

Inflation: transitory or persistent?

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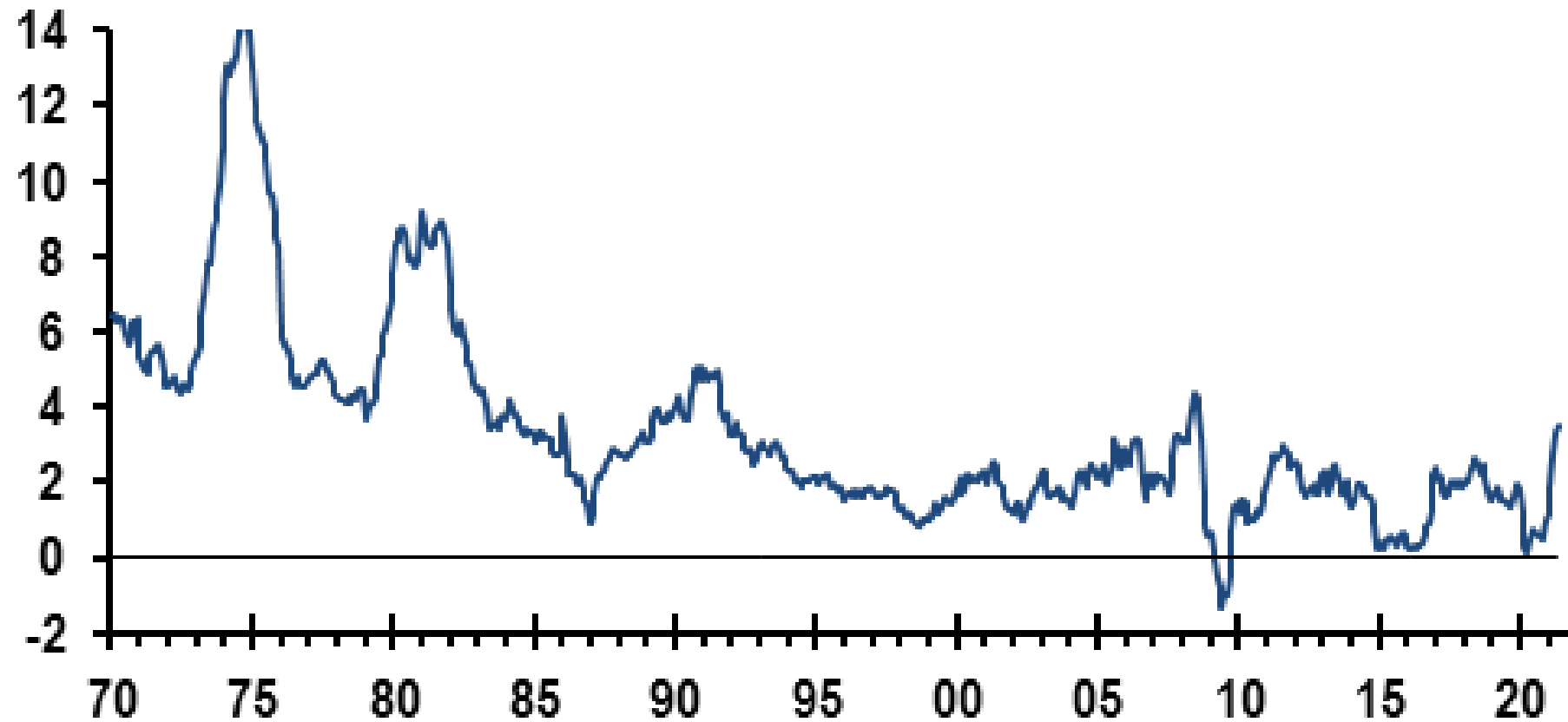
Overview

- ❑ Persistent or transitory? Short answer is both. Long answer, how much of each....
- ❑ Inflation in the developed world has accelerated to a multi-year high as economies have begun to recover from the pandemic
- ❑ Some argue this is the beginning of sustained secular shift to higher inflation rates: policy stimulus is too large, and fiscal pressures mean pressures on central banks will erode their independence.
- ❑ To some extent higher inflation would be welcome and is something central banks are actively trying to achieve. Low inflation brings its own problems.
- ❑ Humility is needed – empirical models of inflation leave a lot unexplained. There are lots of potential sources of uncertainty and possible policy errors. But we are not persuaded inflation will be troublingly high for long.....
- ❑ ..so a rise to average near 2% is likely persistent, the rest is transitory.

50 years of inflation history.....

CPI inflation in the developed markets

%0ya



Source: J.P. Morgan

Theory of inflation 101

- ❑ What determines the general level of prices in an economy, or how fast they are changing?
- ❑ The equation of exchange: in a money using economy, the effective supply of money must equal the nominal value of transactions, or

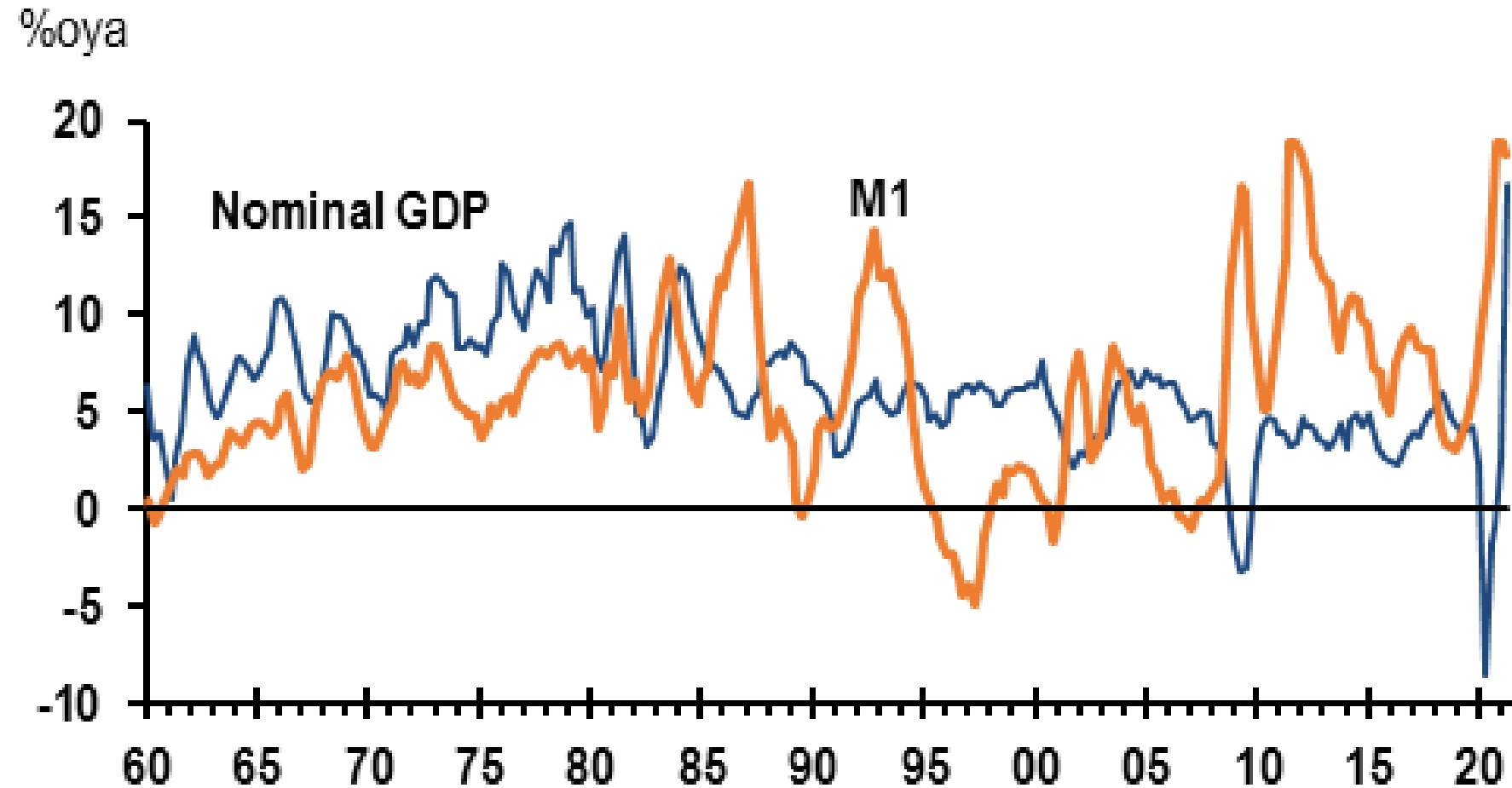
$$MV = PT$$

Where M is money supply, V is the velocity of circulation, P is the average price level and T is the number of transactions.

- ❑ In Classical economics: M is determined by policy, V is stable (or predictably changing), T tends toward an equilibrium determined by free markets, so M drives P.
- ❑ Inflation is the result of “too much money chasing too few goods”
- ❑ Problems: V is unpredictable, and causation can run from PT to M

Those long and variable lags.....

US Growth in nominal GDP versus M1 money supply



Source: J.P. Morgan

Theory of inflation 102

- ❑ The triangle model: firms set prices infrequently, not continuously. Hence inflation depends on
 - (a) inflation expectations
 - (b) slack (in labor and product markets)
 - (c) other shocks to costs (import and commodity prices, VAT)

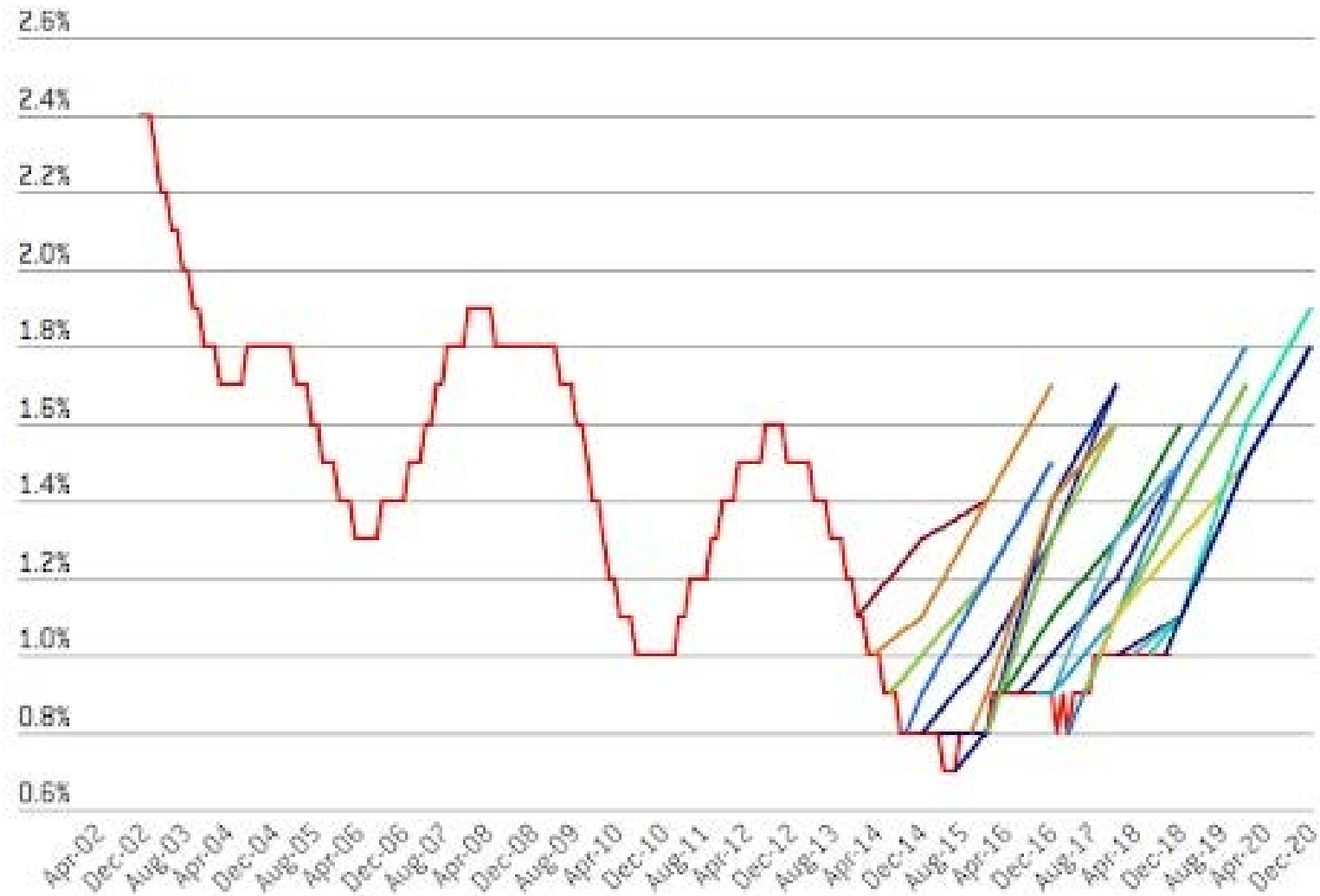
- ❑ Policy influences inflation through these three channels

- ❑ Developed world central banks are aiming to
 - (a) keep inflation expectations stable at a level in line with their targets
 - (b) minimise swings in output relative to its potential
 - (c) hope import prices and exchange rates are not troublesome

- ❑ Stable inflation expectations are important for the effectiveness of monetary policy, as they ensure movements in nominal interest rates drive movements in real rates.

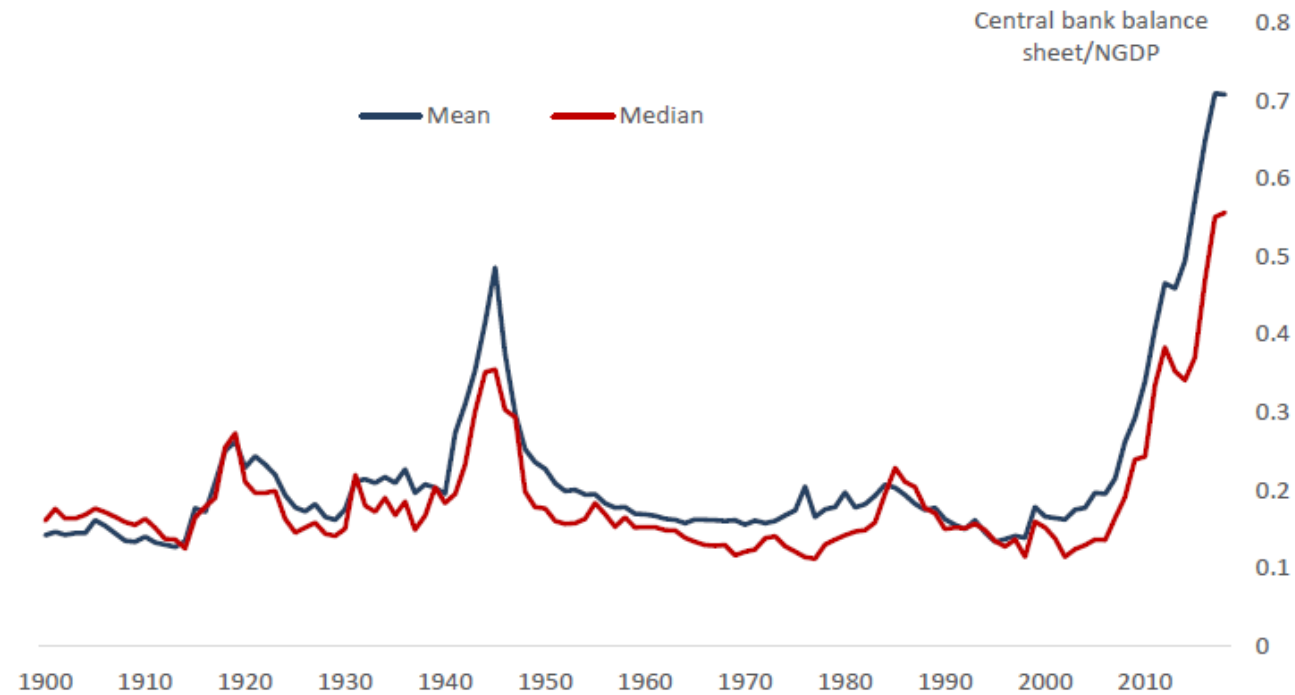
Inflation prior to the pandemic was troublingly low....

ECB forecasts for core inflation (% oya) versus outturns



Forcing central banks to innovate with QE and FAIT

Chart 3: Central bank balance sheets relative to GDP



Source: A. Haldane, Bank of England.

The Fed's shift to FAIT (Flexible Average Inflation Targeting):

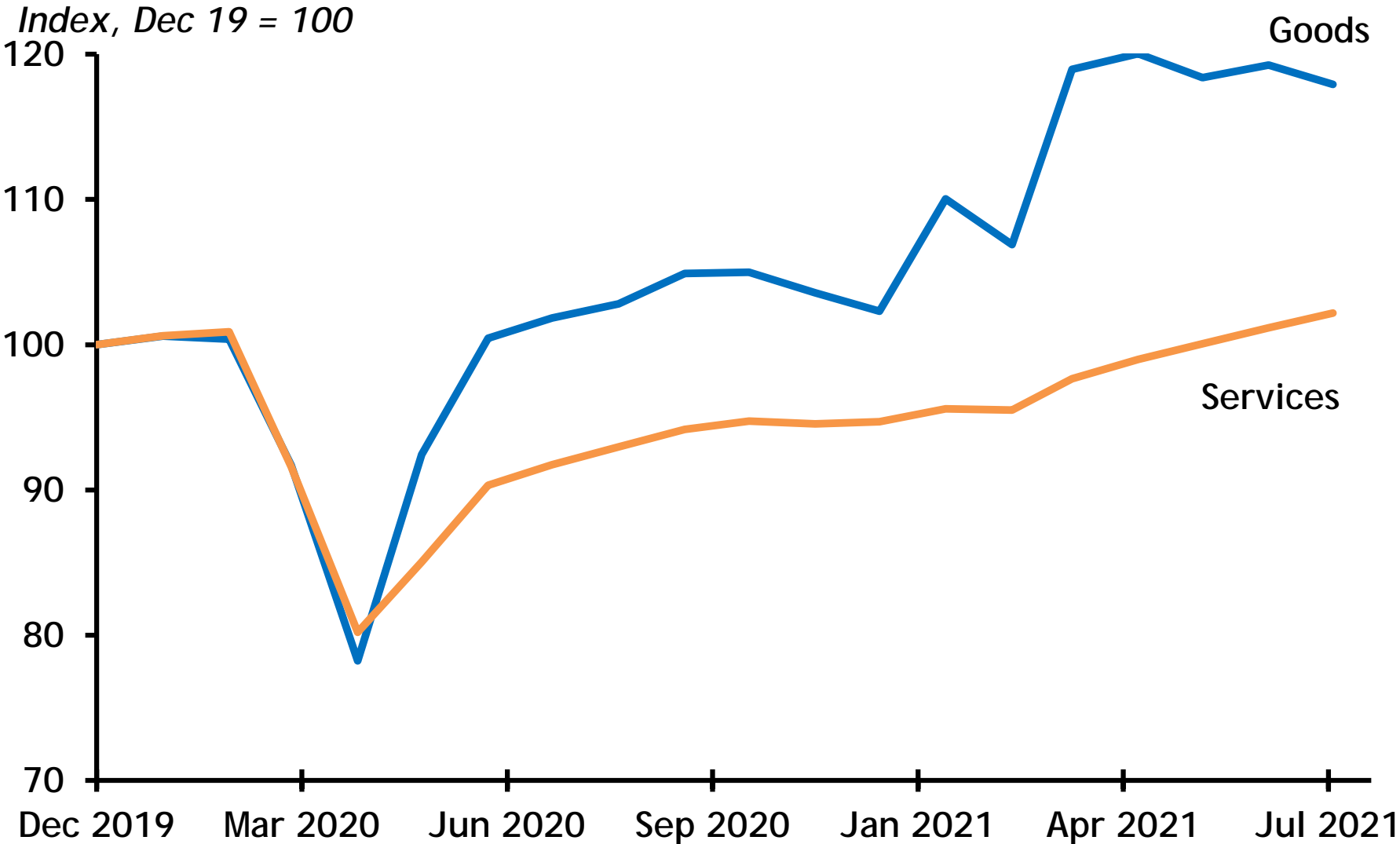
“the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.”

From US Federal Reserve, Statement on Longer-Run Goals and Monetary Policy Strategy

J.P.Morgan

Pandemic hits both level and mix of spending

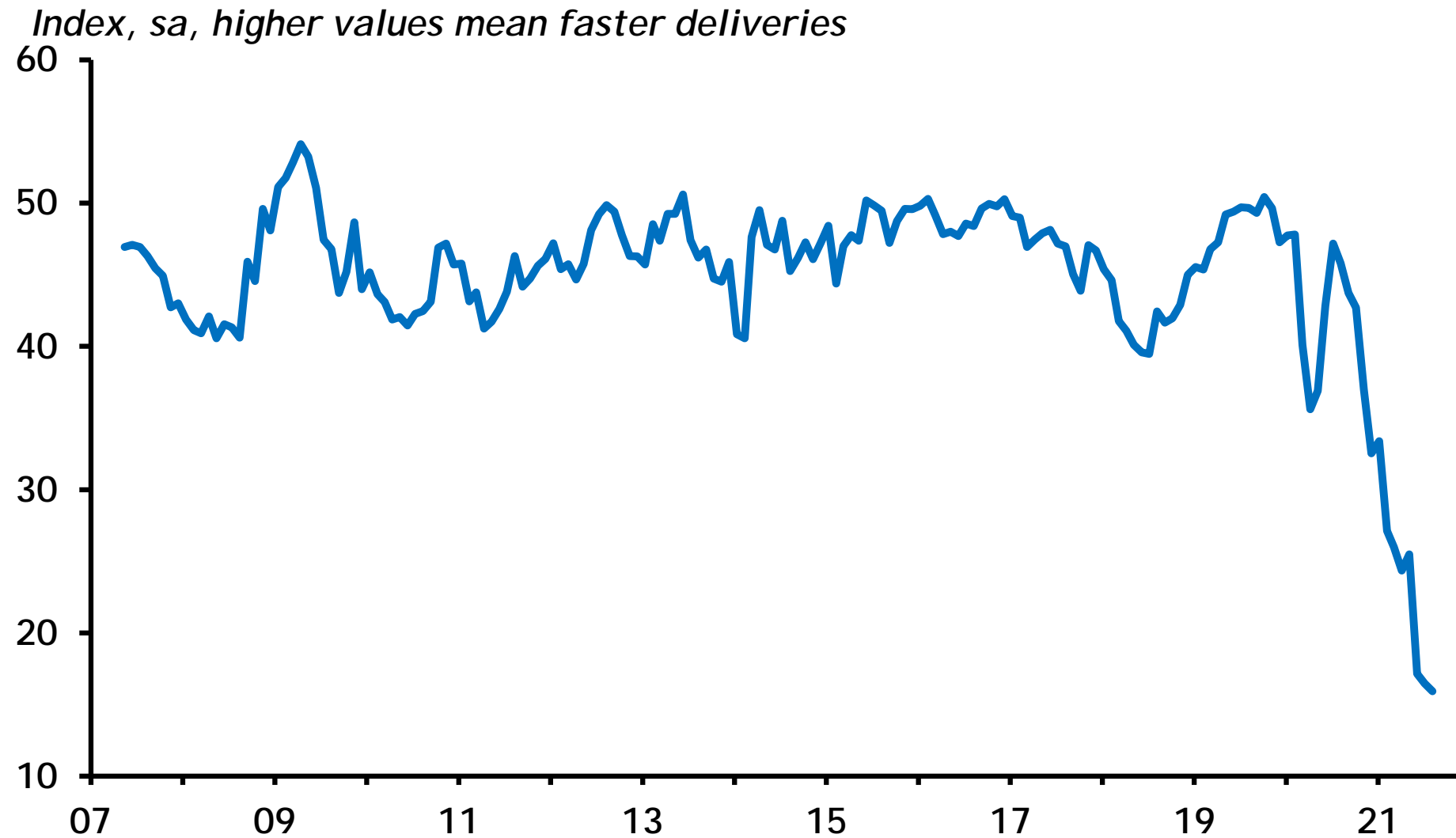
US consumer spending



Source: J.P. Morgan, US Census Bureau

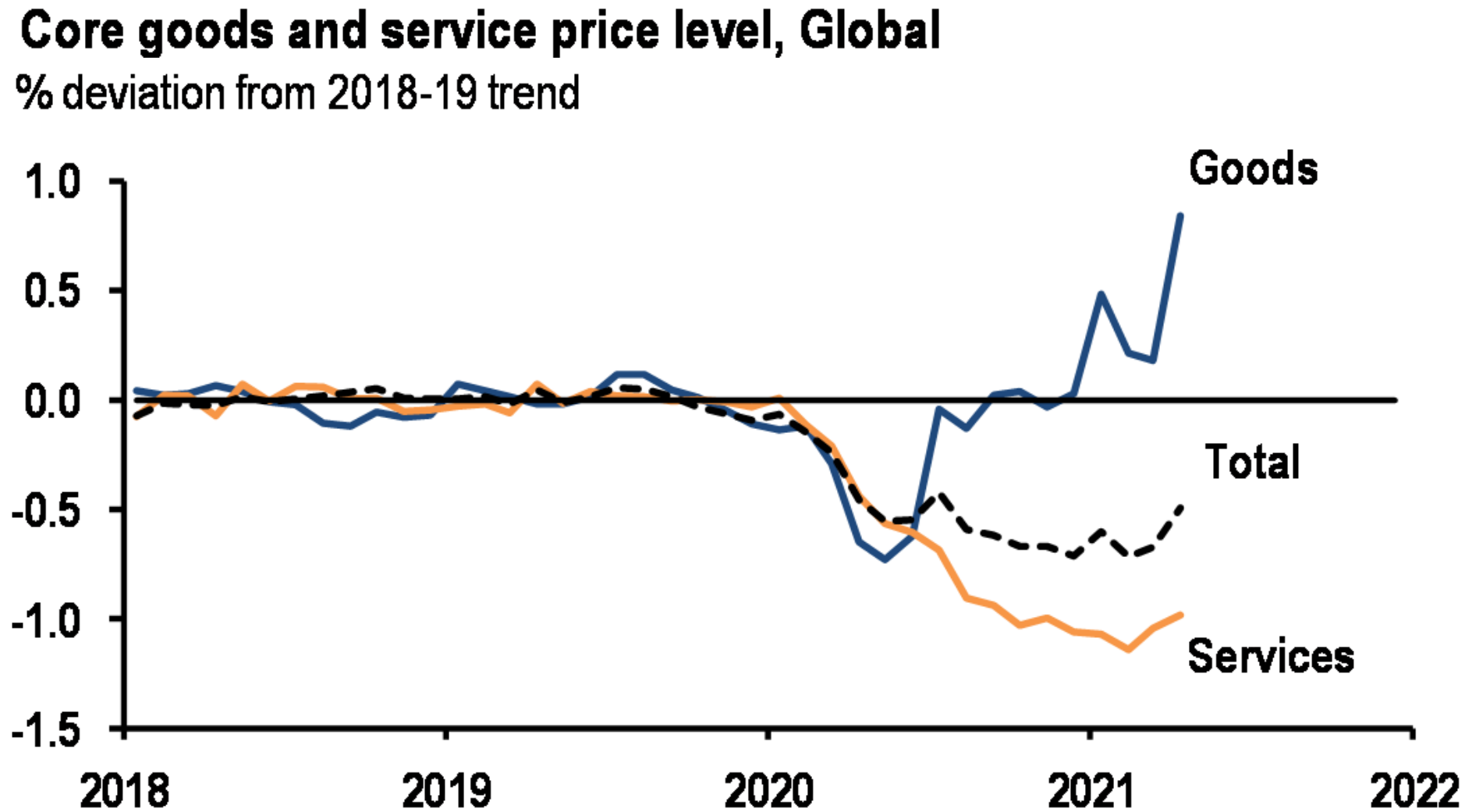
Delivery times rise reflects supply side constraints

US Markit manufacturing PMI: supplier delivery times



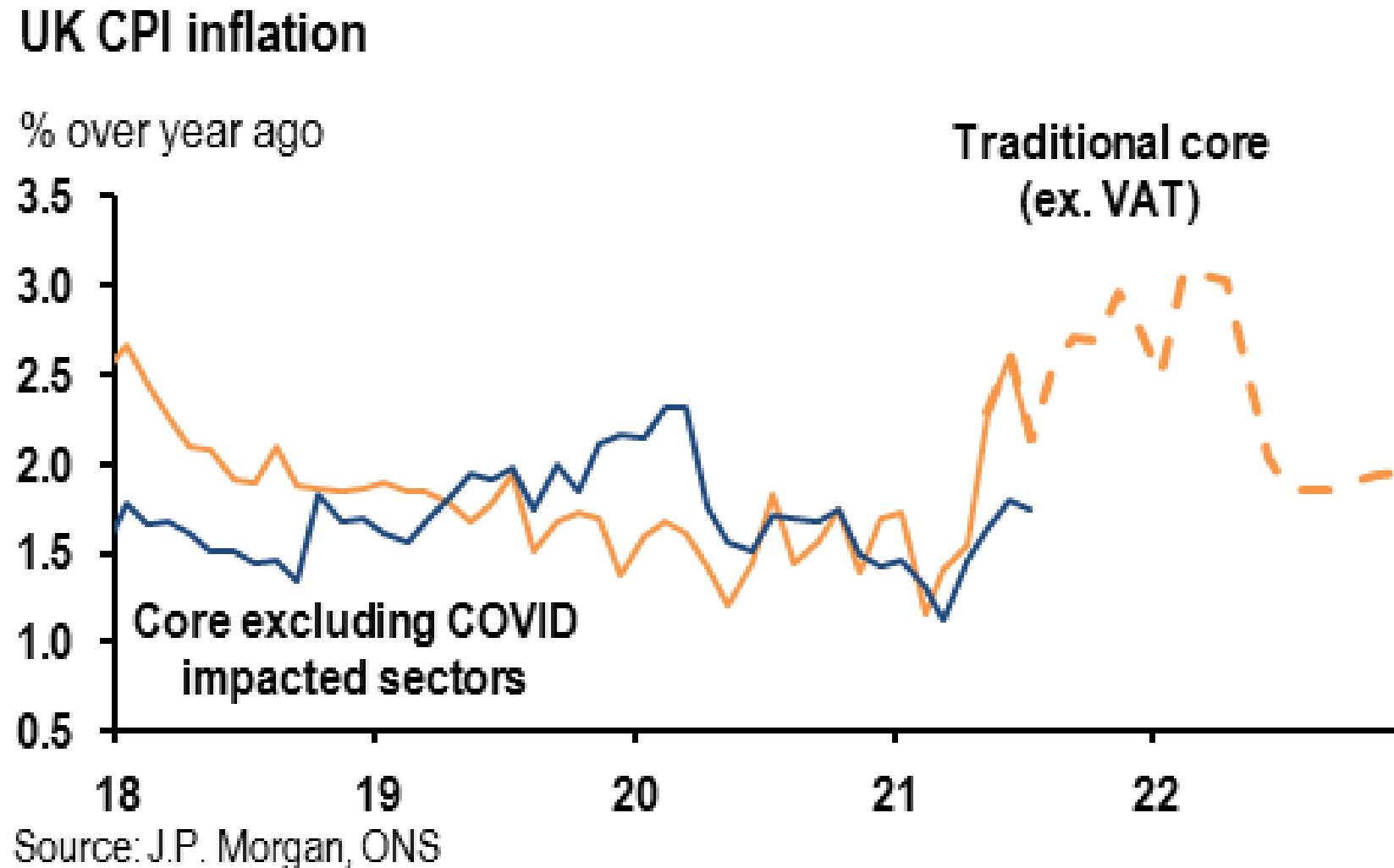
Source: Markit, J.P. Morgan

Price level normalization from pandemic adjustments



Source: J.P. Morgan

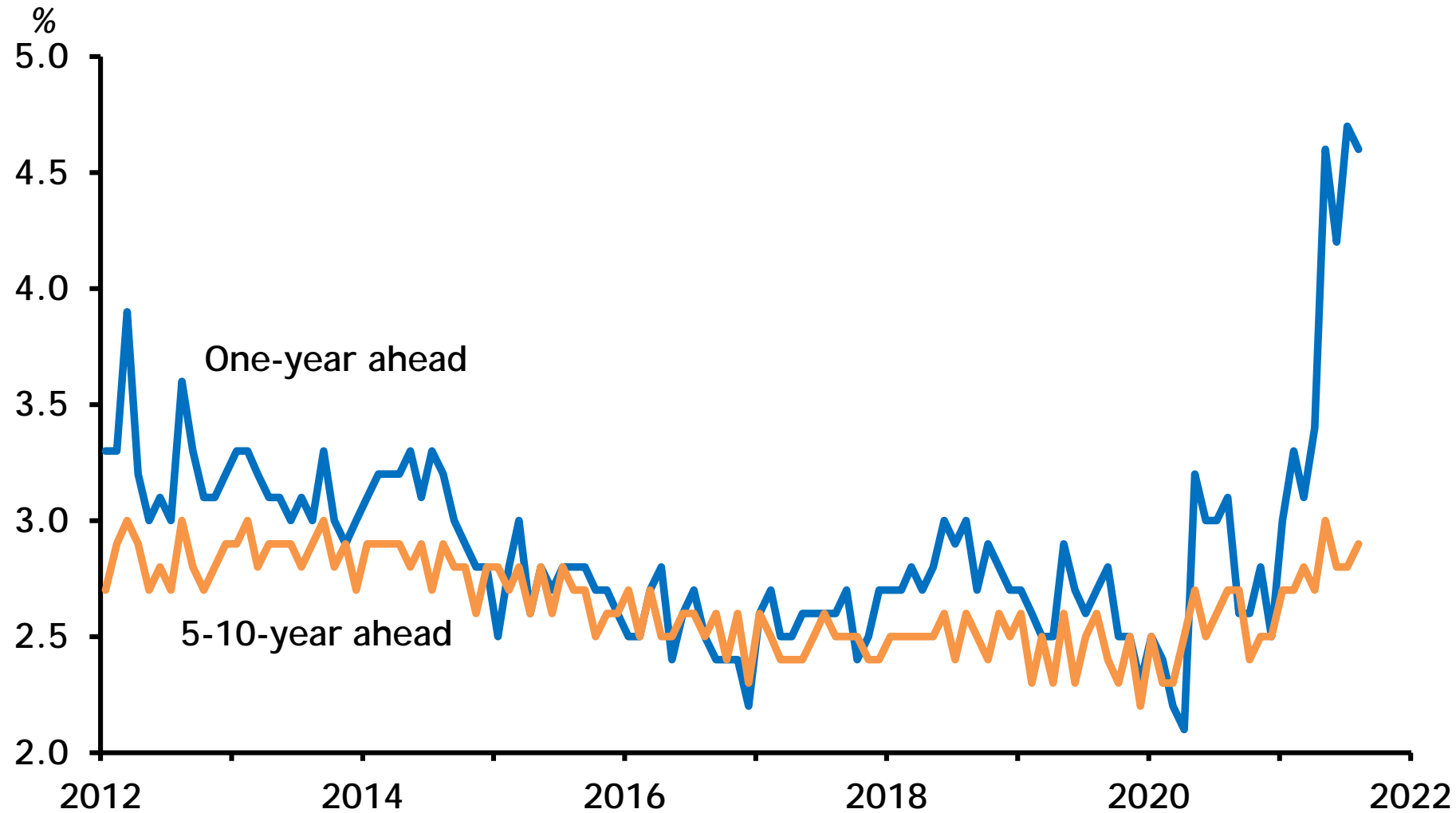
Decomposing the recent rise in inflation: UK as an example



This ex-Covid measure of inflation has moved up but is still within the historical range; the problem is that by now we are looking at only XX% of the CPI.

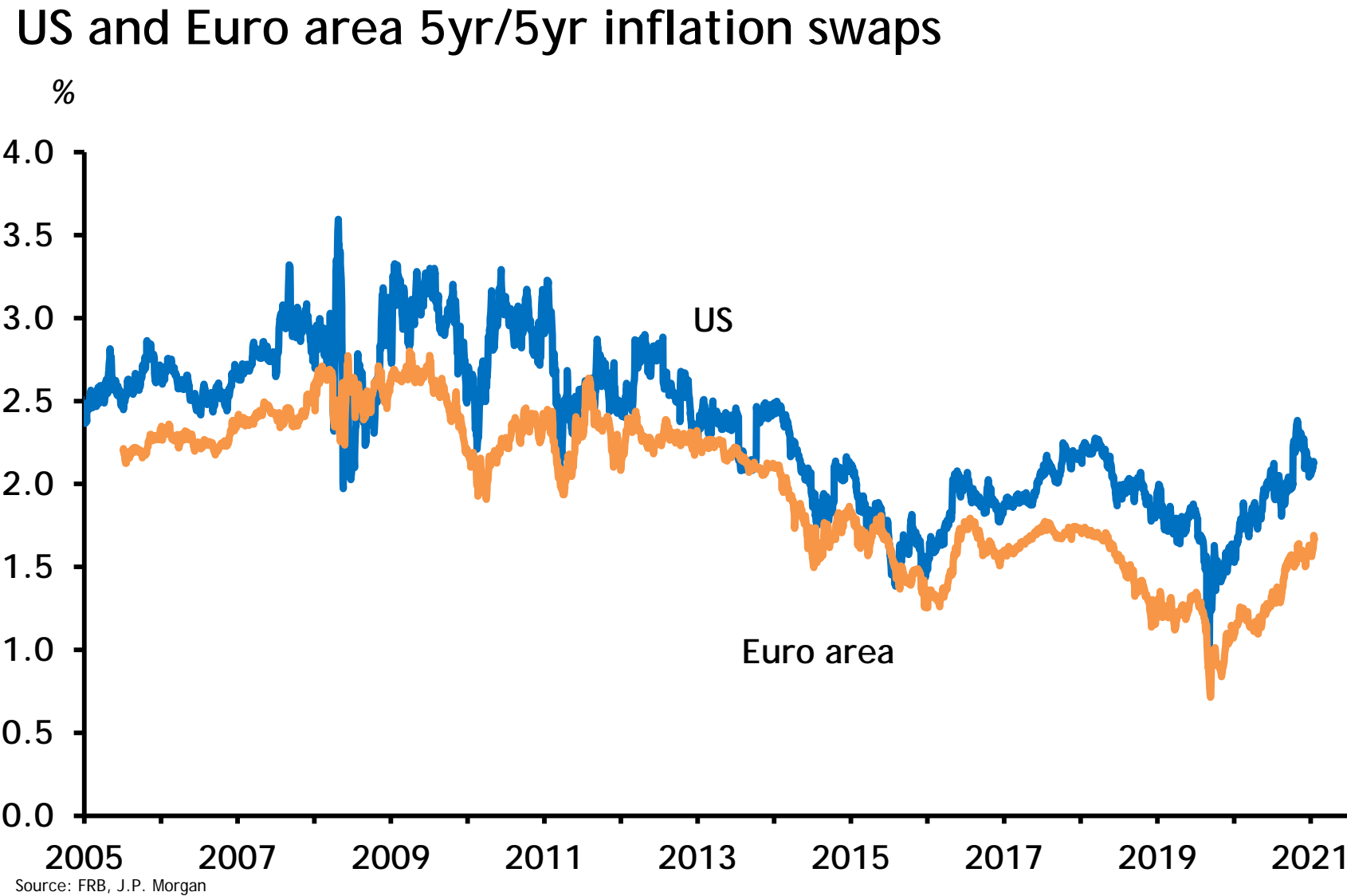
Survey measures of inflation rise for the near term...

Michigan survey inflation expectations



Source: University of Michigan, J.P. Morgan

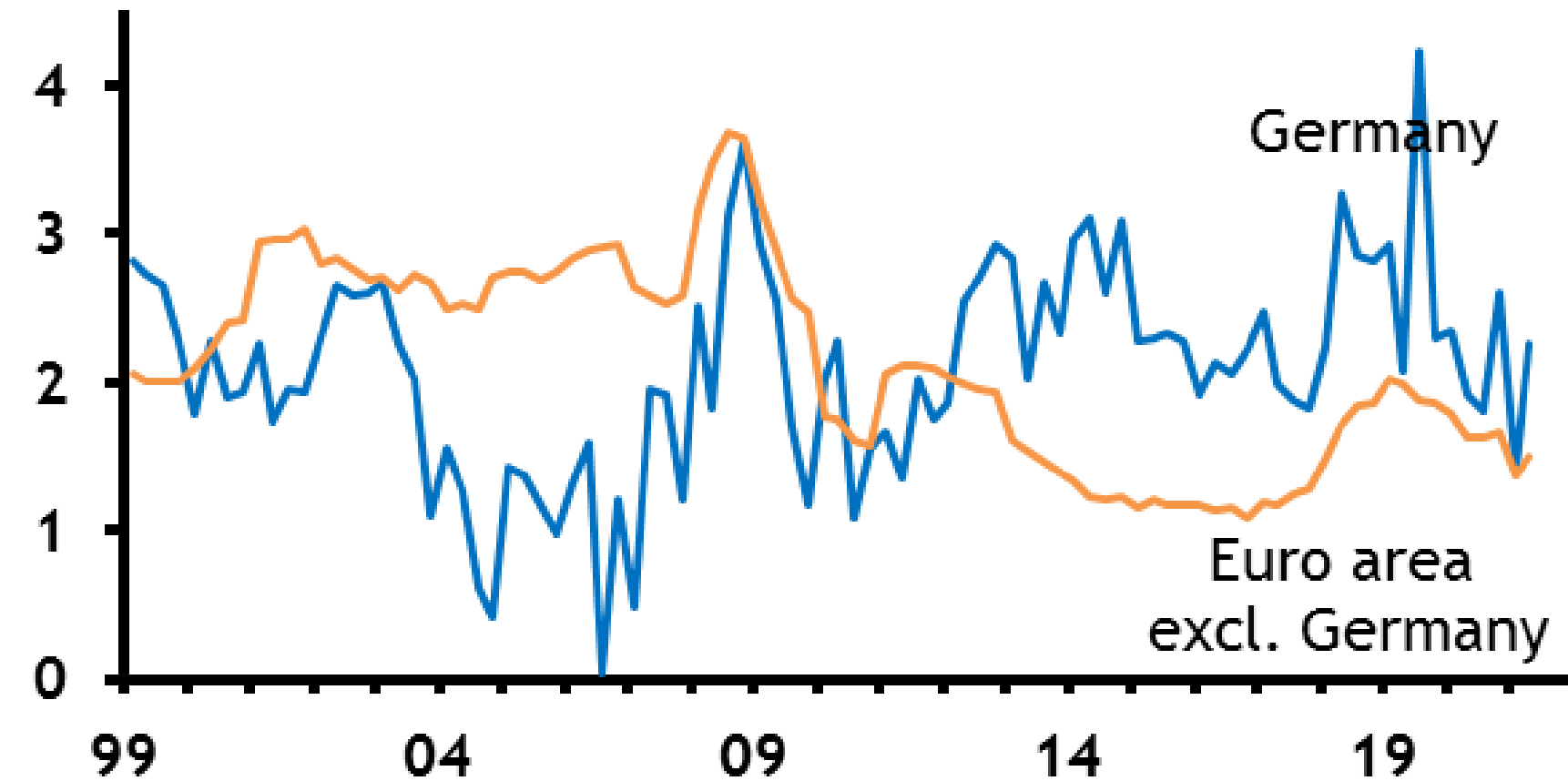
Markets think the recent increase is mainly transitory



Not much sign of inflation in European wage deals

Euro area wage growth

%oya, negotiated pay



Source: ECB, J.P. Morgan

JPMorgan forecasts gravitate back towards 2% through time

- ❑ Short-term is mainly about the huge surge in demand as ongoing social distancing restrictions will constrain supply. Also normalisation of price levels impacted by the pandemic.
- ❑ Medium-term is about a rapid return to full employment against the backdrop of a shift in monetary and fiscal policy objectives (average inflation targeting and monetary support for fiscal policy) aiming to lift inflation expectations.
- ❑ Will the inflation undershoot of past decade continue in the coming decade?

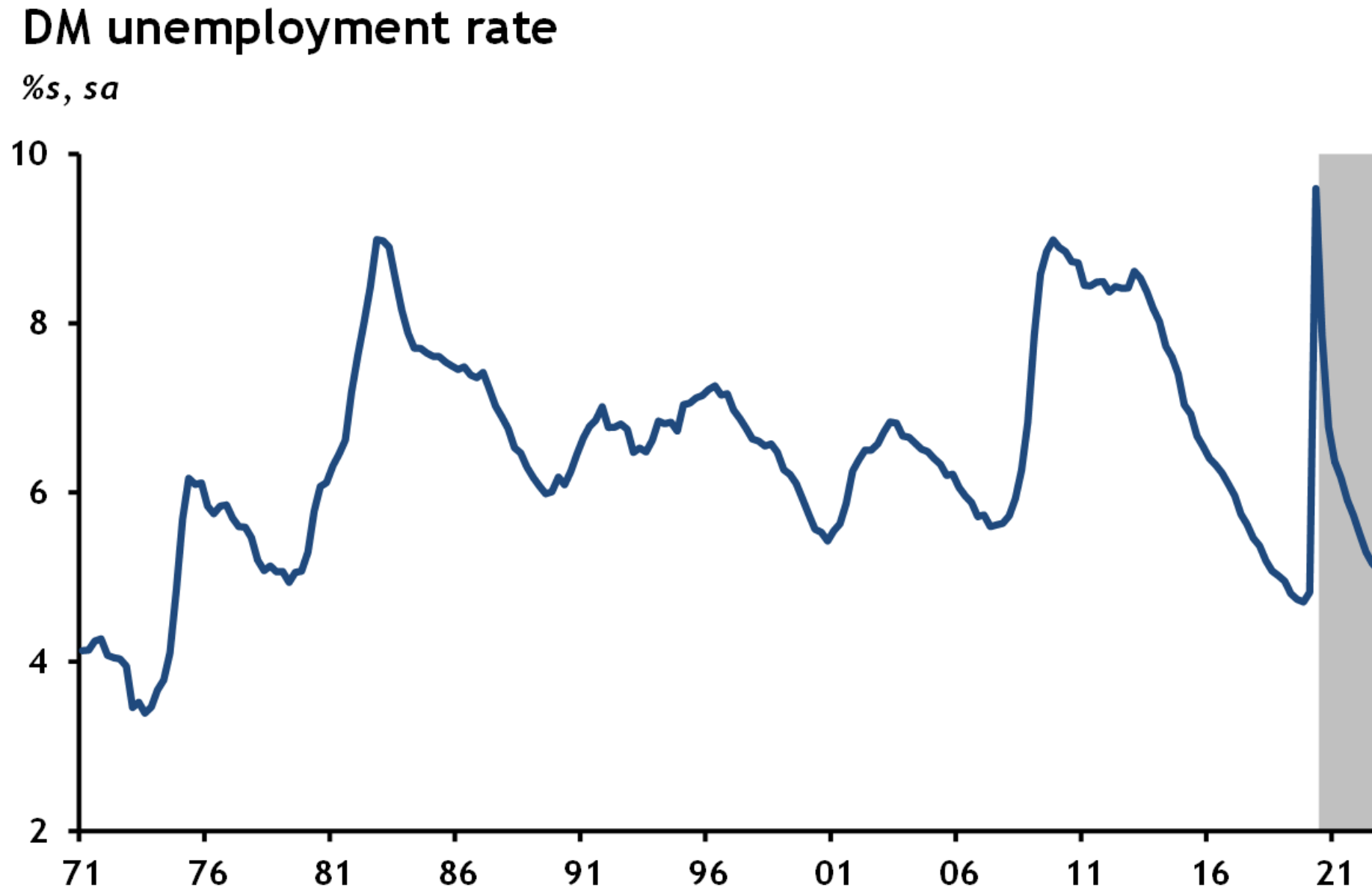
Core inflation performance

%oya

	2009-2019	4Q20	4Q21	4Q22
US	1.7	1.6	4.5	2.4
Euro area	1.1	0.2	2.3	1.3
UK	2.2	1.3	3.0	2.1
Japan	0.1	0.1	-0.2	1.0

Source: J.P. Morgan

Lots of uncertainty about where the pandemic leaves 'slack'

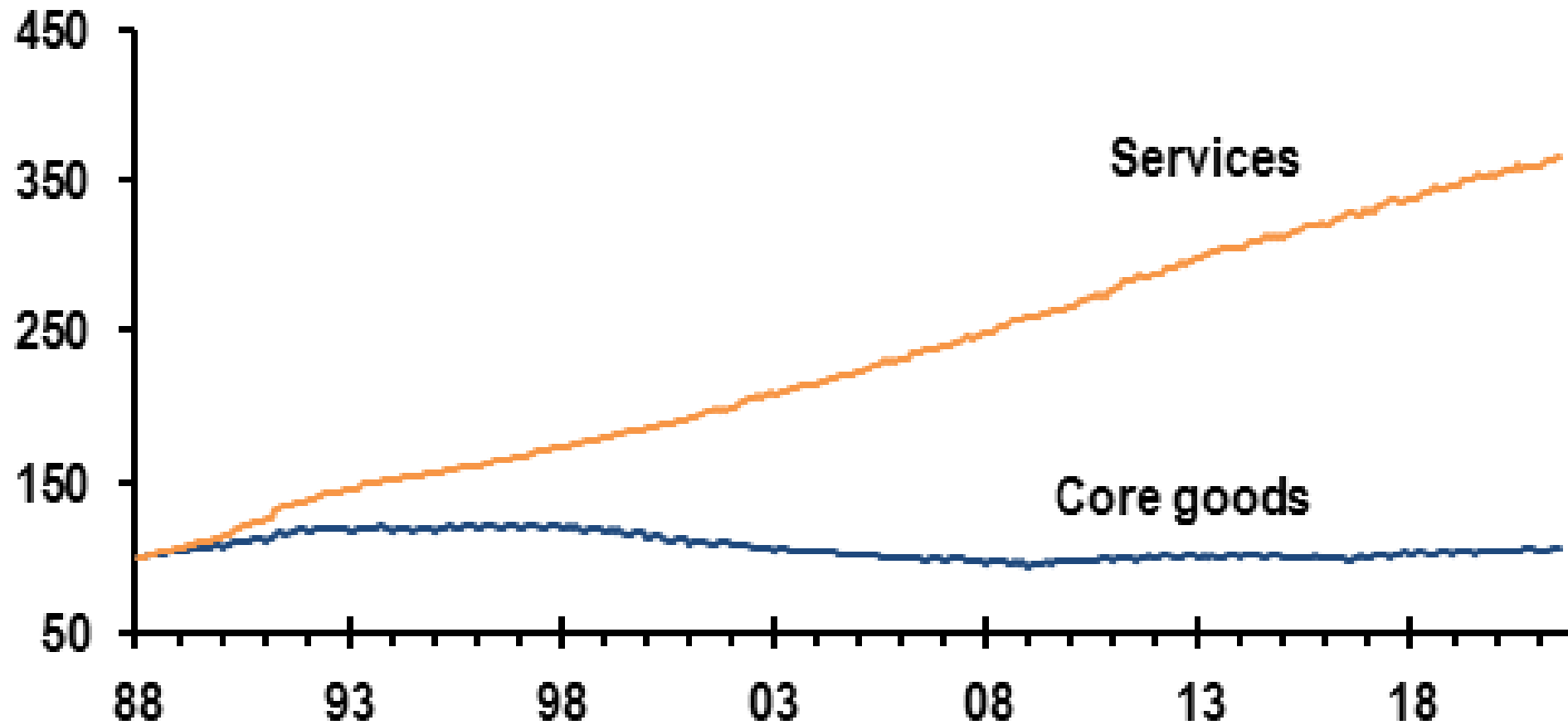


Source: J.P. Morgan

Globalisation does not have reverse to lift inflation

UK: Core goods versus services prices

Index level, January 1988=100



Source: J.P. Morgan

How independent are the world's central banks?

- ❑ QE makes the government's interest payments (and hence the available 'fiscal space') more dependent on the interest rates set by the central bank.
- » But how the economy is performing overall is still a much bigger influence
- ❑ After the pandemic, and given an ageing population, fiscal pressures are going to intensify. Governments will respond by putting 'independent' central banks under pressure to support growth regardless of inflation.
- » Markets, economists, and society as a whole are watching!!!
- ❑ Survey measures suggest public trust in central banks fell in the wake of the GFC, and that the public is confused about the boundary between policies given QE
- » "Formal" indices of central bank independence do not suggest that much has changed.
- ❑ The current move up in inflation is the tip of the iceberg of a broader change in social/political preferences toward higher inflation than central banks want.
- » Central banks are set to succeed in pushing inflation up to their objectives after a decade of undershoot, and this should be welcomed.
- » There is a case for (slightly) higher inflation targets (say 3-4% rather than 2%) that central banks could support

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