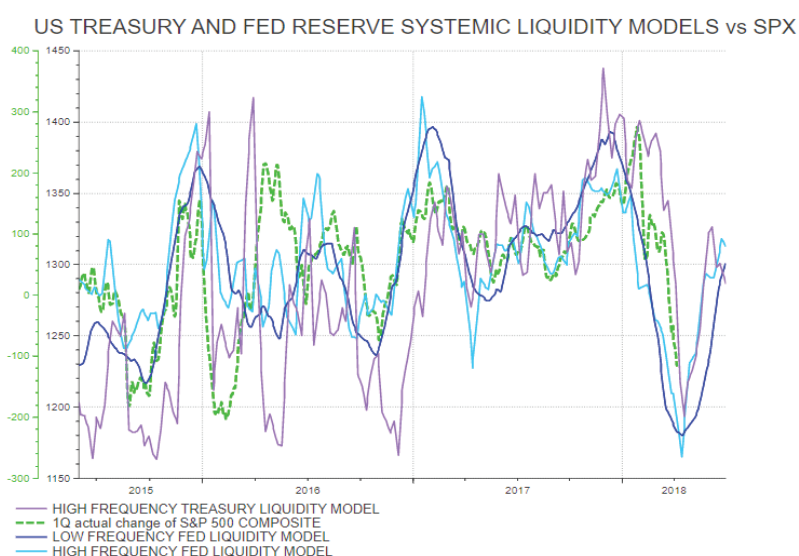


12 / Timing the Late Cycle Stage: growth in risk asset prices likely until late Q2-early Q3 2018

We wrote in the January 2018 Capital Observer issue that the growth cycle is transitioning towards the late stage. We described that in H2 2017, the wariness of investors regarding the elongated business cycle gave rise to counter-intuitive results as in equity defensives outperforming equity cyclicals, large caps outperforming small caps, a weaker U.S. dollar and a flattening U.S. yield curve in the face of cyclical reflation. We have seen it before – the market performance in 2017 was typical asset performance and state of investor sentiment just ahead of a last reflation stage. We expect this final stage to unfold further over the next 3 to 6 months.

We added: “... we expect this final stage to unfold over the next 6 to 8 months. And at the last stage of the cycle, the pessimism seen last year will disappear (as is wont to during the last, blow-off stage of a business cycle). The wariness seen last year should disappear as many investors who stayed away will re-embrace the markets.”

During the next few months, risk assets will get support from still positive macro, but global/US systemic liquidity is receding in the aggregate (which has long-term implications for risk asset prices), and inflation risk is putting pressure on the Fed, which may again over-tighten. That poses risk to risk assets in the longer-term (which will probably come to a head in Q3, this year). Nonetheless, a multitude of domestic liquidity flows (real money balances) will start to re-expand during the period encompassing the 3rd week of April and 1st week of May. We expect to see the trough of risk asset prices (equities, High Yield, Bitcoin, and the US Dollar) during that period, which could be followed by a new upside phase of the bull market.



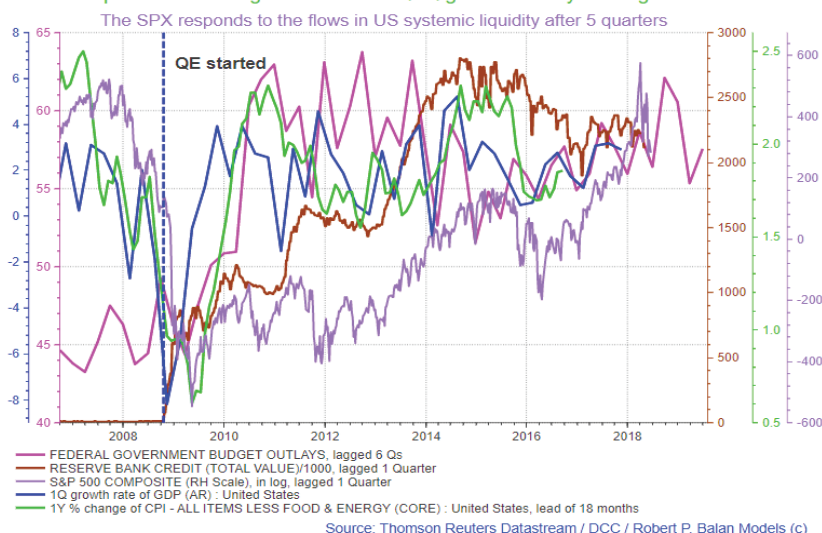
Coincidentally, the equity market also expects the forthcoming earnings season as generally being positive, especially into AMZN/GOOG earnings in late April, early May. If the numbers come out as supportive as many equity analysts expect, we could be in for some interesting valuation expansion going into the end of the second quarter. US companies are expected to report earnings growth of 17 Per cent per share for the first three months of the year, as the recent cut to the corporate tax rate helps deliver what would be the biggest quarterly increase in seven years. Wall Street analysts have forecast broad-based gains in earnings with all 11 sectors of the S&P 500 expected to report growth (Bloomberg).

We lay down the foundation of this thesis.

We begin with what passes as “first principles” in macro-economics. There are lags between government/central bank policy moves and their subsequent impact on economic data and asset prices – however, these lags are often much longer than many investors expect. There is no such thing as «Efficient Economy Hypothesis.» The usual lag is often 5 to 6 quarters, so it is very easy to be misled by current fiscal and monetary policy initiatives (see 1st graph on this page). Therefore, 2018 should provide more concrete results arising from the fiscal initiatives undertaken by the Trump

A 5 to 6 Qs lag before impact of fiscal, monetary initiatives appear

Example: Core CPI lags behind GDP QoQ growth rate by as long as 18 months



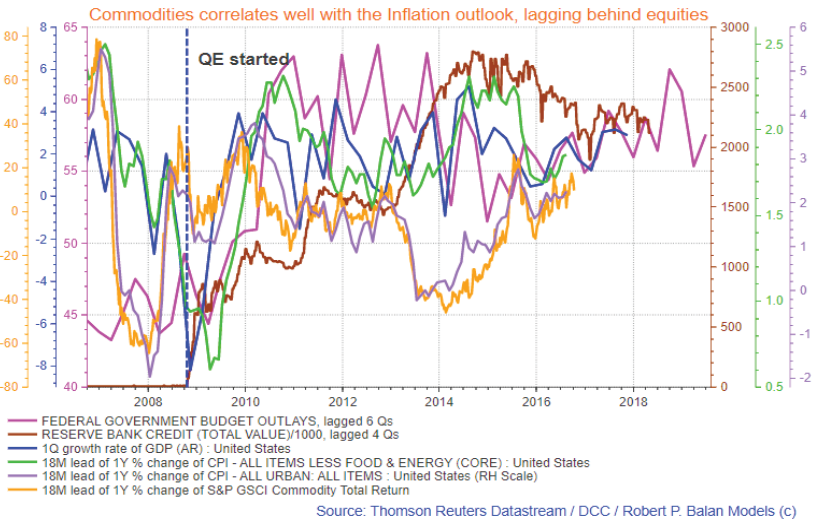
administration, and monetary policy initiatives adopted by the Federal Reserve, in 2017.

The graph above illustrates that GDP growth reflects fiscal initiatives only after a circa 6 quarters lag, while the stock market discounts those initiatives after 5 quarters delay. But what is truly astounding is that Core CPI displays evidence of the impact of GDP changes 6 quarters thereafter, and trails the impact of fiscal initiatives for another, added 6 quarters. It is so easy to be led astray, given the long, distributed lags between steps taken by the government and the central bank, and the actual time their effects show up in asset prices. The other implications could be more significant: if the correlations are proved right, US GDP growth might have an important inflection point (to the downside) in Q3 2017. Correspondingly, the equity markets might make a peak before that (in late Q2), or if that does not happen, then we look for a top within Q3 this year.

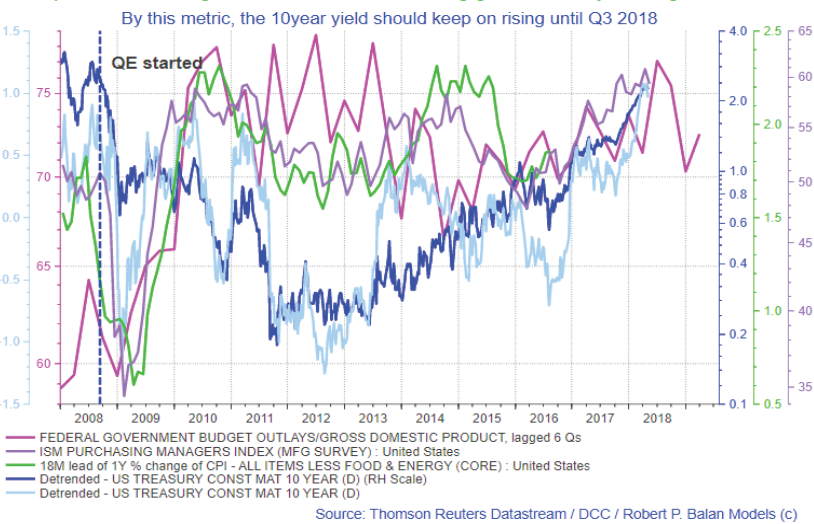
There are also profound implications for commodities. Basically, the outlook for commodities should be tied up with the inflation view. And currently, there are issues with that. (1) One problem is that inflation lags behind changes in GDP growth by 18 months; furthermore, the distributed lag of fiscal and monetary initiatives until it shows up in GDP changes could be as long as 5 quarters (see 1st graph on this page).

Commodities do not synch well with equity cycles, which lag fiscal/monetary initiatives with shorter lags (2 to 3 quarters). This is the reason why commodities can still remain positive (relative to equities), at the keel-over inflection point of the growth cycle. Generally, all asset prices get it when the growth cycle peaks, but commodities would still be benefitting from the distributed lags of the previous policy initiatives. That promotes the outperformance of commodities (relative to equities), and that is what makes them «defensives»

A 5 to 6 Qs lag before impact of fiscal, monetary initiatives appear
Example: Core CPI lags behind GDP QoQ growth rate by as long as 18 months



A 5 to 6 Qs lag before impact of fiscal, monetary initiatives appear
Example: Core CPI lags behind PMI manufacturing growth rate by as long as 20 months



as an asset class at the cycle's terminal stage. So, definitely, commodities are highly recommended as should part of investment portfolios in a «defensive» capacity, especially now as we are transitioning towards the keel-over point of the growth cycle.

For non-risk assets (e.g., bonds, in yield terms), the procedure is not straight-forward. First, we have to add to the matrix a variable that also drives changes in the Core CPI, and that is the PMI manufacturing survey. The PMI manufacturing leads Core CPI by 20 months on average, and therefore is a good indicator of expectations of actual inflation over two years. By this metric, bond yields should be rising to just before, or up to the end of Q3 2018 (see 2nd graph on this page).

In previous publications of the Capital Observer, we have shown much empirical evidence that Core inflation

lags far behind changes in growth and activity. For instance, Core CPI trails quarterly GDP by 18 months; it also lags behind PMI manufacturing by 22 months. That makes sense because quarterly GDP lags behind manufacturing PMI by a quarter. And we also know from experience that bond yields tend to provide hints of ongoing growth three months ahead (because of the reporting lag on quarterly GDP). Therefore, wherever PMI manufacturing goes (as it responds to systemic liquidity provided by fiscal and monetary initiatives), that is where the long rates should be going (assuming no severe extraneous dislocations happen at that time). We believe that PMI manufacturing may start slowing down in late Q3 – therefore the long rate may peak just before, or at that particular time (see 2nd graph on this page).

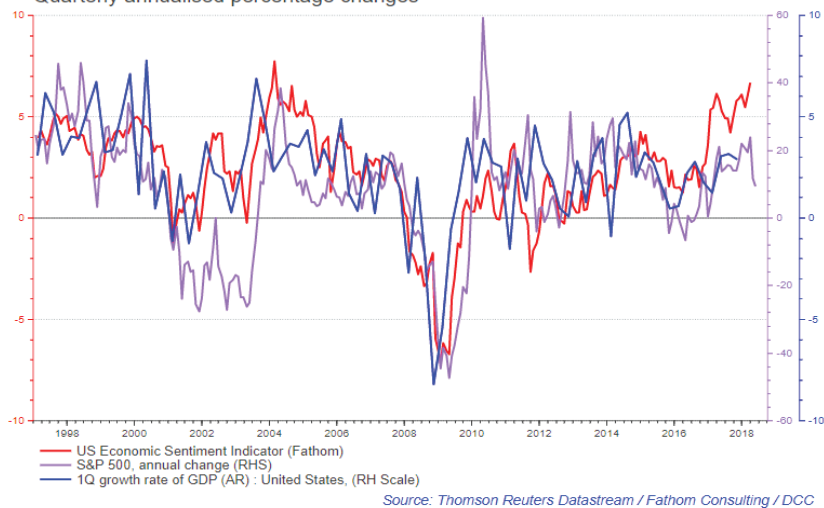
The background data is still favourable. US macro conditions are still consistent with historical norms which prevail during the last stage of the cycle. U.S. business sentiment and economic indicators have been trending higher; manufacturing and services surveys as well as capital spending plans tracked by ISM have been rising as well. Both variables suggest PMI manufacturing will be rising until at least September, this year (see the two first graphs on this page).

Nonetheless, macro data is not the last word in the forecasting of asset prices. The economy (GDP growth) is frequently a lagging indicator. Even so-called «first principles» relationships in Economics frequently flip-flop. In our experience, the most reliable correlations (relatively speaking) can be found between the causality from monetary flows (changes in systemic liquidity) to the changes in asset prices (see 3rd graph on this page). Very often, it is the change rate in the nominal values (flows), not the absolute changes in nominal value (the stock), which makes the most impact. Note, however, that the response of asset prices to the impact of those flows is variable; some assets respond more quickly to the flows; for other assets, the impact of those flows come later. Apparently, the tenets of the Efficient Market Hypothesis (EMH) are suspended in those relationships. We show two examples to illustrate the varying relationships between liquidity flows and asset prices.

In the last graph of this page, the Fed bank reserves and the Reverse Repurchase Agreements being conducted by the central bank have significant impacts on the high-frequency valuation of the US Dollar TWI. The lead time of the liquidity variables however is very short, sometimes even practically non-existent. To use this information profitably, look for systemic liquidity conditions, macro data, or financial

US Economic Sentiment Indicator

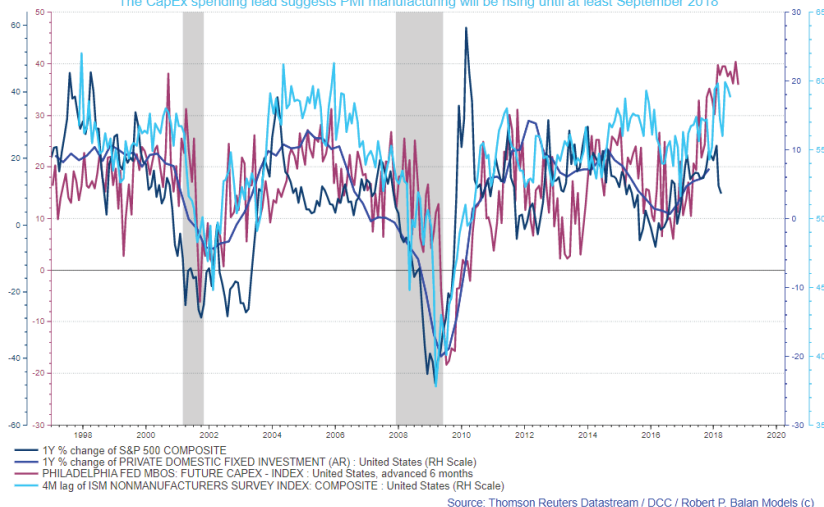
Quarterly annualised percentage changes



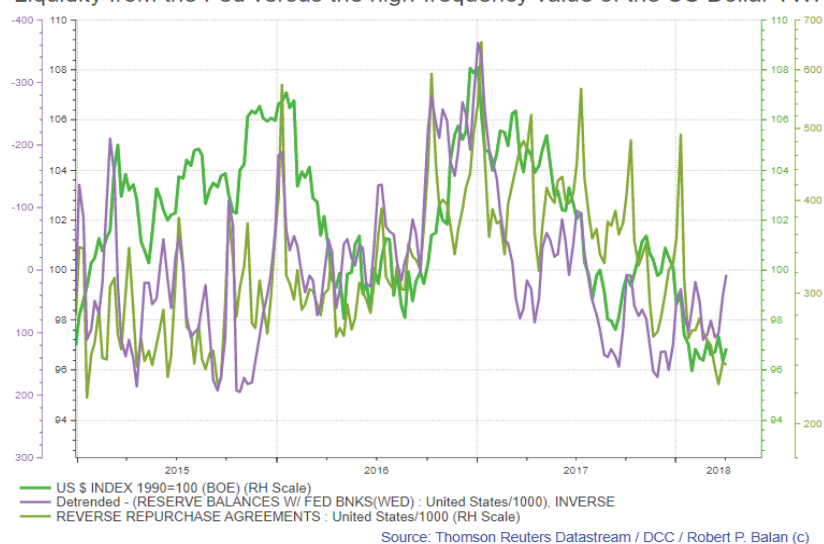
Future corporate CapEx plans still surging, presaging higher capital spending in late 2018

Business spending plans (CapEx) over the next 6 months have been rising sharply since Q2 2016

The CapEx spending lead suggests PMI manufacturing will be rising until at least September 2018



Liquidity from the Fed versus the high-frequency value of the US Dollar TWI



variables which can modify the course of the bank reserves and the conduct of the reverse repo agreements. For example, if you believe that the Fed will reduce the bank reserves to a significant degree over time, as they have declared

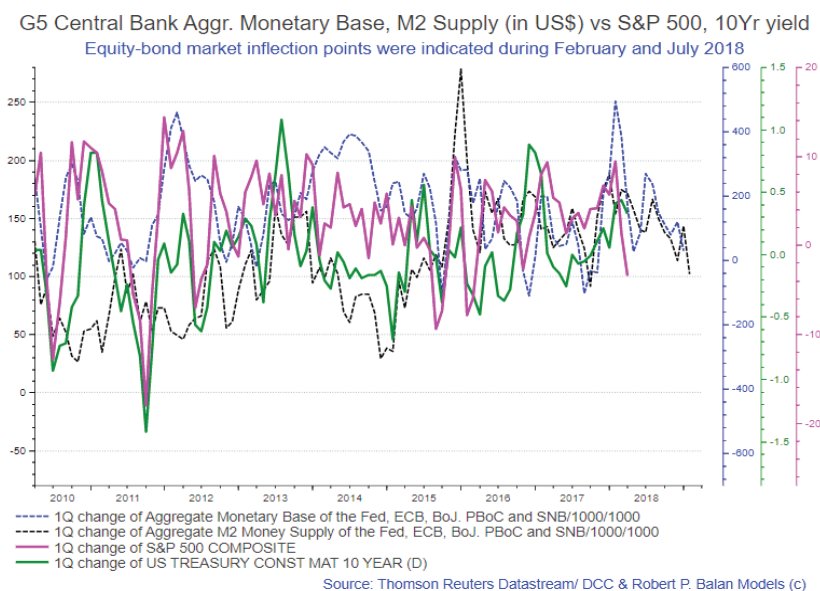
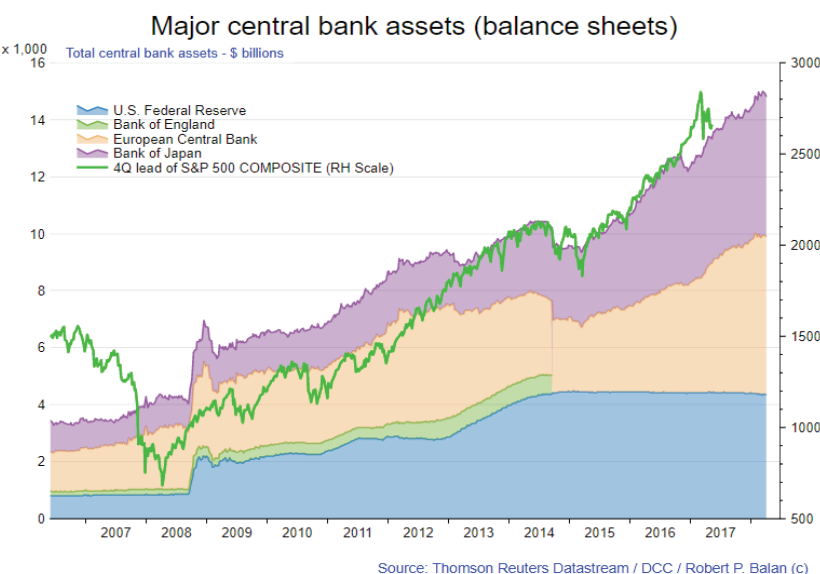
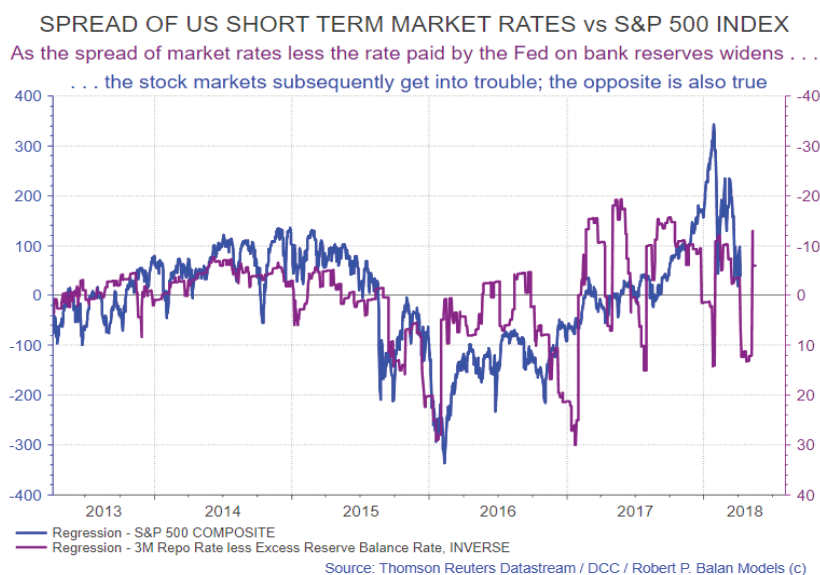
in several FOMC meetings (and have indeed started to reduce their balance sheet) why would you be bearish on the US Dollar TWI long term?

It should therefore come as no surprise that in very many cases, some market prices are best forecasters of other asset prices. And frequently, the variable co-movements of two asset prices (spreads) can frequently provide clues as to the future behaviour of other assets, and in fact, as to the future state of the financial markets. **The spreads of market rates are especially very useful in this regard – in this case a market rate (3-mo. Repo rate) and the rate paid the Fed on bank reserves.**

As the spread of market rates less the rate paid by the Fed on bank reserves widens, the stock markets subsequently get into trouble; the opposite is also true. This example(see 1st graph on this page) is simple and straightforward, but even at this state, the spread is already useful, as it could telegraph likely equity market moves several weeks in advance (if properly set up). Imagine how much more useful these tools can be with the application of statistical and numerical analysis to refine expectations and define probability cones - important information when making investment or trading decisions.

At The Capital Observer, we take the liquidity being issued or being absorbed back by global central banks, the Federal Reserve and the US Treasury (liquidity flows) and model the manner those real money balances impact asset prices. We present some of those models in the rest of this article. These models are capable of providing short-term market forecasts, but they are also scalable so as to look as far as a year or longer.

The grand-daddy of systemic liquidity is, of course, the aggregate stimulus provided by the leading global central banks (the Fed, European Central Bank, Bank of Japan, People's Bank of China, and Swiss National Bank). Their aggregate balance sheets have been feeding the markets since late 2008. Due to their relatively large volume, the aggregate G5 central bank stimuli (in the form of bank reserves) have also become their de facto Monetary Base



(MB). Due to the small percentage of the cash percentage (notes and coins) to the whole, banks reserves being held by central banks have become their MB. The aggregate global central bank balance sheet has been credited with pushing up the valuation of equity markets around the world (see the 2nd & 3rd graphs on this page).

The relationship of the monetary base to M2 Money Supply is well established and tested. MB equates to M2 times the so-called “money multiplier (MM).” MM is currently 3.59 – the figure attained by dividing M2 of \$13.858 trillion today by \$3.855 trillion for the monetary base (*see 1st graph on this page*). Put another way, MM is determined by changes in currency held by the public, the Treasury’s deposits at the Fed, excess reserves of the depository institutions and the ratio of demand deposits to time and savings deposits.

Of the global central banks, only the Fed is currently reducing its balance sheet. Therefore, if we take the aggregate balance sheet of central banks which have gone the way of Quantitative Easing (G5 – US, Japan, Eurozone, China, Switzerland), high frequency changes (flows) in the aggregate global central bank balance sheet will merely reflect the Fed’s ongoing QT program at this time. Already, the impact of the Fed’s balance sheet reduction is being seen in the wobbly performance of risk assets, which are linked to the outflows we are currently seeing in US M2 Money Supply and the US Monetary Base. That is impacting the near future trajectory of asset prices, as shown in a previous graph.

Excepting the Federal Reserve, most of the G5 global central banks are still adding to or are holding the nominal levels of stimulus. For instance, the ECB will still be buying securities until December this year. The Bank of Japan has been making hints of further tapering their stimulus activity, but has, so far, refrained from any drastic reduction of systemic money inflows. The rate of inflows still looks positive but is slowing down, and will probably reach a keel-over point with regards to their impact on asset prices, by Q3 this year.

