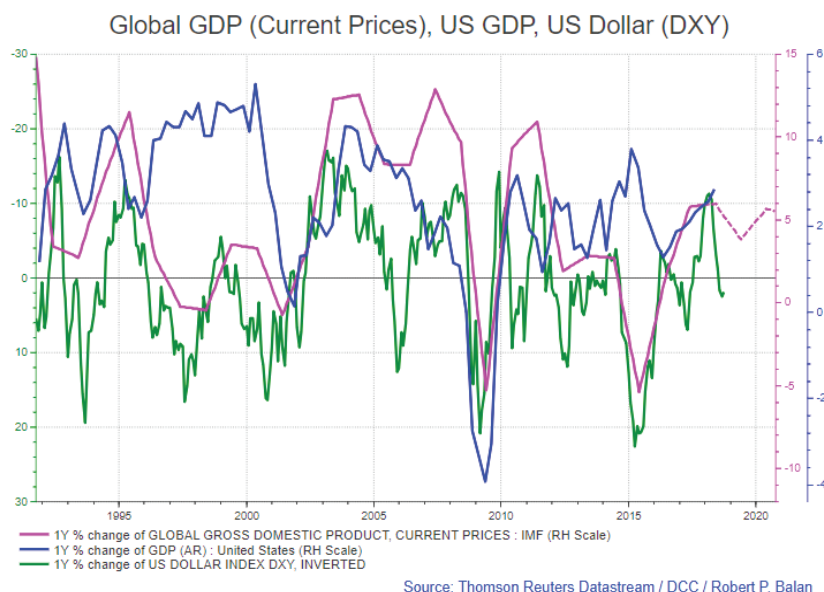


45 / Macro and micro factors are aligning to push the US Dollar even higher going into H1 2019: winners and losers in its wake

Since early in the year, our thesis has been that the dollar is in a strengthening phase, and will likely remain strong over the near term for a number of reasons, one of which is expectation in the coming year **that global growth will be uneven – the US will grow while the Rest of the World (RoW) will not**. That's has not been true as a whole – the RoW has grown along with the US, but it is the prospect of variance in growth between the US and the ROW going forward that has lately powered the ascent of the US currency. **There is nothing like weaker growth in the RoW that pushes the US Dollar higher. There is a negative covariance between Global GDP and the US Dollar. Weaker global growth strengthens the US Dollar** (see 1st chart on this page), and vice versa. And the outlook of weaker RoW growth during 2019 has really provided impetus for a USD ascendance.

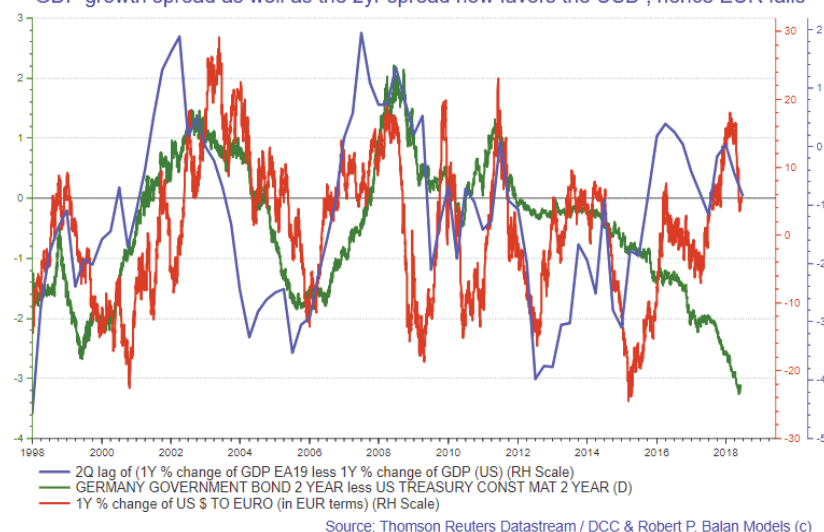
The latest World Economic Outlook report projects that global growth will remain steady over 2018-19 at last year's rate of 3.7 percent. This growth exceeds that achieved in any of the years between 2012 and 2016. It occurs as many economies have reached or are nearing full employment and as earlier deflationary fears have dissipated. That's the "real GDP" but it is the "current" global GDP growth which has relevance to the US Dollar. The forecast of the IMF shows falling "current GDP" for 2019.

There are also other factors contributing to the dominance of the US currency at this time. And we go from the macro scale, represented by (1) the growth or non-growth of the Rest of the World vs US, (2) differentials in central bank monetary policies, (3) by differentials in regional capital flows, to micro scale represented by (1) domestic systemic liquidity proxied by the level of term (money) market rates, and (2) by the spreads of those short-term market rates.



Original graph in the June Capital Observer

EU-US DIFFERENCES IN GDP GROWTH RATES AND 2YR BOND YIELDS
GDP growth spread as well as the 2yr spread now favors the USD , hence EUR falls



We have discussed the impact of growth differential between the US and the RoW above. Next, we look at the difference in central bank policies, and that too contributes to the Dollar strength. In the US, the Fed's policy tendency is generally for continuation of gradual tightening and raising of interest rates. The monetary policy drift around the world has been a little bit different, particularly in Europe, where the European Central Bank (ECB) want to "normalize" policy (raise rates) but are constrained by the uneven recovery being shown by the EU economy.

In the June 2018 Capital Observer issue, we said:

"Almost all the macro factors remain in favour of the US currency, especially those that matter in FX currency valuation. Against the EUR, the dollar's most stalwart rival, GDP growth spreads now lean favourably towards the U.S. With regards to the spread of the 2yr bond and 2yr bund (instruments closest to the official policy rates), it's almost no contest - the spread is massively in the U.S. dollar's favour (see 2nd graph above).

The differentials in growth and interest rates remain massively in favour of the US Dollar and will likely stay that way for some time.

Higher US interest rate relative to those of other major central banks tends to attract funds via the capital account, which acts to raise the value of the domestic currency (USD in this case). Rate differentials are therefore one of the primary impetus for the recent improvement of the capital account balance. These capital inflows, composed of repatriated domestic capital and net foreign inflows, have been, and for some time to come, will be the primary mover of the US Dollar's exchange rate vs other global currencies.

In the June 2018 Capital Observer issue, we also included these observations:

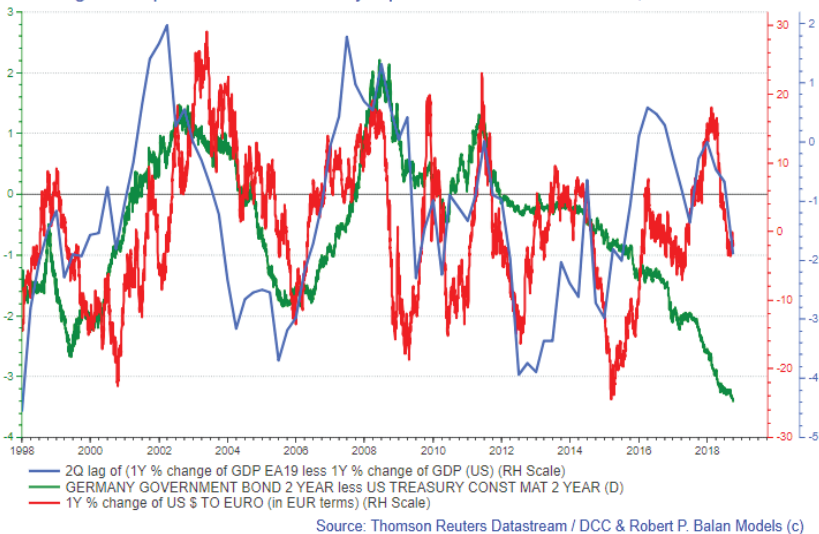
"The divergence of the direction of policies between the US Fed and other major central banks, will be a major linchpin in bullish arguments looking for further US dollar strength down the road. But that is not the sole argument for our enthusiasm for the US currency. Extra support is coming from elsewhere. We suggest instead that the US dollar's continuing strength is, and will be, coming from the steady improvement of the US Capital Account Balance."

The capital account balance reflects net change in ownership of national assets and is one of the components of a country's Balance of Payments ledger, the other being the Current Account Balance. A surplus (or improvement) in the capital account balance means money is flowing into the country; the inbound flows represent non-resident borrowings or purchases of assets.

This is how the 2nd graph on previous page looks now

EU-US DIFFERENCES IN GDP GROWTH RATES AND 2YR BOND YIELDS

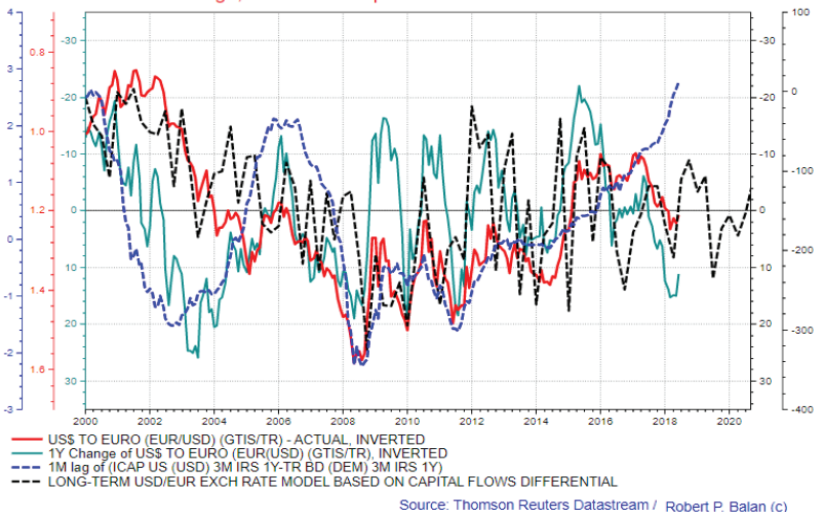
GDP growth spread as well as the 2yr spread now favors the USD , hence EUR falls



Original graph in the June Capital Observer

USD/EUR Models: based on swap rates, capital/trade flow differentials

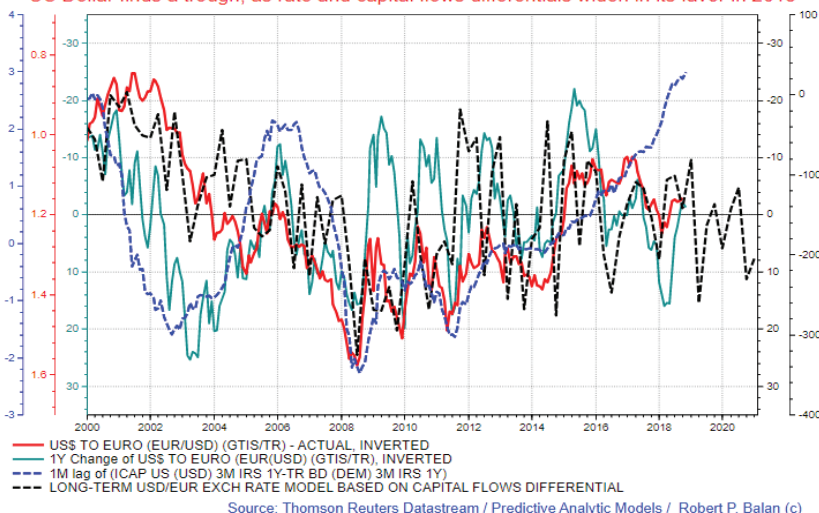
US Dollar finds a trough, as rate and capital flows differentials widen in its favor in 2018



This is how the chart above looks like

USD/EUR Models: based on swap rates, capital/trade flow differentials

US Dollar finds a trough, as rate and capital flows differentials widen in its favor in 2018



What's especially significant is the difference in US and EU capital account flows, whose effect on the USD vs. EUR relationship has a long, distributed lag. The relationship therefore provides a long-term outlook of the likely path of the currency pair's exchange rate (see last chart on previous page). For the rest of the year, the lagged effect of that differential will significantly favour the US dollar.

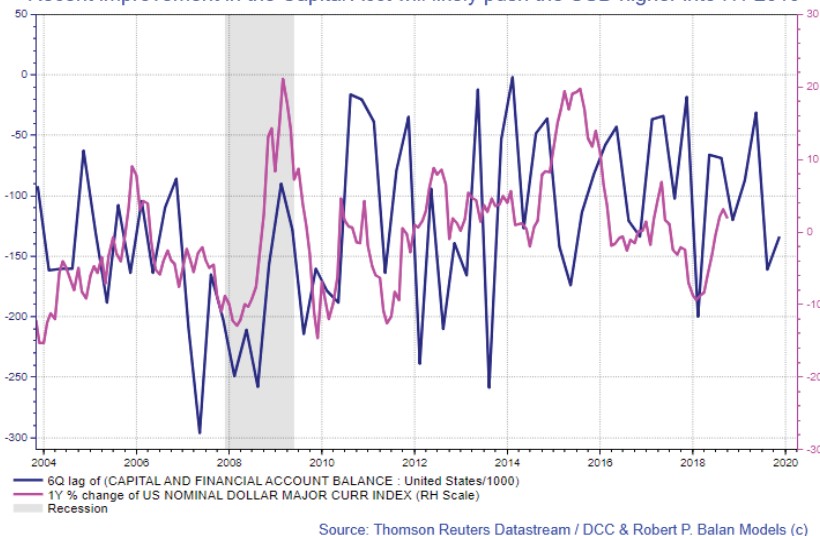
The changes in the US capital account has a large impact on the US Dollar exchange rate, and its impact normally shows up in the valuation changes of the US currency 5 to 6 quarters later. Capital accounts improve when non-resident (external) capital inflows increase or resident (domestic) capital outflows slow. The sharp improvement in the domestic capital account since Q3 of 2016 will therefore likely to result in further rise of the US dollar until the first half of 2019 (see 1st graph on this page).

On the micro scale, the media has been ascribing the strength of the US Dollar to supposed "drying USD liquidity." Here is a vivid description of this supposed phenomenon; we do not make any attribution as this is a typical narrative on this meme:

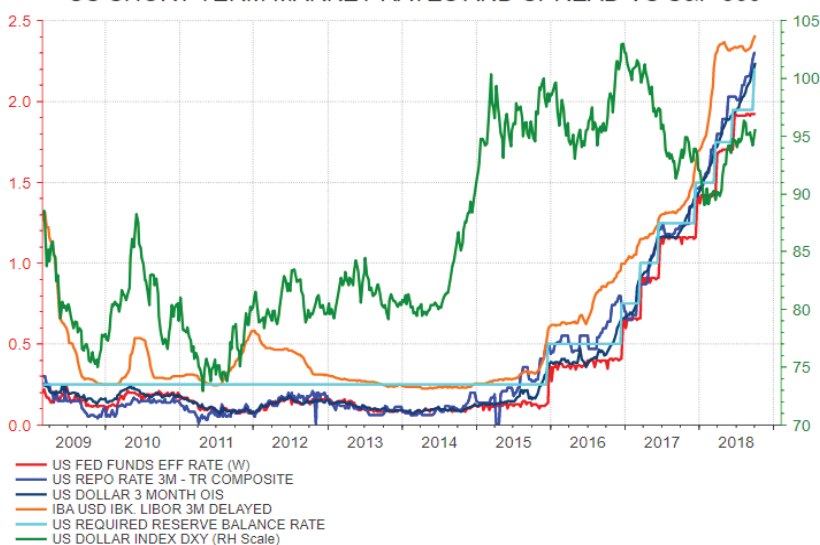
"This is going to cause an evaporation of dollar liquidity – making the markets extremely fragile. Putting it simply – the soaring U.S. deficit requires an even greater amount dollars from foreigners to fund the U.S. Treasury. But if the Fed is shrinking their balance sheet, that means the bonds they're selling to banks are sucking dollars out of the economy (the reverse of Quantitative Easing which was injecting dollars into the economy). This is creating a shortage of U.S. dollars – the world's reserve currency – therefore affecting every global economy."

Narratives like this shows that the "drying USD liquidity" phenom is misunderstood by the media and many analysts. That phenom implies that there can a dearth of Dollars in

Sharp improvement in the US Capital Acct is pushing the USD TWI higher
Recent improvement in the Capital Acct will likely push the USD higher into H1 2019



US SHORT TERM MARKET RATES AND SPREAD VS S&P 500



the financial system. That is patently false -- the Fed can create digital Dollars at the touch of a computer key -- remember, international transactions are conducted with digital, not PHYSICAL dollars. (This meme of need for PHYSICAL dollars, is a hang-over from the Gold standard, a thing that many, like Bill Gross, never understood to have gone out of the window so many years ago). And the Fed always obliges when there is need for Dollars, digital or physical (that is why they tinker with the Monetary Base).

What this "drying up in liquidity" really means is that new, particular supply of US Dollar has become very expensive. US term (money) market rates have gone very high -- repo and term (money) market rates are at the highest since January 2008, when the

Great Financial Crisis started (see 2nd chart on this page). **There is a feedback loop between repo and term market rate vs the Fed Funds Rate, and the net effect in that both are spiralling higher** (these two variables feed on each other -- something that anyone with an understanding of fluid dynamics easily understand). **The impact of the rising FFR (which will even go higher as Powell implied last week -- goosing up rates across the spectrum sharply), lays the groundwork for a crisis in 2019.**

As in the oil business, it is DEMAND that drives the show. The demand side for US Dollars is encapsulated by the US Capital Account. The effect of the distributed lag in the **US Capital Account has made demand for bonds and Dollars stronger,**

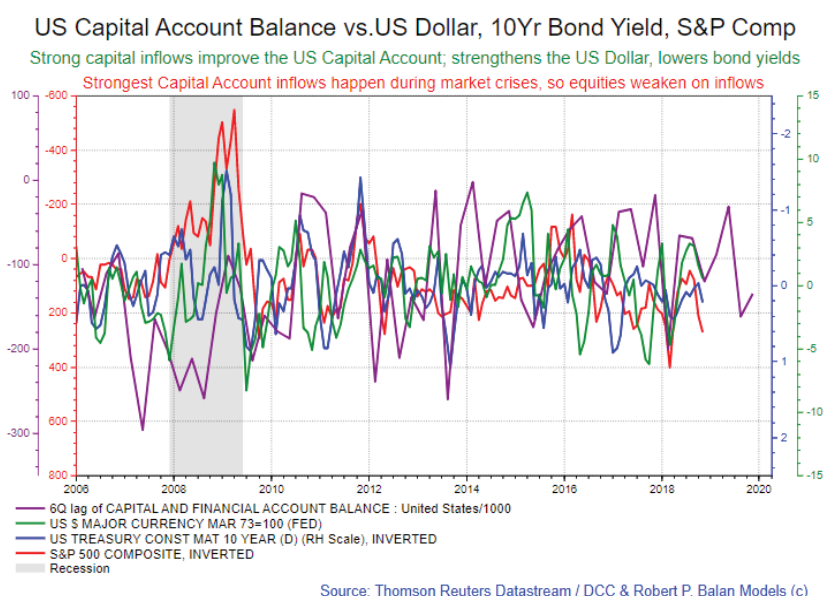
the combined effect of which will weaken equities. Strongest Capital Account inflows happen during market and/or economic crises, so yields fall on demand for safe haven paper, strengthening the DXY -- that weakens equities. For most of H1 2019, get used to falling yields, stronger DXY and weaker equities. And perhaps a crisis, or two.

And the yield curve should invert (something that does not trouble Powell and cohorts). But do not fear the yield curve inversion. Fear the subsequent steepening of the yield curve, because when that happens, a recession is about to begin in matter of weeks, not months. This has been discussed in another piece in this Capital Observer issues (*"The Fed shifts to restrictive policy stance, push yields sharply higher and steepen the yield curve; preparing for fallout on risk assets"*).

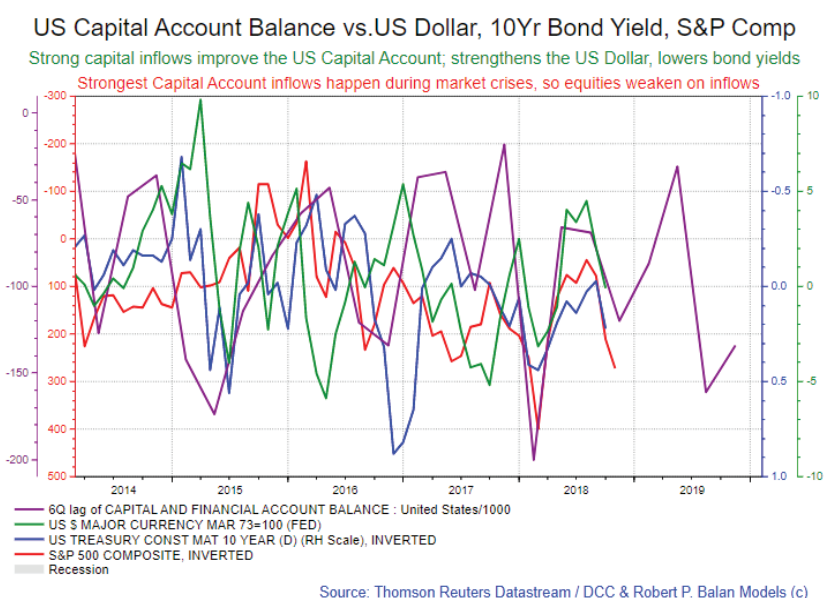
What is left unspoken is that Capital Account inflows to the US are both symptom AND cause of financial and economic crises elsewhere in the globe. That describes the Emerging Market situation very clearly at this juncture – capital is fleeing the EM and are flowing into the US.

Here is a chart (see 1st chart on this page) of the US Capital Account vs. USD, Bond Yields and Equities (see chart below). Note that (1) strong capital inflows improve the US Capital Account; strengthens the US Dollar, lowers bond yields, and (2) strongest Capital Account inflows happen during market crises, so equities weaken on inflows.

Term (money) market rates have very strong influence on the day to day fluctuation of the US Dollar. The term market rates closely mirror the Federal Funds Rate, so that is no big surprise. Clearly, the change rate of the repo rate which correlates well with the nominal changes in the US Dollar (DXY), (see 3rd graph on this page).

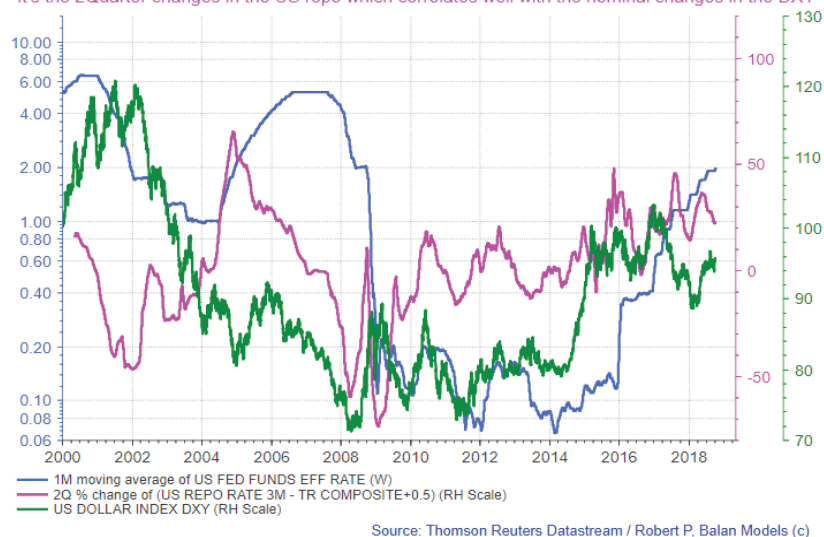


Zoomed View



FFR vs US SHORT TERM MARKET RATES (REPO) vs US DOLLAR (DXY)

It's the 2Quarter changes in the US repo which correlates well with the nominal changes in the DXY

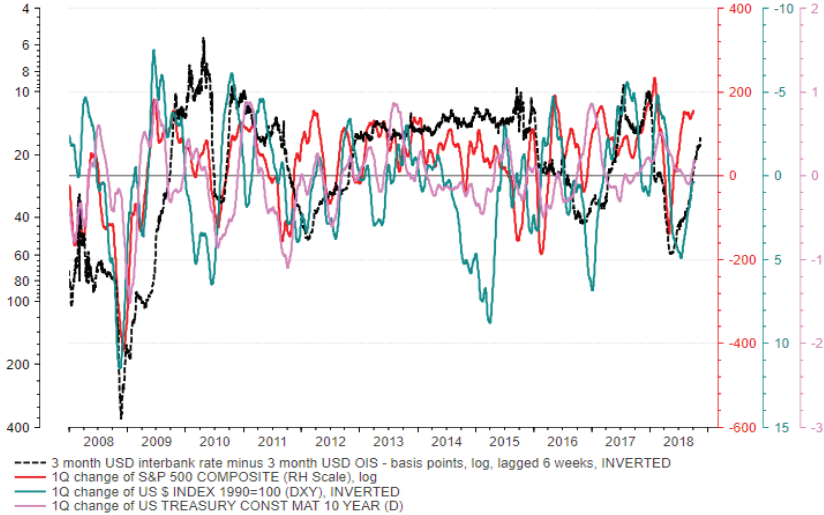


Term market rate spreads, as proxied by the Libor-OIS spread, provide actionable leads. The widening and subsequent narrowing widening of that crucial term market spread has been driving the US Dollar, and the other major assets classes, after a short time lag (see 1st chart on this page).

Summary: **The evidence convinces us that the US Dollar (DXY) is in a bull market which could last until late Q2 2019.** The shift of the Fed from pseudo-dovish stance to overt bullishness over monetary policy will also help drive the upwards trend. **This is happening during a time when the distributed lag of the Capital Account inflows begins to reassert as well – and its lagged impact is estimated to last until mid-2019.** The winners will be US Dollar denominated assets over those of other regions, and the biggest losers are shaping up to be the Precious Metals asset class. Stay away from Gold until the middle of next year

USD libor vs. OIS spread: impact on US Dollars, S&P 500, 10yr yield

Higher cost of term market funding pushes up bond yields and the US Dollar, weakens equities



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)