would be to forecast the turning points. Unfortunately, that is not easy and no forecasts can be relied upon. There are however some pointers we can use for each transition.

1) Recovery always follows Recession. This sounds obvious but people often despair during the worst period. That said some recessions are worse than others. The downturn becomes deeper and longer the greater the vulnerabilities built up during the upswing and if there are policy mistakes, typically monetary policy. If interest rates do not go down rapidly in the early stages of the Recession phase (as in Japan in the early 1990s) or even go up (as they did in 1931 and 1974) then the downturn will be bad. Otherwise expect the Recession to last 6-12 months or so. The 2008-9 recession lasted 18 months according to the NBER though during the first 6 months of it the economy was more flat than declining.
2) The transition from Recovery to Early Upswing is mostly a matter of confirmation that the upturn has definitely arrived.
3) The transition from Early to Late Upswing can usually be identified by the path of unemployment and inflation. Typically, once US unemployment declines to around 5%, wage inflation begins to pick up. In 2015 and early 2016 there were many voices doubting whether wages would respond at the same point (or even ever) this cycle. There were good reasons for this doubt such as high levels of 'discouraged workers', (not measured as unemployed but who would potentially come back into the workforce holding down wages). Also, the argument that, with globalization and plenty of spare capacity in Europe and China, it is now the global labour market that matters. But since early 2017 it has become clear that wages are accelerating on schedule, albeit very gradually, and the Fed in turn has accelerated its tightening plans. Another notable change in this transition is that consumer confidence reaches high levels.
4) Identifying the Peak. As discussed, the ingredients are normally going to be that the economy has been in the Late Upswing stage for some time, vulnerabilities have built up and a shock occurs. The art is in judging whether the shock is large enough relative to the vulnerabilities. Quite often it is not, especially if the central bank responds with easier monetary policy. This was the case with the 1987 stock market crash, the 1997 Asian crisis onset and the 1998 LTCM

crisis. In all three cases a recession was feared but a quick response from the central bank kept the upswing going. Critically, inflation was not a concern in any of these cases, allowing the Fed to move rapidly. Consumer confidence usually declines at the peak.

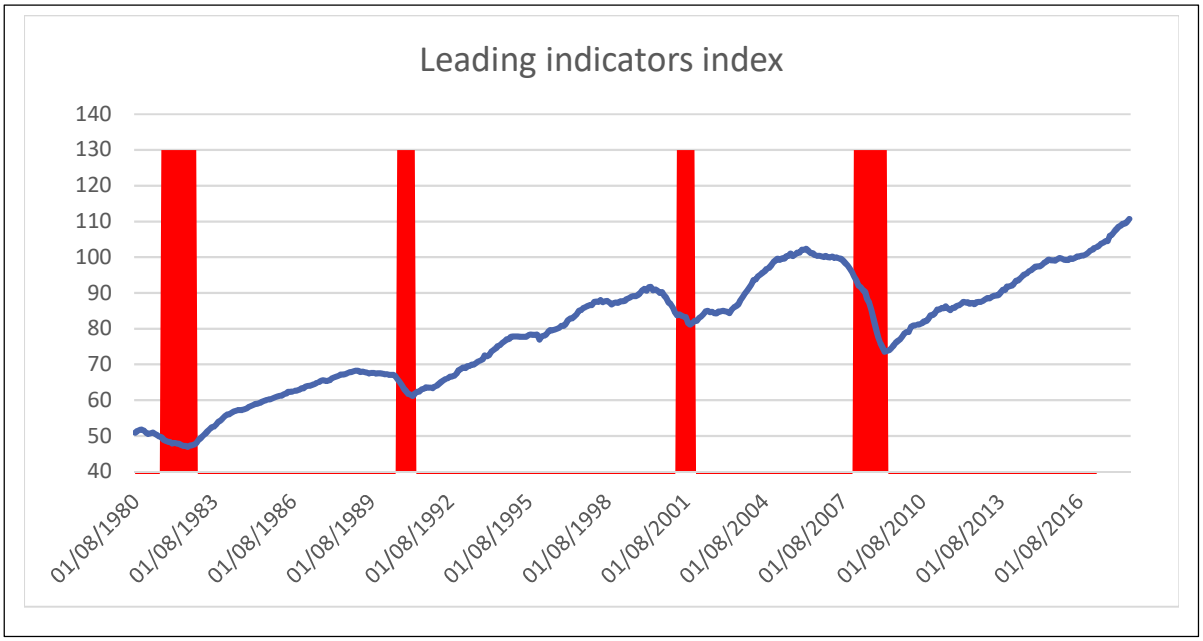
5) Peak into recession. Once the peak is identified correctly a recession is inevitable. The depth and length of the recession, however, is dependent on the interaction between the vulnerabilities built up, the size of any shock and the policy response.

The role of indicators

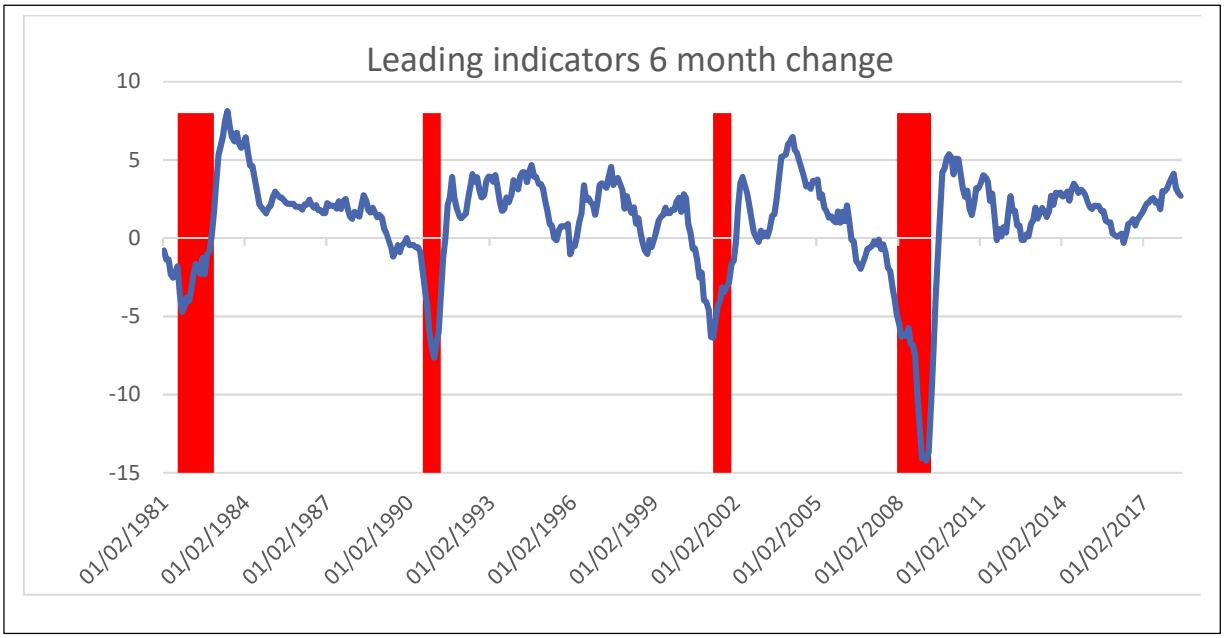
Most of the indicators avidly watched by investors tell us where the economy is, or rather where it was a couple of months ago. Even so-called 'nowcasts' only help by giving slightly more up-to-date information. Innovations such as using search counts on Google or satellite imaging of mall car parks still only tell us where we are. The US employment report, the most-watched indicator, is timely as it is published only 3-4 weeks after the survey. But employment is a lagging indicator. That is to say, it is known to turn *after* the economy.

The best type of indicator is a leading indicator, something that turns ahead of the cycle. A range of data releases come into this category including unemployment claims, new orders, building permits, stock prices, the yield curve and consumer expectations. Individually they are of limited help because of short term volatility, but taken together there is evidence that they often (not always) provide some warning of turning points. That said, the warning is usually only a few months, especially since the index when published refers to data typically of 2 months prior.

Still, ahead of the last three recessions, the leading indicators index (which I like to measure as a 3 and 6 month change, was weak for some time leading up to the peak, indicating a stuttering economy and one vulnerable to a shock. But beware because there are plenty of false signals too, as in 1998 and 2015. A strong jump in this indicator is a good confirmation of the Recovery stage.



The markets usually react little on the day to the release of the leading indicator index. But that is only because most of the components have been published before so it is rarely a surprise. In my view, the fact that the markets pay it little attention means that it often gets under-rated by analysts.



Its different this time

So often during the cycle people say or write that it is different this time. They argue that the cycle will behave differently because of some new trend in the economy – a change in central bank strategy perhaps, or in the structure of the economy or the effects of technology. Sometimes, often at the height of the boom, people even argue that the downturn can be avoided altogether.

The truth is that the cycle does vary, but by much less than people often claim. The phases will still work through and there will always be a peak and downturn eventually. Where the differences have to be taken into account is in shaping the duration and timing of the cycle as well as its amplitude. That there *will* be a cycle is guaranteed. This should be the starting point for understanding the economy and markets.

	Recovery	**Early Upswing**	**Late Upswing**	**Peak**	**Recession**
DRIVERS					
Monetary policy	Easy	Easy	Tighter	Tight	Easing
Inflation	Falling	Falling/stable	Rising	Rising	Peaking
Pent-up demand	Stimulus	Stimulus	Used up	Reverses	Building
Inventory behaviour	Key driver	Not important	Not important	Key driver	Key driver
Investment	Weak	Picking up	Strong	Fades	Collapses
Financial fragility	Still high	Improving	Worsening	Critical	Danger