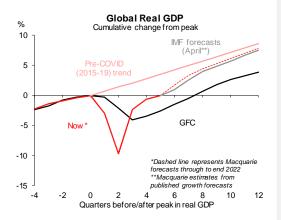


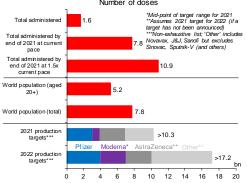


24 May 2021 Global

MACRO STRATEGY



Global COVID-19 Vaccine Rollout





Source: IMF, Media reports, Our World in Data, Macrobond Macquarie Macro Strategy

Economists/Strategists

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Global Economic and Market Outlook Macro policy "credibly promising to be irresponsible". But is it fighting the last war?

The global economy is recovering rapidly, with GDP at a new peak, and the pace of expansion re-accelerating after the COVID-induced lull in Q1. Encouragingly, after a period of uneven growth – both among the major economies and between sectors – we are on the cusp of a more synchronised/balanced expansion, with the recovery resuming in Europe and spending rebalancing away from goods and back to services. This should see global GDP increase by ~5% this year – the fastest expansion seen in decades.

Unsurprisingly, COVID-19 remains the biggest known unknown, with effective suppression a prerequisite for full recovery. To that end, the recent data are encouraging, with the number of global daily confirmed cases likely to have finally peaked, as the Northern Summer (90% of the global population live North of the equator) and the rapid vaccine rollout combine to limit the spread.

- The world has already administered nearly 1¾ billion vaccine doses, with the pace picking up rapidly in recent months, to nearly 30 million per day.
- While the rollout has been uneven, this is now beginning to change, with the Eurozone overtaking the US in terms of daily doses, and China administering ~15 million per day (4x the US peak).
- Importantly, manufacturing is ramping up fast, with Western production alone
 likely to be well over 10 billion doses this year. This, along with Chinese and
 Russian supply, suggests that there will be enough vaccines to inoculate the
 world by year end. However, to lock in ongoing control, DMs will need to stop
 hoarding, while the EM world will need to overcome distribution challenges.

Against this improving backdrop, the latest US fiscal stimulus was akin to pouring kerosene on an already hot manufacturing sector, with real US goods consumption increasing by a dramatic 7.3% in the month of March, helping push copper and iron ore prices to historical highs. This, along with the Fed's promise not to increase policy interest rates until they achieve their dual inflation and employment mandate, has seen market concerns shift to inflation, as the authorities promise to be "rationally irresponsible", as first recommended by Paul Krugman when discussing Japan's failed attempt to escape deflation in the 90s.

On balance, we agree with the Fed that the current price increases will be transitory, with the likely dip in goods consumption (as spending rebalances back to services) taking the heat out of hard commodity prices. And given the recent dovish mandate change, we don't expect Chairman Powell to begin to prepare the market for a taper until Q3/early Q4, with the eventual reduction in purchases unlikely until next year. However, further out, with the fed funds rate still at zero, and fiscal policy easy, wage pressures could continue to build, forcing an eventual sharp reversal. Indeed, by late 2023, we are likely to see either a period of rapid tightening, with the fed funds rate eventually moving above neutral, or a major asset price bust, as the Fed realises it has been fighting the last war.

We see the risks as broadly symmetrical. On the downside, the tragic COVID outbreak in India has shown that we are all in this together, and that the risk of a dangerous mutation remains too high. However, with US policy makers trying to find the economy's limits, there are also considerable upside risks.

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Global outlook: The return of synchronised growth

Roaring 2021

The global economy is recovering rapidly, with GDP at a new peak, and the pace of expansion reaccelerating after the lull in Q1. Encouragingly, after a period of uneven growth – both among the major economies and between sectors – we are on the cusp of a more synchronised/balanced expansion, with the recovery resuming in Europe and spending rebalancing away from goods and back to services.

- Global GDP growth looks to have increased from the anaemic ½% seen in Q1 to a rapid 1½% in Q2, with that pace likely to be sustained in Q3, before slowing back toward trend in 2022.
- In y/y terms, global GDP should grow by around 5% this year the fastest expansion seen for decades – and around 3½% in 2022, with the level of activity at the end of next year only modestly below the pre-COVID trend.

Fig 1 The global recovery has continued, with GDP likely to expand by ~5% this year – the fastest pace in decades

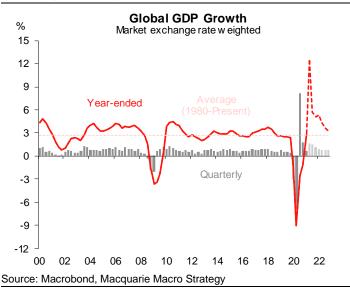


Fig 3 However, the recovery has been uneven, with Chinese GDP back on trend, and the US beginning to boom, while Europe is still weak

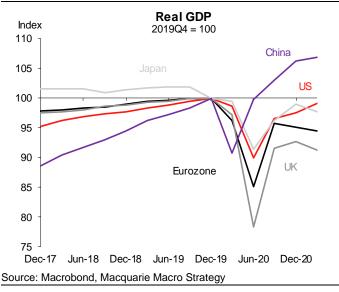
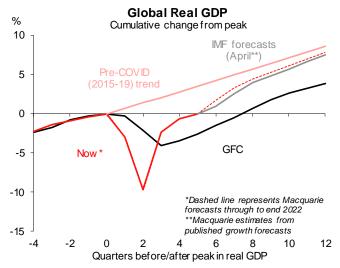
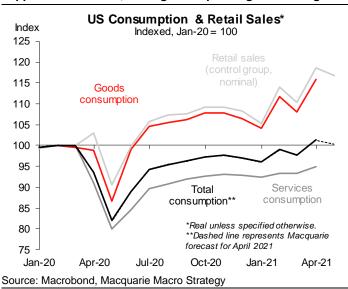


Fig 2 The level of GDP regained its peak in Q1, and is likely to approach its previous trend by the end of next year



Source: IMF, Macrobond, Macquarie Macro Strategy

Fig 4 Ongoing high levels of COVID infections have suppressed services, while goods spending is booming



Unsurprisingly, COVID-19 remains the biggest known unknown, with effective suppression a prerequisite for strong recovery. To that end, the recent data are encouraging, with the number of global daily confirmed cases probably having peaked in mid-May, as the Northern Summer (90% of the global population live North of the equator) and the rapid vaccine rollout combine to limit the spread.

- The world has already administered almost 13/4 billion vaccine doses, with the pace picking up rapidly in recent months, to nearly 30 million per day.
- While the rollout has been uneven, this is now beginning to change, with the Eurozone overtaking the US in terms of daily doses, and China administering ~15 million per day (4x the daily US peak).
- Importantly, manufacturing is ramping up fast, with Western production alone likely to be well over 10 billion doses this year. This, along with Chinese and Russian supply, suggests that there will be enough vaccines to inoculate the world by year end.
- If the current daily pace of rollout continues for the remainder of the year, the world will administer around 8 billion doses in 2021. However, if the pace increases by a further 50%, we will see around 11 billion jabs.
 - ⇒ Given that the world adult population is around 5.2 billion, this suggests that it should be possible to inoculate all adults that want to be vaccinated this year.
- Rather than production capacity, the constraint is likely to increasingly become developed market vaccine hoarding, vaccine hesitancy, and local EM medical capacity.
 - ⇒ For example, Australia has ordered ~195 million doses for a population of only 25 million.
- However, we suspect that once the large countries have inoculated most of their populations a milestone likely to be achieved in both the US and Europe by the end of summer - they will then release large quantities of vaccine to the rest of the world.

Fig 5 The pace of vaccination has picked up materially, with nearly 30 million doses being administered globally per day

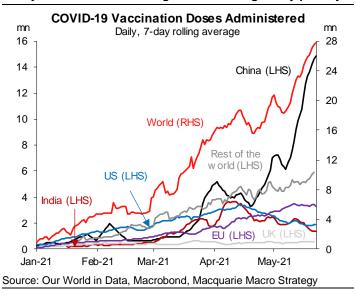
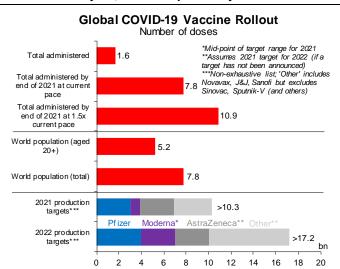


Fig 6 The world will produce enough vaccines to inoculate most adults this year, with a surplus likely in 2022



Source: Media reports, Our World in Data, Macrobond, Macquarie Macro Strategy

Macro policy "credibly promising to be irresponsible" ...

Against this improving backdrop, the latest US fiscal stimulus was akin to pouring kerosene on an already hot manufacturing sector, with real US goods consumption increasing by a dramatic 7.3% in the month of March, helping push copper and iron ore prices to historical highs. This, along with the Fed's promise not to increase policy interest rates until they achieve their dual inflation and employment mandate, has seen market concerns shift to inflation, as both the Federal Government and the Fed "credibly promise to be irresponsible", a policy first recommended by Paul Krugman when discussing Japan in the 1990s.¹

On balance, we agree with the Fed that the current price increases will be transitory, with the likely dip in goods consumption (as spending rebalances back to services) taking the heat out of hard commodity prices. As such, given the Fed's new dovish mandate, we don't expect Chairman

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In 1998, with Japan dipping into deflation, Nobel Laureate Paul Krugman suggested that, to escape the liquidity trap, the macro authorities needed to "credibly promise to be irresponsible" i.e. to make a persuasive case that they would permit inflation to occur, thereby producing the negative real interest rates the economy needed.

Powell to begin to prepare the market for an upcoming taper until late Q3/early Q4, with the eventual reduction in asset purchases unlikely to begin until early 2022.

However, further out, with the fed funds rate at zero, and fiscal policy still highly accommodative, wage pressures could continue to build, forcing an eventual pivot.

- By definition, the longer the Fed leaves its first move, the faster it will then need to move, and the greater the risk of financial instability.
- This suggests that by late 2023, we are likely to see either a period of rapid tightening, with the fed funds rate eventually moving above neutral, or a major asset price bust.
 - ⇒ While the focus in the media has been on Larry Summers' inflation warning, he has also suggested that current policy settings are increasing the prospect of extreme financial instability.
 - ⇒ This is consistent with the warning from the former Fed Chairman, Paul Volcker, in his 2018 autobiography when he suggested that "the real danger comes from encouraging or inadvertently tolerating rising inflation and its close cousin of extreme speculation and risk taking, in effect standing by while bubbles and excesses threaten financial markets. Ironically, the "easy money," striving for a "little inflation" as a means of forestalling deflation, could, in the end, be what brings it about."
- When Krugman first talked about being rationally irresponsible, Japan was in a liquidity trap
 and facing a period of outright deflation. To us, the situation in the US at present looks very
 different.
- Indeed, we suspect the Fed may currently be <u>fighting the last war</u>, with 2023 promising to be a most interesting year...

Fig 7 The US goods surge has peaked...

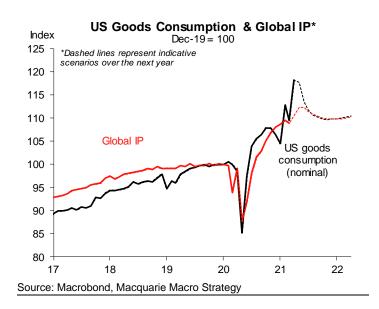


Fig 8 ...which should see commodity price inflation moderate a bit

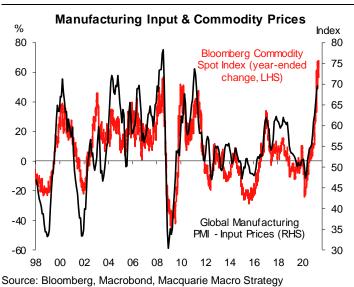


Fig 9 US wage inflation has not slowed as much as would normally occur during a deep recession

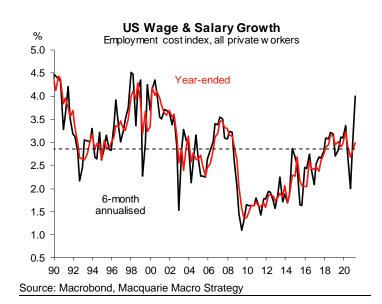
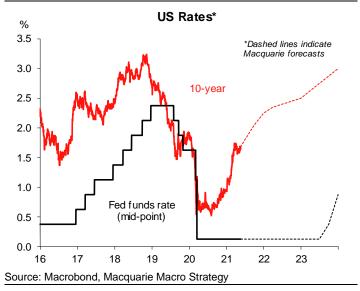


Fig 10 The Fed will try to keep long rates contained this year, but the market will increasingly begin to price in a Fed hike in 2023



As Europe reopens, the US dollar may dip a little in coming months, while equities are likely to continue to climb, albeit with more volatility. Base metal and bulk commodity prices will probably fall a little over H2, as goods demand moderates from a very high level. However, as services (and in particular aviation) recover, oil will likely remain well supported.

We see the risks as broadly symmetrical. On the downside, the tragic COVID outbreak in India has shown that we are all in this together, and that the risk of a dangerous mutation remains too high. However, with US policy makers trying to find the economy's limits, there are also considerable upside risks.

Fig 11 GDP growth forecasts (forecasts shaded)

Quarterly											Annual			
QoQ	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	2020	2021	2022	2023
US	7.5	1.1	1.6	2.3	1.7	1.2	0.9	0.8	0.7	0.7	-			
China	3.1	3.2	0.6	1.3	1.4	1.4	1.3	1.2	1.4	1.5				
Eurozone	12.5	(0.7)	(0.6)	2.0	2.0	1.1	0.7	0.6	0.5	0.4				
Japan	5.3	2.8	(1.3)	0.8	1.3	0.5	0.3	0.3	0.2	0.2				
India	23.7	7.9	1.5	0.4	1.2	1.0	1.3	1.5	1.5	1.5				
UK	16.9	1.3	(1.5)	4.2	3.5	1.8	1.5	1.4	1.3	1.0				
Canada	8.9	2.3	1.6	0.5	1.4	1.0	0.8	0.6	0.6	0.5				
Australia	3.4	3.1	1.2	1.1	1.0	0.9	0.8	0.8	0.8	0.8				
New Zealand	13.9	(1.0)	0.3	0.7	8.0	0.9	0.9	0.9	8.0	0.8				
Global (MER)	8.2	1.7	0.6	1.7	1.5	1.1	0.9	0.8	0.8	0.8				
Global (PPP)	8.7	2.2	0.7	1.5	1.4	1.1	0.9	8.0	8.0	0.8				
YoY	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	2020	2021	2022	2023
US	(2.8)	(2.4)	0.4	12.9	6.8	7.0	6.3	4.7	3.7	3.2	(3.5)	6.6	4.4	2.6
China	4.9	6.5	18.3	7.5	6.0	5.0	5.6	5.6	5.6	5.6	2.3	8.5	5.6	5.4
Eurozone	(4.1)	(4.9)	(1.8)	13.3	2.7	4.5	5.9	4.5	2.9	2.2	(6.7)	4.4	3.9	1.4
Japan	(5.5)	(1.0)	(1.8)	7.7	3.5	1.2	2.8	2.3	1.2	0.9	(4.7)	2.5	1.8	0.7
India	(7.3)	0.4	0.5	36.1	11.3	4.2	3.9	5.0	5.4	5.9	(6.9)	11.4	5.1	6.1
UK	(8.5)	(7.3)	(6.1)	21.5	7.5	8.0	11.4	8.4	6.1	5.3	(9.8)	7.0	7.7	3.5
Canada	(5.3)	(3.2)	0.3	13.7	5.9	4.5	3.7	3.8	3.0	2.5	(5.4)	6.1	3.2	2.1
Australia	(3.7)	(1.1)	0.4	9.1	6.6	4.3	3.8	3.5	3.2	3.2	(2.4)	5.0	3.4	2.8
New Zealand	0.2	(0.9)	0.6	13.9	0.8	2.7	3.3	3.5	3.5	3.4	(3.0)	4.2	3.5	2.9
Global (MER)	(2.5)	(1.2)	2.9	12.5	5.7	5.0	5.3	4.4	3.6	3.3	(3.6)	6.3	4.1	2.8
Global (PPP)	(2.5)	(0.8)	3.4	13.4	5.9	4.8	5.0	4.3	3.7	3.4	(3.5)	6.6	4.1	3.1
Source: Macrobond, Mac	guarie Mad	cro Strate	eav											

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