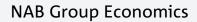
US ECONOMIC UPDATE FEBRUARY 2022 Solid Start to Q1 activity data; fed to start lifting Rates in March



Strong January retail and auto sales, and a sharp fall in COVID-19 cases, have boosted Q1 GDP growth prospects. Employment growth remains strong and wage growth robust. Inflation readings also remained elevated in January. We now expect the Fed to lift rates by 125bps over 2022 (previously 100bps) with the first increase in March. We also expect the Fed to start reducing the size of its balance sheet ("QT") in Q3.

We continue to expect that there will be a material softening in economic growth in Q1 2022, despite some strong January data.

In part, the expectation of slower growth in Q1 reflected the weakness in December consumption data. Another factor was the latest COVID wave which started in late 2021 and which was disrupting activity, not just through reduced demand for certain in-person services, but also because of the sheer number of new cases. The number of people not at work due to illness in January was a record high and well above anything recorded prior in the pandemic.

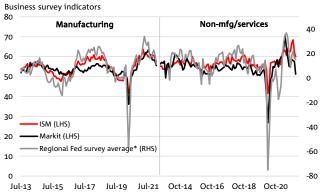
Business surveys also point to a slowing over the last few months, including a noticeable move down in some service sector readings.

However, there was a surprisingly large bounce in retail sales in January, up by 3.8% m/m, more than reversing the 2.5% m/m fall in December There was a 5.9% m/m rise in motor vehicle dealer sales but the BEA separately reported a 20% m/m increase in light vehicle sales suggesting goods consumption was even stronger than the retail sales figures suggest.

However, the December fall and subsequent January sales bounce possibly reflects problems with the seasonal adjustment process. Moreover, retail sales mainly reflect goods consumption. An exception is the food services category (restaurants etc) which fell for the second month in a row. This highlights that the COVID-19 wave has impacted parts of the services sector which rely on in-person contact. Similarly, mobility and transit data point to a fall in travel.

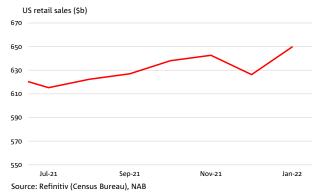
As a result, services consumption growth in Q1 is likely to be weaker than growth in goods consumption, although improvement is likely from February onwards as the

Business surveys eased again in January



Sources: ISM; Markit; Dallas, New York, RIchmond, Dallas, Philadelphia and Kansas City Federal Reserves.

Retail sales bounced in Jan after large Dec. fall

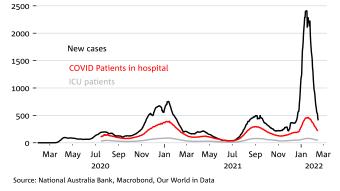


number of new COVID-19 cases has fallen sharply. High frequency data to mid-February are consistent with a turn-around in activity having already started in COVID-19 affected sectors.

Beyond consumption, we expect to see stronger growth in business fixed investment. This is consistent with robust survey measures on capex intentions and the need to address capacity constraints. Residential investment is likely to increase in Q1 but will come under pressure as mortgage rates have been rising.

COVID-19 cases have fallen rapidly since mid-Jan

New covid cases & hospitalisation per million people (7 day ma)



High frequency data starting to turn around



We also expect inventories to continue to rise at a rapid rate as the level of inventories is still very low relative to sales. However, it is too early to a get read on whether this assumption will hold for Q1. Indeed, strong sales combined with only modest manufacturing production growth in January suggests there is some downside risk to our inventories forecast in Q1.

In Q1 we expect GDP to grow at 2.0% q/q annualised (previously around 1.5%) and there is now less downside risk. As a result, our 2021 growth forecast is now 3.5% (previously 3.4%). We still expect growth to slow to 2.2% in 2023 as the re-opening impetus fades, COVID-19 fiscal supports further unwind and as monetary policy tightening bites.

The unemployment rate increased in January from 3.9% to 4.0%, the first rise since last June. Parts of the employment report also point to fall-out from the COVID-19 wave. As already noted, the number of people not out work due to illness was exceptionally high. Moreover, average weekly hours worked declined and there was also a 147k increase in the number of people on a temporary lay-off; the first material increase since December 2020 (during another COVID-19 wave).

Nevertheless, employment growth remained robust; non-farm employment increased by around 470k with upward revisions to prior months. The participation rate also increased although this reflects the BLS's annual benchmarking and population control adjustments and so cannot be read as an increase on the prior month. Nevertheless, it is consistent with the notion that, over time, participation will continue to recover as society 'learns to live with the virus' and some of the barriers to people re-entering the workforce – difficulties accessing childcare, school disruptions etc – recede.

Continued recovery in the size of the labour force will be important given the difficulties employers are facing in filling an exceptionally high level of job openings. This is being reflected in strong wage growth – average hourly earnings growth remained elevated in January at 0.7% m/m. Similarly, the Atlanta Fed's wage growth tracker moved to its highest level in around 20 years.

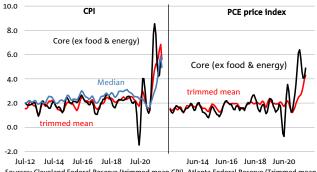
No let up in wage cost measures



Goods and services inflation also remains high. There were strong (above expectation) CPI and producer price prints for January. Nor was CPI inflation narrowly based on a few items, with the trimmed mean CPI posting another large gain.

Inflation remains high

Core consumer inflation measures (3mth/3mth annualised%)



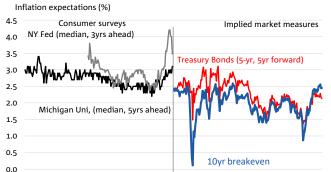
Sources: Cleveland Federal Reserve (trimmed mean CPI), Atlanta Federal Reserve (Trimmed mean PCE), BEA, NAB. Monthly data to November 2021 (PCE) or December 2021 (CPI).

Survey indicators suggest that the supply constraints that have been one of the factors contributing to high inflation might have at least stabilised. The start of a recovery in advanced economy auto production and the US inventory rebuild that commenced in the last quarter also provided further support to the view that price pressures might start to recede.

However, the strength of inflation indicators at the start of the year suggests the underlying problems persist and we have revised up our inflation forecasts again, particularly for Q1 and Q2 2022. We still expect to see inflation moderate over the year and into 2023, but not to fall below 2¼% y/y.

Underpinning this projection is the view that inflation expectations remain anchored. While expectations have moved up during the pandemic, they are generally at a level consistent with inflation near the Fed's 2% target.

Inflation expectations suggest current inflation rates will not be sustained



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.

There are risks around this view, with upside risks more prevalent. Given the persistence of elevated inflation, expectations may move higher. Moreover, it is also possible that survey or market derived measures of expectations are failing to pick up significant changes in wage and price setting behaviour in the economy. Downside risks to the price outlook come from the likelihood that there will be downward corrections to the prices of certain goods as supply is restored and inventories re-built; if this was to happen over a short period of time and across a range of goods, then some weak inflation readings would be possible.

Monetary policy implications

As we noted in our recent Forward View – Global, there was upside risk around our expectation of 100bp of rate rises over 2022. Given the strong data for January – particularly for wages and price growth – and the changes to our inflation outlook, we now expect to see 125bps of rate hikes last update.

That the Fed will kick-off this process at its next meeting, in March, is as close to a done deal as these things can get, noting that the Fed will have a month's worth of additional data by the meeting and there are geo-political risks (such as a possible Ukraine-Russia war). Rather the debate has been about whether it will raise rates by 25bp or 50bp. Some Fed members have indicated they are open to the latter (if not yet there).

While we expect that the Fed will most likely move in 25bp increments, the openness to consider a 50bp move suggests that the Fed will front load its tightening into the first half of the year. While the 'neutral' level fed funds rate is uncertain, and a

reason to move in measured steps, this is less of a constraint when the policy rate is well below any reasonable estimate of neutral.

Accordingly, if the first move is only 25bps then we would expect to see follow up rate hikes in both subsequent meetings. Beyond this we expect quarterly rate hikes through to at least end 2023 (our forecast horizon), as the Fed seeks to return policy to a more neutral policy setting. This would take the target range to 2.25 to 2.50% by end 2023.

Given the uncertainty around any estimate of the 'neutral' rate, the Fed will feel its way, particularly through 2023. Fiscal policy could also have a say; any appreciable tightening would reduce the need for Fed rate hikes. In this regard, the mid-term elections later this year are a key uncertainty.

Our outlook for the federal funds rate is highly conditional on a notable easing in actual inflation from around the middle of the year. If this were not to eventuate, or if measures of inflation expectations were to move significantly higher, then this would suggest an even more rapid monetary tightening over 2022.

A slower pace of tightening is possible if there were a notable deterioration in incoming activity data – raising doubts about the outlook – or if supply bottlenecks were to ease more quickly than expected leading to a faster than expected moderation in coming months.

The upside risks to our inflation forecasts suggest that, on balance, there is more upside risk to our rate call. This is also suggested by market pricing which is currently for around 150bps of rate hikes over 2022.

In the Forward View – Global we also noted that we were bringing forward our expectation of when the Fed would reduce the size of its balance sheet (quantitative tightening or "QT") from 2022 Q4 to Q3.

The Fed will reduce its balance sheet by adjusting the amount of reinvestments of maturing securities (with reinvestments only occurring when monthly maturities exceed a specified cap). As before, the monthly cap may start at a lower level initially and be increased over time but we expect it will ultimately be \$100b with a split of \$60-\$70b for Treasuries and \$30-\$40b for MBS.

Contact the author:

Tony Kelly Senior Economist Antony.Kelly@nab.com.au

U.S. ECONOMIC & FINANCIAL FORECASTS

	Quarterly Chng %														
							2021 2022			2023					
	2019	2020	2021	2022	2023	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US GDP and Components	Year Average Chng %														
Household consumption	2.2	-3.8	7.9	3.6	2.1	0.5	0.8	1.0	0.8	0.7	0.6	0.5	0.4	0.4	0.4
Private fixed investment	3.2	-2.7	7.7	3.8	4.5	-0.2	0.3	1.2	1.6	1.4	1.2	1.0	0.9	0.9	0.9
Government spending	2.2	2.5	0.5	0.5	1.8	0.2	-0.7	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Inventories*	0.1	-0.6	0.0	0.8	-0.1	0.5	1.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports*	-0.2	-0.2	-1.8	-0.6	-0.1	-0.4	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Real GDP	2.3	-3.4	5.7	3.5	2.2	0.6	1.7	0.5	0.7	0.7	0.6	0.5	0.5	0.5	0.4
Note: GDP (annualised rate)						2.3	6.9	2.0	2.9	2.7	2.4	2.1	1.9	1.9	1.7
US Other Key Indicators															
PCE deflator-headline	Dec/Dec % change														
Headline	1.5	1.2	5.5	3.4	2.1	1.3	1.6	1.5	0.9	0.6	0.4	0.5	0.5	0.6	0.5
Core	1.6	1.4	4.6	3.7	2.3	1.1	1.2	1.4	1.0	0.7	0.5	0.6	0.6	0.6	0.6
End of period															
Unemployment rate - qtly average (%)	3.6	6.8	4.2	3.4	3.3	5.1	4.2	3.8	3.5	3.4	3.4	3.4	3.4	3.3	3.3
US Key Interest Rates	End of period														
Fed funds rate (top of target range)	1.75	0.25	0.25	1.50	2.50	0.25	0.25	0.50	1.00	1.25	1.50	1.75	2.00	2.25	2.50
Source: NAB Group Economics															

Source: NAB Group Economics *Contribution to real GDP growth

Group Economics

Alan Oster Group Chief Economist +(61 0) 414 444 652

Dean Pearson Head of Behavioural & Industry Economics +(61 0) 457 517 342

Jacqui Brand Personal Assistant +(61 0) 477 716 540

Australian Economics and Commodities

Gareth Spence Senior Economist +(61 0) 436 606 175

Brody Viney Senior Economist +(61 0) 452 673 400

Phin Ziebell Economist – Australia +61 (0) 475 940 662

Behavioural & Industry Economics

Robert De Iure Senior Economist – Behavioural & Industry Economics +(61 0) 477 723 769

Brien McDonald Senior Economist – Behavioural & Industry Economics +(61 0) 455 052 520

Steven Wu Economist – Behavioural & Industry Economics +(61 0) 472 808 952

International Economics

Tony Kelly Senior Economist +61 (0)477 746 237

Gerard Burg Senior Economist – International +(61 0) 477 723 768

Global Markets Research

Ivan Colhoun Global Head of Research +(61 2) 9237 1836

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