Is the global growth cycle suffering cardiac episode or a palpitation?

"Cycles are not like tonsils, separable things that might be treated by themselves, but are, like the beat of the heart, of the essence of the organ that displays them". Joseph Schumpeter 1939.

Over the past month our leading indicators of the industrial cycle have shown signs of peaking. The real question is whether this suggests the industrial cycle is merely temporarily interrupted and rapid global growth will soon return; whether we are through the fastest phase of acceleration in the cycle, and continued but slower and more volatile growth becomes the norm; or whether a broader and deeper slowdown is now in prospect?

Most people with even a passing interest in economics would be aware of the existence of Joseph Schumpeter, one of the most important economists of the 20th century. Born in 1883 in Austria, Schumpeter was educated in Germany before spending the post-Depression period lecturing at Harvard University until his death in 1950. Schumpeter's main contributions may well have been better received in the current period since he focussed on the role of the producers and the process of innovation as the key determinant of the 'circular flow' of the business cycle. Schumpeter will be forever tied to the phrase 'creative destruction' – the *"process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one"*. The beneficiaries of the gig-economy have been ready adopters of the phrase, albeit the FAANGs have unleashed a different type of destruction in recent days.

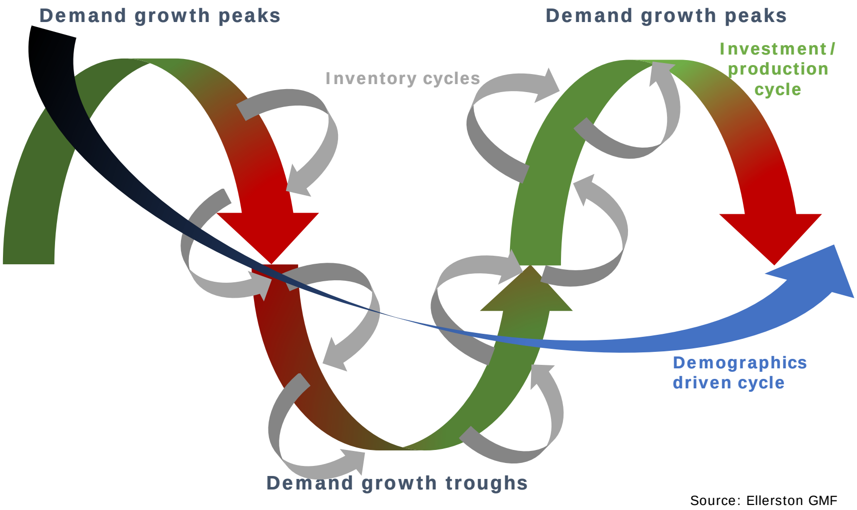
Schumpeter was such an adherent of the business cycle that he saw cycles within cycles. In fact, he believed there were 4 separate cycles;

- Kitchin cycle (an information asymmetry and inventory cycle) - 1-5 years
- Juglar cycle (a fixed investment cycle) - 7–11 years
- Kuznets swing (a demographic driven infrastructure-led investment cycle) - 15–25 years
- Kondratiev wave (a long term cycle driven by technological advances, social change) - 45–60 years

Most modern day economists readily accept the idea of an inventory and investment cycle, many agree that medium term cycles exist driven in part by demographics, myself included, but few believe in a long term Kondrativ type waves. A simple schematic of the concept illustrates how it is easy to confuse short term inventory cycles or slow moving demographic forces with the underlying industrial cycle.

Exhibit 1: The identification of an underlying industrial cycle is often complicated by shorter dated inventory cycles and inflection points in long term structural drivers of economic growth.

Cycles within cycles

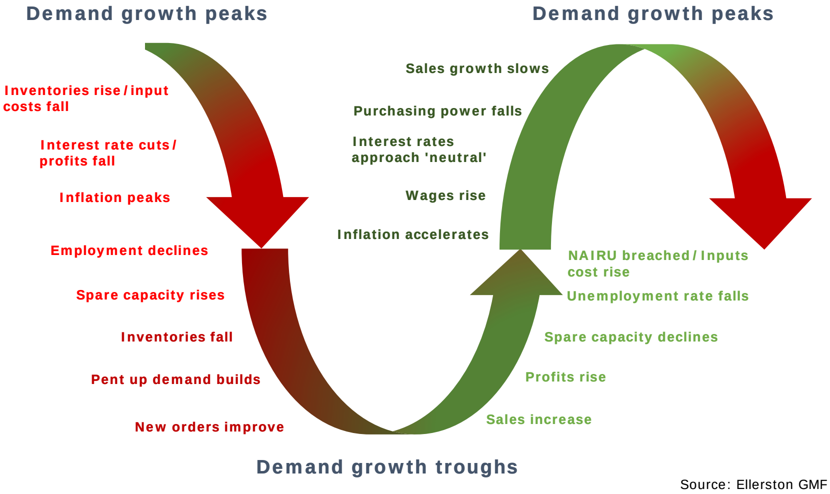


Source: Ellerston GMF

There are no rules as to how long nor how severe the ebbs and flows of these various cycles will last. However, our process is attuned to identifying where the major global economies are in the broader investment/industrial production cycle and for searching for points of inflection in the shorter and long run cycles that help shape the path of the industrial cycle. Our rationale for focussing on identifying the industrial cycle is that it is ultimately what determines the path of interest rates and sales growth, and in turn, asset class returns.

Exhibit 2: The economic signposts of a traditional industrial cycle.

Path of a traditional industrial cycle

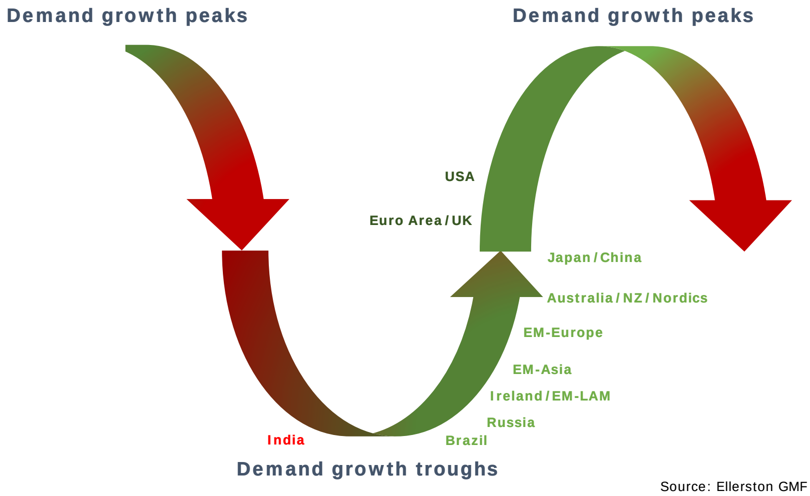


Source: Ellerston GMF

We have published Exhibit 2 [previously](), showing the steps encountered throughout a typical industrial cycle. Of course, different countries can be in different phases of the cycle, and we spend a good deal of time scrutinising the economic data for each country to map them to the phase of the cycle they are currently in. Exhibit 3 summarises our current assessment. Only the USA is at the phase whereby a broad based acceleration in wage growth should be expected, most of the rest of the world is still enjoying the relatively benign environment of robust growth with modest cost pressures, but are steadily moving behind the slipstream provided by the US.

Exhibit 3: Where are the major economies in the industrial cycle?.

Country positioning in the current industrial cycle

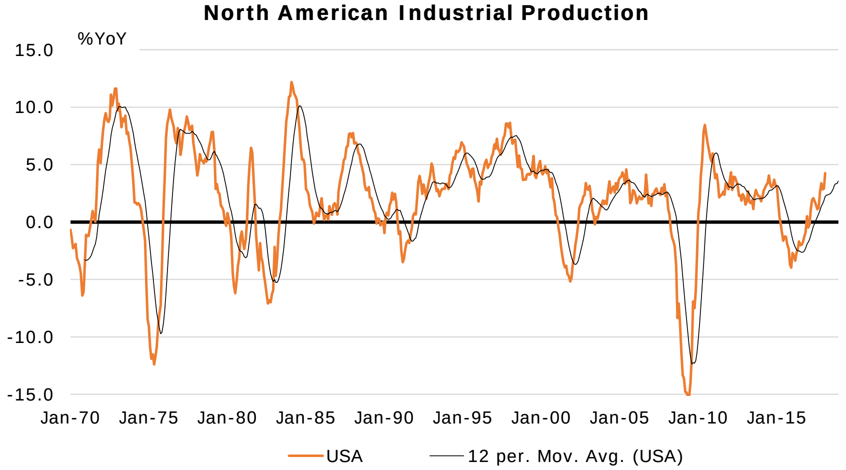


Source: Ellerston GMF

Exhibit 4 shows we are currently in the 8th major industrial upswing in the US since 1970. While there is clearly an ebb and flow of the cycle identifiable, the trough to peak length of the cycle has varied. By the standards of the 1970-1990 period the current upcycle of 23 months would be a reasonable prediction of the cycle peak. The 4 cycles from 1970 to 1990 from trough to peak averaged 23.25 months, with little variation in the length between each of the 4 cycles. Yet by the standards of the 1990-2018 period, where the 3 completed trough to peak cycles lasted on average 71 months, the current expansion would be just one-third complete. Policy makers have suggested that inflation targeting policies, combined with sounder institutional frameworks, better information and analytical tools, and the movement towards less cyclical services sectors in the major economies have helped elongate the length of the economic cycle. The industrialisation of major developing economies, the relatively harmonious geopolitical environment, low volatility in commodity prices and old fashioned good luck likely also played a helping hand.

Moreover, given the recovery from a debt-deflation recession typically takes much longer than a traditional industrial recession, it would seem premature to call time on the current industrial production cycle. For instance, the US is still to eclipse the level of output recorded prior to the financial crisis although it is now very close, while Japan is still 11% below the pre-financial crisis peak and the Euro Area is only slightly better at 9% below its prior peak. Typically, the prior peak in industrial production is reclaimed within 3 years from the cyclical trough. For the world's major developed economies the current wait is in excess of 10 years, and counting. In comparison, it took 7 years to recover the pre-Great Depression level of production in the US.

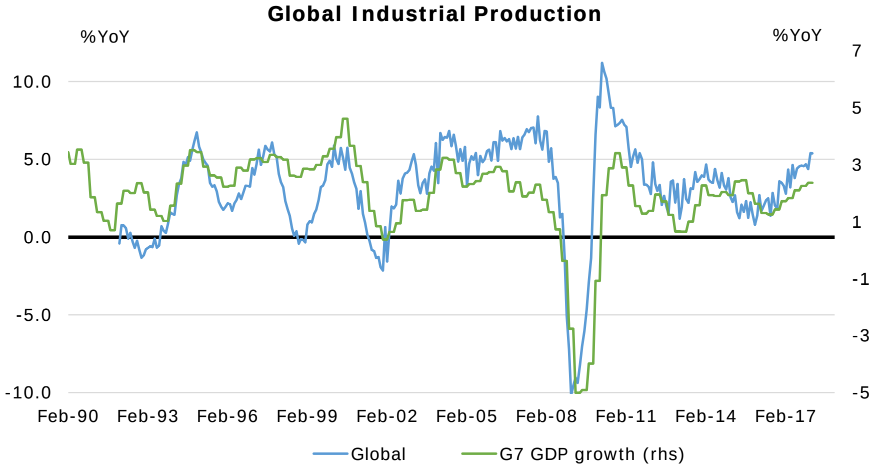
Exhibit 4: USA industrial production growth cycles.



Source: Ellerston GMF

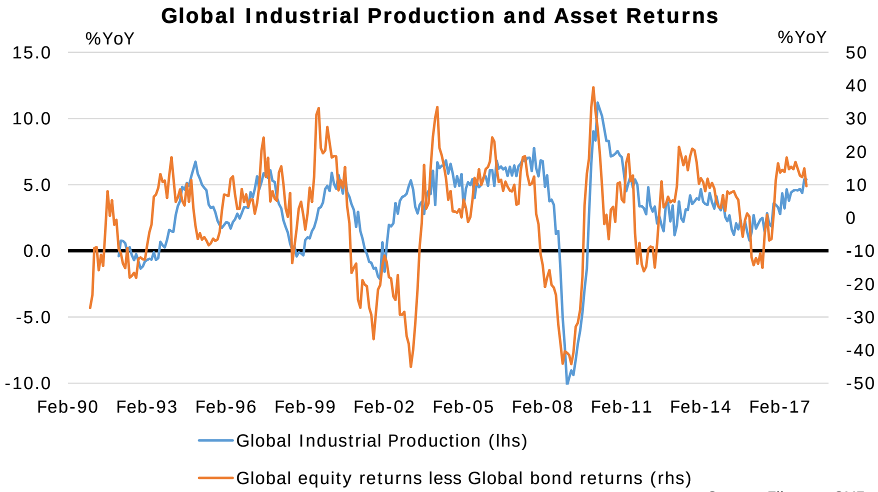
We construct our own aggregates of industrial production from the individual country data, in part to give a richer picture of the drivers of growth and in part because it gives a more timely read than official regional estimates. As Exhibit 5 shows, global industrial production growth has accelerated to its fastest pace since mid-1998 - excluding the bounce in activity growth from the depth of the crisis. Moreover, one should be careful in assuming that the rising importance of the services sectors in developed markets suggests G7 economic growth is decoupling for the global industrial cycle – the evidence is to the contrary.

Exhibit 5: Global industrial production and major developed economy growth remains highly correlated.



Source: Ellerston GMF

Exhibit 6: Identifying the peak of industrial cycles is crucial for relative asset class performance



Source: Ellerston GMF

Importantly, the peaks and troughs of the industrial cycle are incredibly important in being on the right side of the battle between global equity and bond returns through the economic cycle (see Exhibit 6).

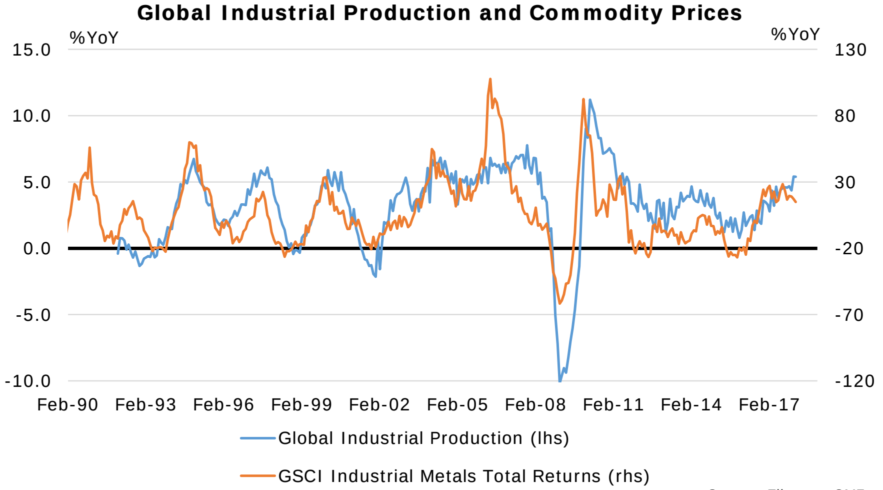
What evidence is there that the economic growth cycle is peaking?

"Pessimistic visions about almost anything always strike the public as more erudite than optimistic ones" Joseph Schumpeter.

If Schumpeter was right about anything it was that it has always been easier to sell a message of doom and despair than one of relative optimism. Any well-constructed thesis that seriously challenges the current consensus has the potential to have an outsized impact upon markets. If the industrial cycle has really peaked, and financial markets are yet to fully grasp the implications, then the impact on relative asset class returns could be profound. But what is the evidence of the slowdown? There are a host of indicators we track, including credit impulses and trade flows that have been flashing amber for several months, but the most interesting indicators include:

1. The **commodity price cycle appears to have peaked**. Industrial metal prices are one of the most reliable early lead signals on the health of the industrial cycle and once a peak has formed there are relatively few examples of the price cycle reversing to make a new high. Corroborating indicators such as the Baltic Dry Freight index and semi-conductor sales also suggest global trade growth may now be slowing.

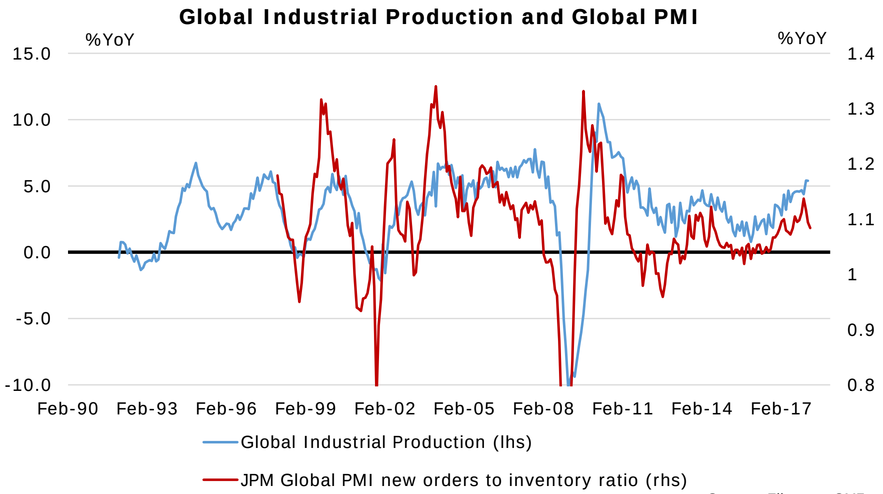
Exhibit 7: Commodity prices, freight rates and commodity currencies are the most directly exposed to the industrial cycle.



Source: Ellerston GMF

2. The most leading component in the industrial surveys – **the new orders to inventory ratio** – has shown a clear signal that the tentative weakness in the world's PMI's is set to become more evident in coming weeks.

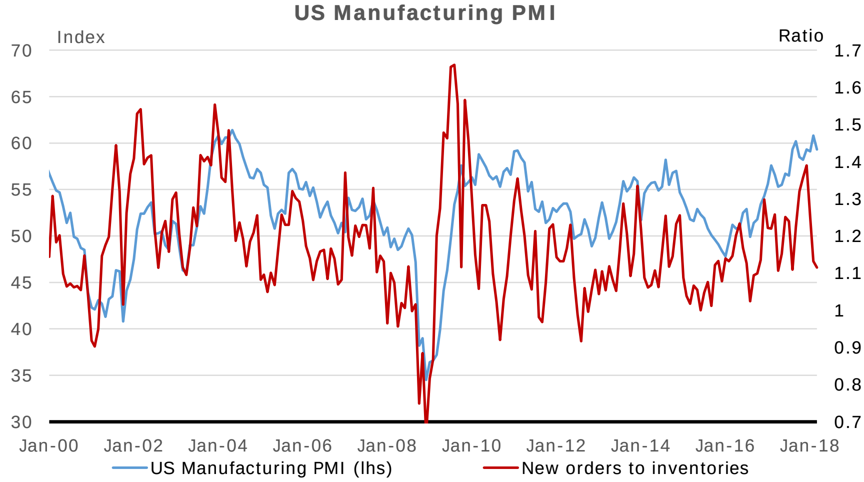
Exhibit 8: A peak in the global new orders to inventory ratio is a reliable indicator of a peak in the industrial cycle.



Source: Ellerston GMF

3. Even in the US where the economic growth expectations have been revised higher in recent weeks – the new orders to inventory ratio has weakened significantly. The implication is that the **US ISM's healthy recent readings are set to move significantly lower in coming months**.

Exhibit 9: The US new order to inventory ratio suggests the US will not be immune for the slowdown.



Source: Ellerston GMF

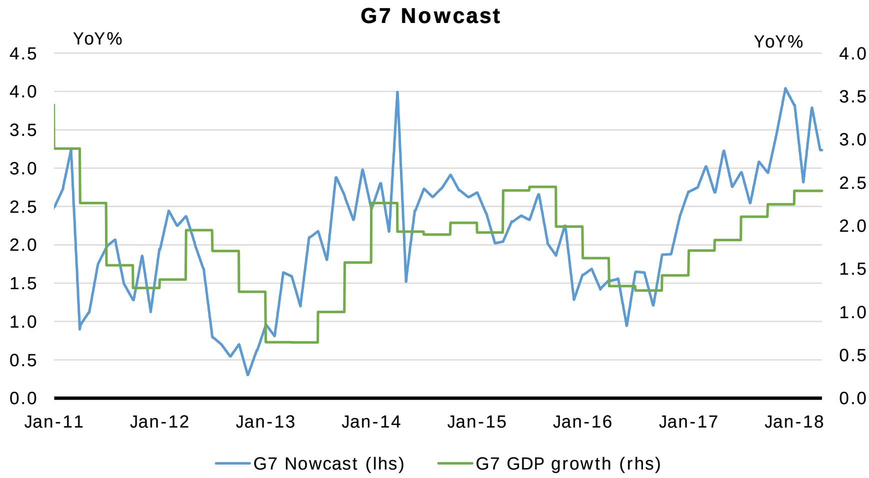
Should we be worried? Growth is still good, isn't it?

"The success of everything depends on intuition, the capacity of seeing things in a way which afterwards proves to be true, even though it cannot be established at the moment, and of grasping the essential fact, discarding the unessential, even though one can give no account of the principles by which this is done." Joseph Schumpeter.

Although our view is the industrial cycle is the clearest representation of the ebbs and flows of economic growth, 'the cycle' is a somewhat abstract concept for financial markets; mixing evidence of the pace of expansion in the real economy, together with indices of whether the market has been 'surprised' by the strength of this data, and whether this is consistent with adding exposure to risky assets. 'The cycle' for financial markets is thus part measurable, part positioning, and part sentiment driven. There is an element of intuition exhibited in financial markets where an emerging theme can dominate market behaviour for days, weeks or even months at a time until it is unpacked, quantified and has exhausted the attention span of markets.

As a result we spend a lot of time refining our measures of real time growth, data surprises, financial conditions and risk aversion to isolate these impacts. Our measures of G7 real-time economic activity, or nowcasting, suggest that the peak in economic growth in the G7 likely occurred at the very end of 2017. Although realised economic growth has printed somewhat below our nowcasting estimate of current economic growth, it is notable that our nowcast estimate tends to lead the official G7 GDP data. We are now in the interesting period for markets where the activity data in the G7 remains in a solid expansion phase but it is slowing from its cyclical peak.

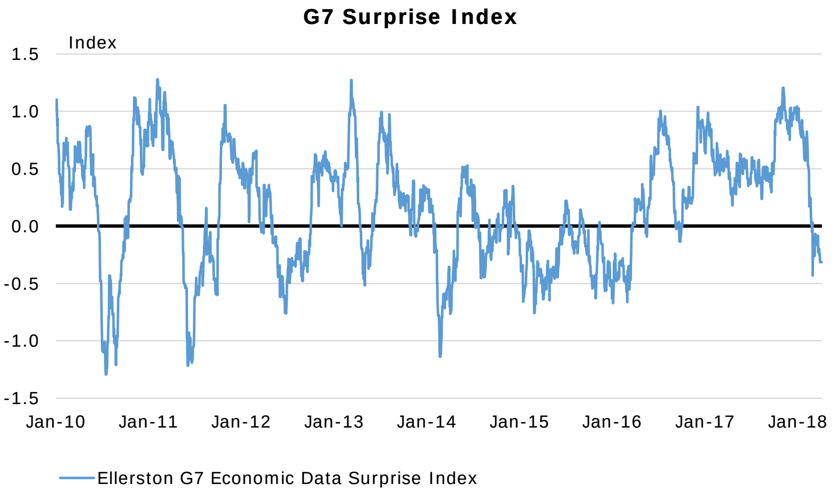
Exhibit 10: Our real time measure of economic growth suggests G7 growth likely peaked in late 2017.



Source: Ellerston GMF

How do financial markets respond to economic growth that is still good but at a slower pace than it has recently become accustomed to? It depends upon whether such a growth slowdown was anticipated or came as a surprise. Exhibit 11 shows our G7 economic data surprise index. It is notable that although the economic data prints have been robust, analysts had become too far optimistic in their forecasts relative to what was ultimately delivered. A sharp breakdown in our economic surprise index typically suggests a problematic period for risk assets is in store.

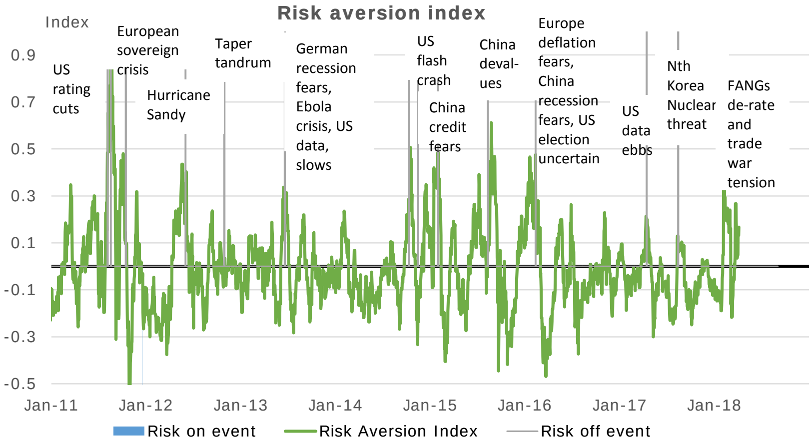
Exhibit 11: Our data surprise measures suggest analysts become too optimistic relative to what the data could deliver .



Source: Ellerston GMF

Indeed, when we look across asset classes this has indeed already occurred. Our risk aversion index that seeks to quantify the size and duration of bouts of risk aversion suggests the February and March risk off events were easily larger than the bout of US data weakness in early 2017 and the Korea nuclear threat in mid-2017. By the standards of the risk aversion events over the past 7 years, these events were significant, but the February and March risk off events were largely a function of rising volatility and the derating of the FAANGs and trade war threats, and not that the fear of a broad-based slowdown in global economic growth was in prospect.

Exhibit 12: Risk aversion has spiked twice in 2018, but neither of the spikes yet reflect the scenario of weaker growth and higher inflation.



Source: Ellerston GMF

It is virtually inevitable that post a bout of risk off behaviour, a period of renewed risk appetite emerges. However, the real questions are whether the events that drove the risk off events have passed, whether the market has fully discounted the nascent slowing of the industrial cycle, and whether the frequency of risk off events increase?

Most bad ideas can be tolerated in an economic upswing, but there is less latitude for bad ideas past the peak in the growth cycle.

"The typical citizen drops down to a lower level of mental performance as soon as he enters the political field. He argues and analyzes in a way which he would readily recognize as infantile within the sphere of his real interests. He becomes primitive again." Joseph Schumpeter.

Schumpeter would never have met President Trump. At the time of Schumpeter's death Trump would have been only four years of age. Yet he may well have been channelling a version of the current President's transition into politics when he made the above observation. Infantile and primitive arguments are now the mainstay of the US administration, particularly as members of the administration who believed they could mould the President into a more conventional GOP leader have been shed. To be fair, the President is mostly doing what he said he would do during the election campaign, yet as Schumpeter neatly opined *"the accuracy of an economic vision is not always commensurate with the analytical ability of those who hold it"*. Indeed, few could have imagined the haphazard delivery of the policy recommendations on trade and tariffs, the dangers of deploying a debt funded large discretionary fiscal stimulus into a fully employed economy, the constant threats to scrap NAFTA at a whim and the thin line being tread on obstruction of an ongoing investigation into the Administration's ties with Russia.

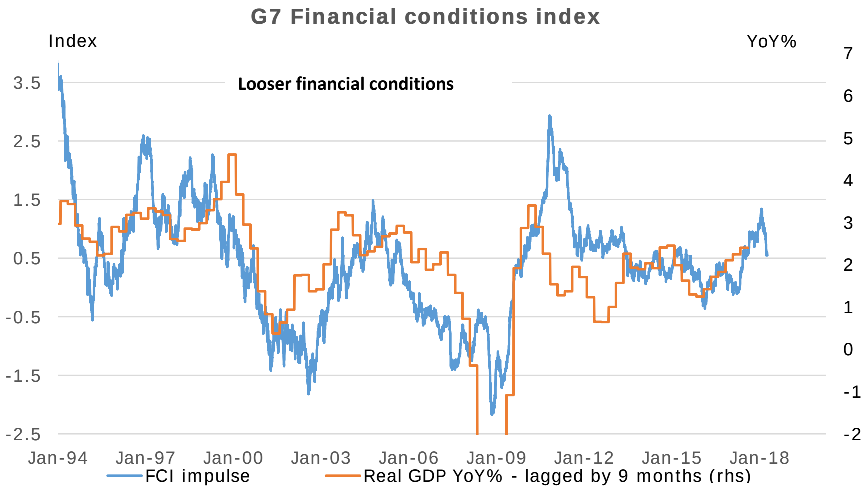
Nevertheless, one can also imagine many of these issues dissipating rather than escalating in coming months. The Mueller investigation could conclude without directly linking the President to any illegal activities, NAFTA may well be signed in coming weeks, the fiscal package may prove to be less pro-cyclical than currently feared and China and the US may end up reaching an agreement that prevents a dramatic escalation of events. Indeed, it's likely that many of these issues are resolved in a manner that avoid worst case scenarios. Yet, the potential for missteps and new distractions remains large in the interim.

Moreover, we have always believed the version of history that reads the election of Trump provided the economic catalyst to the global economy was flawed. The recovery started long before Trump became president, commenced outside of the USA and has persisted in spite of the distractions created by the US administration. What concerns us is that our long held views on US inflation pressures continues to play out as predicted, yet what financial markets have likely failed to fully digest is that they are now facing a period of weaker economic growth in concert with higher inflation pressures.

That is potentially a bigger threat to equity and credit markets than current trade tensions. Indeed, there are few examples of a modest downswing in economic growth and rising inflationary pressures, and rarely do these periods exist for more than 6-months of time. Either inflation follows growth lower or the growth cycle merely experiences a brief aberration and inflation pressures continue to build.

For now, financial markets will likely assume a brief aberration in the growth cycle and attribute factors such as weather, inventories and seasonality in the economic data for the weakness in 1Q18 data. However, it is important to note that the weakness that we are seeing in global indicators such as the PMIs currently will be exacerbated by the recent equity market declines when the data is released next month. This risks feeding into the weaker growth/higher inflation narrative for the next month or two. Should this feed into a further bout of equity market weakness then financial conditions will continue to tighten. As Exhibit 13 shows this tightening in financial conditions risks entrenching a feedback loop whereby rising risk aversion results in risk asset price declines, tightening financial conditions and eroding the G7 economic growth cycle.

Exhibit 13: Beware the feedback loop of rising risk aversion, falling asset values, tigher financial conditions and weaker growth.



Source: Ellerston GMF

So how to position for the next month? The one thing we can say with some degree of certainty is that volatility will remain a key feature of the month ahead. Equities remain close to sustaining the break through their 200 day moving average in the US and unleashing a wave of technical selling. Further weakness in the industrial cycle presents the most likely catalyst for that event, whereas the risk events of tariffs, NAFTA and Mueller investigation present as potential positive and negative catalysts. Meanwhile inflation pressures look to be well entrenched and employment indicators will likely continue to reflect the strength of where the economy was, rather than necessarily signalling where it is going. Ultimately it is these inflation and labour market indicators that will keep the Fed engaged in its program of ongoing rate hikes. Indeed, unless financial conditions continue to tighten sharply it is unlikely the Fed will signal a fundamental shift in its strategy.

In the spirit of Exhibits 1, 2 and 3 our base case remains that the broader upswing in the global industrial cycle is not complete, but there are cycles within cycles, and the market is yet to embrace the notion of a mid-cycle slowdown of unknown depth and duration. In such an environment commodity currencies, industrial metals, and cyclical sectors of the equity and credit markets are vulnerable to corrections.

Tactically we have retreated from the more pro-cyclical longer dated trades until the weakness evident in our leading indicators of the global industrial cycle stabilise. The safer play is to continue to focus on the Fed delivering on its plans in 2018 and 2019, and to add some tail hedges to the portfolio.

Ultimately, we believe the heartbeat of the global industrial cycle remains robust but the beat is becoming more irregular and after a period of overexcitement it is now prone to slow somewhat. Signs of rising inflation and wages may be starting to line the artery walls, and financial markets may yet have to fully grasp what a bout of slower growth and higher inflation may mean, but our central case is that the industrial cycle is not suffering a cardiac episode, but a period of cardiac dysrhythmia, a condition which is likely to persist for several more weeks.

"I set out to become the greatest lover in Vienna, the greatest horseman in Austria, and the greatest economist in the world. Alas, for the illusions of youth: as a horseman, I was never really first-rate." *Joseph Schumpeter*