US ECONOMIC UPDATE JUNE 2022

THE FED TIGHTENS THE SCREWS



NAB Group Economics

The Fed lifted the fed funds rate at its June meeting by 75bps and flagged further increases which should see it move above its estimated neutral level. We expect a peak fed funds rate target range of 3.25%-3.50% in early 2023. Given the move to restrictive monetary policy and other global economic headwinds (commodity price shock, China disruptions due to COVID), we expect growth to slow to a crawl by around mid-2023. As a result, it is likely that the US will go into recession next year.

At its June meeting the Fed raised rates by 75bps, the biggest single meeting increase since 1994. It also signalled that more rate rises will be delivered in upcoming meetings.

The Fed had been signalling a desire to "expeditiously move the stance of monetary policy toward a neutral posture" (May meeting minutes). At its June meeting, the Fed signalled a clear intention to take the funds rate well above its estimate of 'neutral'. The median member projection of the top of the fed funds rate target was 3.5% for end 2022 and 3.9% for end 2023 – up from 2.0% and 2.9% respectively at the time of the March meeting. This is well above the Fed's estimate of the longer-run (or neutral) level of the fed funds rate of 2.5%.

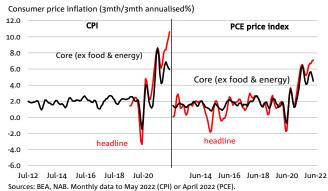
The shift reflects developments on the inflation front. Not only are there no clear signs of core inflation easing, headline inflation has accelerated due to higher energy and food prices.

While normally the Fed would focus on core measures, it is worried about inflation expectations de-anchoring. The rise in the Michigan University survey measure of 5-year consumer inflation expectations in May to its highest level since 2008 was described as 'eye catching' by the Fed Chair. While he indicated that most inflation expectation measures are consistent with inflation coming back to around 2% over the next several years, he went onto say "If we even see a couple of indicators that bring that into question, we take that very seriously."

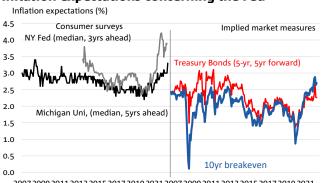
This suggests that readings on inflation and inflation expectations in coming months will be important to the pace of Fed tightening. We expect the Fed will raise rates by 100bps in Q3 and by a further 50bps in Q4. For Q3, this could include a 75bp increase at the July meeting followed by 25bp in September, although 50bp at each meeting is also a possibility.

For Q4 we expect 25bp movements in each meeting. We are also pencilling in a further rate hike in Q1 2023 (of 25bps). This would see a peak target range of 3.25-3.50%. That said, markets are expecting more aggressive rate hikes.

Inflation remains high and headline still rising



Inflation expectations concerning the Fed



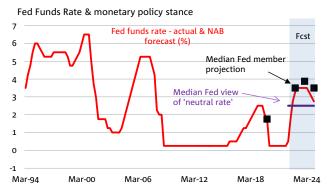
2007 2009 2011 2013 2015 2017 2019 2021 2007 2009 2011 2013 2015 2017 2019 2021 Sources: Bloomberg, New York Fed.Reserve, Thomson Reuters/Michigan Uni.

The reason we have a slightly lower peak than the median Fed member projection is that we are far less sanguine about how the economy will fare under the anticipated policy tightening. This is particularly so given the other headwinds facing the economy. As

the impact on the economy becomes more apparent, we expect this will stay the Fed's hand.

That said, getting inflation under control is the Fed's main aim right now, so an easing in inflation will also be needed for the Fed to first slow, and then end, policy tightening.

Expect fed funds rate to peak at 3.50%



Source: Datastream, Fed. Reserve, NAB. Fed funds rate is top of target band (Fed 'dots' adjusted to be on same basis).

As noted above, there is no clear evidence that inflation (core or headline) has started to slow, although we expect this to emerge at the year progresses.

That said, risks around our inflation forecast are likely biased towards the upside. Downside risk comes from the possibility that some goods prices (such as for autos) which have risen considerably over the last 1-2 years could fall just as quickly given production has picked up and rate hikes will cool demand. However, inflation has clearly broadened out, with prices for services now also growing well above pre-pandemic levels (including for housing services, which are likely to show elevated inflation for a little while yet). Recent high inflation readings could also lead to a further move up in inflation expectations.

Upside risk to inflation (and expectations) means that the risk around our fed funds rate projection is that the Fed will take the fed funds rate even higher than we expect, rather than lower.

Tighter policy = lower growth

We have downgraded our forecasts for US growth reflecting several factors. These include:

- Weak May retail sales data, including downward revisions to prior months (which lowers our Q2 2022 estimate).
- The increased level (and speed) of anticipated monetary policy tightening (as noted above).
- A greater and more persistent commodity price shock from the Russia/Ukraine war.

The whole point of the Fed tightening monetary policy is to reduce aggregate demand and yet, while the Fed is projecting that policy will turn restrictive, it is also projecting that GDP will grow at around its

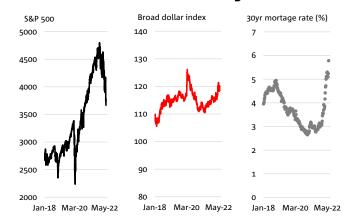
trend rate (around 1¾%). A possible rationalisation for this is that with demand so elevated – and supply struggling to keep up with it – that it may be possible to reduce demand without affecting production (with GDP measuring the latter).

Moreover, the large level of savings built up by households (in aggregate) during the pandemic mean they are in a strong position to absorb current headwinds – at least in the near term.

However, there are clear negative global economic shocks currently – on/off lockdowns in China and the fall-out from Ukraine/Russia war and the resulting impacts on commodity prices and supply chains. Fed estimates of the longer-run or neutral level of the funds rate assume a world in which there are no negative (or positive) economic shocks. Clearly, the world is not in a 'steady state' right now and so a simple comparison of the expected policy rate relative to its longer run level likely understates how much pressure the economy is coming under.

Monetary policy can work through several channels; as we noted last month these include equity prices, the value of the US dollar and market interest rates such as mortgage rates. Since our update last month, equity prices have continued their rapid decline (reducing household wealth) and mortgage rates have increased further. Due to the latter, housing activity data are showing clear signs of weakness. Market volatility is also high and consumer confidence low, which can lead to greater risk aversion and a pull back in spending. Survey measures of business capex, while still at a reasonable level, have come down in the last couple of months and are likely to continue to soften as demand eases.

Financial conditions continue to tighten



Following the start of the Ukraine/Russia war, we based our US forecast around an assumption that oil prices (on a quarterly basis) would peak at around \$110/barrel in Q2 with prices then to slowly ease. While this has been broadly realised for the Q2 average to date, prices since late May have been around \$120/barrel. We now expect prices to largely persist around this level over the rest of the year. It is

also the case that natural gas prices in the US have risen significantly, adding to the energy shock, as have oil refining capacity issues. With the US also a major energy producer, the impact of higher energy prices is mixed for the economy but we consider that, overall, it is a negative factor.

Energy price shock persisting



Reflecting these factors, we have lowered our US GDP growth forecasts. We now expect growth of 2.3% in 2022 (previously 2.6%), and 1.1% in 2022 and 2023 (was 1.7% and 1.3% respectively). Quarterly growth is expected to be weakest around mid-to-late 2023; our forecasts include a couple of quarters with growth of only 0.1% q/q. In reality, even if our forecasts are broadly correct, actual economic data will be more volatile than our projections so there is a risk of one to two quarters of negative growth. We would however downplay the idea that a recession is only when there are two successive quarters of negative GDP growth.

With growth persistently below trend, we expect unemployment to start rising late this year and continue to do so through 2023 and 2024. By end 2024, we are projecting an unemployment rate of 4.8%, 1.2ppts above its current level.

Historically, in the US, an increase in the unemployment rate of over 0.5ppts over a 12 month period has been associated with a recession being declared (the 'Sahm rule'). So while we do not formally have negative GDP growth in our forecasts, they do meet this alternative recession rule. Therefore, we consider the risk of a recession is more likely than not. If the upside risks to inflation (or inflation expectations) noted above are realised – leading to even more rate hikes than we expect – a recession would become inevitable.

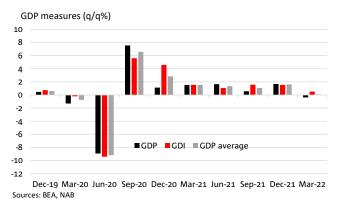
Is the US already in recession? No

While we see recession risk as concentrated in midto-late 2023, we note there is some public commentary around whether the US is already in recession. This has come about because of the fall in GDP in Q1 coupled with the fact that that the Atlanta Fed's GDP growth nowcast (GDPNow) is currently sitting at 0.0% q/q. However, we still don't even have May data for many of the indicators that feed into the Atlanta Fed's calculation, so it is still too early to be reading a lot into a nowcast estimate.

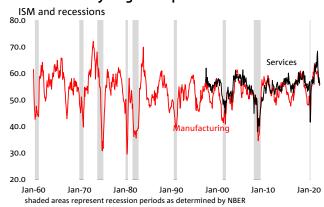
We would also note that:

- Whether the economy even contracted in Q1 is open to question. Real GDI (gross domestic income) should conceptually equal real GDP, although in practice, due to measurement issues there are often differences. In Q1, real GDI increased. A simple average of the two measures (GDP and GDI) suggests that economy grew in the quarter.
- Business surveys are not consistent with a recession in H1 2022. The manufacturing and services ISM were above their historical average in May, and above the level they have been at the onset of past recessions (other than in 1973).

Measures differ on whether economy even contracted in Q1



Business surveys signal expansion not contraction



While we see the weakest conditions for the US economy as most likely to occur in mid-to-late 2023, there is a risk that the trough in growth will come earlier than expected. Lags on monetary policy are variable, and with the economy facing a range of supply shocks, uncertainty around economic forecasts is greater than normal.

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U.S. ECONOMIC & FINANCIAL FORECASTS

	Quarterly Chng %																
													2024				
UC CDD and Common outs	2020	2021	2022	2023	2024	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US GDP and Components	Year Average Chng %																
Household consumption	-3.8	7.9	3.0	1.3	1.0	0.8	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Private fixed investment	-2.7	7.8	3.7	2.6	2.6	1.7	0.9	1.0	0.9	0.6	0.3	0.3	0.6	0.7	0.7	0.7	0.8
Government spending	2.5	0.5	-0.6	1.6	1.3	-0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Inventories*	-0.6	0.1	0.9	-0.2	-0.1	-0.2	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net exports*	-0.2	-1.9	-1.4	-0.3	-0.2	-1.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Real GDP	-3.4	5.7	2.3	1.1	1.1	-0.4	0.6	0.4	0.4	0.3	0.1	0.1	0.2	0.3	0.3	0.4	0.4
Note: GDP (annualised rate)						-1.5	2.3	1.7	1.4	1.2	0.5	0.5	0.7	1.2	1.3	1.4	1.5
US Other Key Indicators																	
PCE deflator-headline	Dec/Dec % change																
Headline	1.2	5.5	5.2	2.0	1.6	1.7	1.5	1.1	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Core	1.4 End of p	4.6 eriod	4.1	2.5	2.2	1.3	1.1	0.9	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Unemployment rate - qtly average (%)	6.8	4.2	3.8	4.2	4.8	3.8	3.6	3.6	3.8	3.8	3.9	4.0	4.2	4.4	4.6	4.7	4.8
US Key Interest Rates	End of period																
Fed funds rate (top of target range)	0.25	0.25	3.25	3.50	2.75	0.50	1.75	2.75	3.25	3.50	3.50	3.50	3.50	3.50	3.25	3.00	2.75
*Contribution to real GDP growth																	

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