



How long can labour markets stay tight?

By John Greenwood

Introduction and Overview

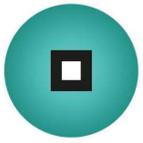
- The puzzle: despite a series of aggressive rate hikes in 2022-23, spending, employment, and wages have stayed strong. How is this possible?
- One place to start thinking about this puzzle is to appreciate that there are really only two theories of inflation: a **monetary** theory and a series of *ad hoc*, **non-monetary** explanations.
- The non-monetary explanations of inflation highlight specific events within the transmission process, elevating them from symptoms to causes.
- Specifically, they have focused on shortages of electronic chips, disruptions to supply chains including those for energy, food, and fertilizers. More recently wage increases and alleged profiteering by firms have been included in the narrative.
- They have also emphasized large-scale fiscal spending and wider budget deficits, the failure of central banks to raise interest rates early enough, and labour shortages.
- The monetary theory is altogether simpler: central banks embarked on QE policies in 2020-21 that led directly to enormous increases in the broad quantity of money, far more than needed by most economies.
- The result has been (1) asset price inflation followed next by (2) a surge in economic activity and finally (3) by inflation of goods and service prices.
- The process continues due to the overhang of excess money still in the system.
- However, as soon as the excess money balances are burned up, inflationary pressures will subside. If monetary policies remain too tight, as at present, many economies will suffer recessions and labour markets will weaken abruptly.

--==--

International Monetary Monitor Ltd

*The IMM Newsletter offers economic research written by John Greenwood, founder and Chief Economist of International Monetary Monitor Ltd. John was also the publisher, editor and lead author of **Asian Monetary Monitor**, a bi-monthly publication that he operated for 20 years from Hong Kong between 1977 and 1996. He was a pioneer of monetary research in Asia. From 1999 to 2021 he was Chief Economist at Invesco, based in London.*

To access my research please email your request to IMM@eri-c.com



1. Introduction: New Keynesian versus Monetarist Analysis.

In several of the major economies – such as the US and the UK – labour market conditions have continued to be unusually tight. Indicators of persistent tightness include low unemployment rates and historically high levels of job openings or vacancy levels. Central bankers, supported by a wide consensus of neo- or New Keynesian economists wedded to Phillips curve analysis, are still raising interest rates due to their concern that a tight labour market combined with wage increases could lead to “second round effects” or self-sustaining wage-price spirals. Monetary analysis rejects this consensus view and points to a very different source of labour market strength – one that is not sustainable for much longer.

The purpose of this Newsletter is to demonstrate that the consensus view is mistaken, adopting a false analysis of how the business cycle operates. Even if the consensus analysis were correct, the effects of further rate hikes would come too late to prevent a recession and a potentially steep rise in unemployment. This Newsletter is also a more formal presentation of my webinar on June 20th when I presented the same arguments. A recording of the webinar is available through www.eri-c.com.

The puzzle that central banks, economists, and financial market analysts are currently grappling with is that, despite a series of steep and extended rate hikes by many monetary authorities during 2022 and 2023, nominal spending by firms and households on aggregate goods and services (i.e., nominal GDP), as well as spending on intermediate output, employment and wages have all remained very buoyant. How is this possible in the face of such aggressive tightening by central banks?

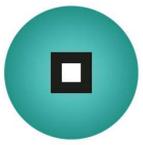
In the discussion that follows covering the US, the UK, the euro-area and Japan I will focus first on the demand side. What is it, according to the consensus view, that has caused such strong spending and inflation? Later I will provide the explanation according to the monetarist view.

Next, I will discuss the supply side. What are the factors – aside from strong demand – that have made labour markets so tight? I will compare some underlying changes affecting the supply of labour as well as a new measure of labour market tightness.

Finally, I will consider how much lead time is provided by labour market indicators and whether these will be sufficient to give adequate advance warning of the onset of recession to investors. My conclusions for investment portfolios will follow.

2. Consensus, Non-Monetary Explanations for Inflation

One place to start thinking about the puzzle set out above is to appreciate that there are really only two theories of inflation: a monetary theory and all the rest. These other theories are not so much a set of theories as a series of ***ad hoc, non-monetary “narratives”*** about what is happening in the economy at any particular point in time. These stories have shifted through time as the inflation process has developed. In short, they are no more than descriptions of the detailed symptoms of inflation which change through time as the transmission process progresses. They



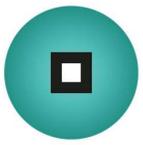
link current datapoints such as shortages in certain product or factor markets such as oil price changes or wage changes to the overall inflation rate; they are not an attempt to identify the true underlying cause of the inflation.

Figure 1. Ad hoc Non-Monetary narratives about inflation have proliferated; but the *only* cause of inflation is excess money growth.

Timing	Alleged “cause” of inflation	Comments
Summer/autumn 2021	Electronic chip shortages affecting new and used car supplies.	Consensus view: inflation mainly due to these causes, and would be “transient”
Winter 2021-early 2022	Energy price increases, exacerbated by the start of the Ukraine war.	BOE analysis is that this was an unforeseeable, terms of trade shock.
From February/March 2022	Food & fertilizer price increases triggered by the Russian blockade of Ukraine’s exports.	Widely viewed as a “shock” that could not have been anticipated by monetary policymakers.
From September 2022	Wage increases demanded by employees in public and private sectors.	Seen as threatening a wage-price spiral and/or the de-anchoring of inflation expectations.
From late 2022 and early 2023	“Greedflation” or profiteering by food or energy suppliers.	Increased profits by leading companies in these sectors dealt with in some economies by “windfall” profits taxes.

Figure 1 lists some of the most well-known of these “narratives” in rough chronological order for this cycle, starting with the shortages of electronic chips that affected the auto industry, disrupting the availability of new and used cars from the autumn of 2020 onwards. The increases in new and second-hand car prices were big enough to cause some upward movement of overall price indices in late 2020. Initially the upward jump of month-to-month overall and core CPI and PCE indices in June, July, and August 2020 could be explained as a return to normal after the declines in March and April. The summer price increases were followed by a lull in price increases during October and November 2020. It was really only from December 2020 that the overall CPI and PCE indices picked up more strongly and began to affect the year-to-year changes from April 2021 when base effects of the falls in prices in 2020 began to kick in. In response, central banks developed the narrative that the on-going inflation was most likely to be “transient”, an ill-advised notion that they clung to for far too long.

Next came increases in the prices of oil and gas, which, having bounced back from their extreme lows in March-April 2020 during the worst part of the early lockdowns, made their first big upward move in the final quarter of 2020, continuing into 2021. The price of Brent crude, for example, doubled from just below \$40 per barrel in October 2020 to \$85 in October-November 2021, reaching \$93 by January 2022, before Russian president Putin’s invasion of Ukraine in February 2022.



Between February and May 2022, soon after Russia’s invasion of Ukraine, the prices of different varieties of grain and fertilizer prices also surged as the implications of Putin’s blockade of Ukrainian ports were translated into spot and futures prices.

Despite CPI inflation already hitting 5.5% in January 2022, the Bank of England argued that UK inflation was due to these external shocks generating shifts in the terms of trade that could not have been anticipated by any central bank. In a variety of speeches and publications Bank officials repeatedly pushed this line of argument – essentially claiming that the inflation was not their fault.

Most recently another false narrative has been doing the rounds of broadcast media such as talk shows, traditional printed publications such as newspapers and magazines, as well as digital social media. This is the proposition that energy producers and food producers or distributors (such as supermarkets) are to blame for some element of the inflation due to profiteering or “greed-flation”. Some countries have gone as far as to impose excess profits taxes on firms in key sectors such as energy and food.

In addition to these consensus “explanations” of inflation, many economists have pointed to more pervasive factors contributing to inflation. Figure 2 summarizes some of the key elements of these arguments.

Figure 2. The Consensus or New Keynesian View has Numerous “Explanations” of Inflation that Fit the Data at Different Points in Time, but they do not Explain Key Parts of the Inflation Story.

Timing	Alleged “cause” of inflation	Monetary view
Pervasive throughout the pandemic, with numerous episodes, dependent on local budgetary process.	Fiscal support measures such as furlough payments to households; loans, grants and other support to corporations.	Fiscal spending on its own is a transfer from private to public sector. It is not “stimulatory” unless supported by simultaneous acceleration of broad money growth.
From start of pandemic until early 2022 (in most economies)	Interest rates kept too low for too long. WRONG: the damage was already done in 2020 by excessive increases in broad money in the US, UK, euro-area, Canada, Australia, NZ etc. – all due to asset purchases	Central banks pay far too much attention to rates and yields, not enough to the quantitative dimension of monetary policy. They ignored rapid growth of money in 2020-21, generally saying that the pandemic would be a deflationary event.
From late 2020 thru 2021, 2022 and into 2023.	Labour “shortages” due to workers not returning to the workforce, or due to long-term sickness.	Total spending is determined by money growth and income velocity. Any decline in output due to labour shortages has been far smaller than either the increase in money or the changes in velocity.

The first of these sustaining stories was fiscal expansion, i.e., the increase in government spending and budget deficits that arose from far-reaching and large-scale pandemic support programmes such as (1) furlough payments to employees



temporarily laid off due to the lockdowns, and (2) lending, grants and tax deferrals provided to firms.

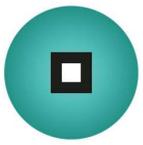
My long-standing view of this issue is that such transfers from the public sector to the private sector – when financed either by borrowing or by taxation – do not constitute an addition to aggregate demand unless they are accompanied by an increase in the quantity of broad money. But in this event the argument reverts to a discussion about monetary policy: was the increase in the quantity of broad money large enough to generate changes in the overall rate of spending? In other words, without monetary support, fiscal actions are not in themselves either inflationary or deflationary. Needless to say, this is not how traditional “fiscalist” economists approach the matter, but it has been a crucial element in the current episode on account of the unprecedented scale, scope, and speed of fiscal support to major economies during the Covid pandemic.

In economies like the US the scale of the fiscal support through the CARES Act, the CHIPS Act, and the industrial subsidy measures in the “Inflation Reduction Act” (IRA) has been enormous. Legislation passed by the Congress in March 2020, December 2020, and March 2021 provided a total of nearly \$5.8 trillion in fiscal support to the US economy—about 28% of US GDP. This total includes roughly \$3 trillion from the spring 2020 bills—the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020; the Families First Coronavirus Response Act; the Coronavirus Aid, Relief, and Economic Security (CARES) Act; and the Paycheck Protection Program and Health Care Enhancement Act— inclusive of roughly \$0.45 trillion in capitalization for the Fed lending facilities in the CARES Act; as well as \$0.9 trillion in the stimulus divisions of the Consolidated Appropriations Act, 2021, passed in late December 2020; and \$1.9 trillion in the American Rescue Plan Act of 2021, passed in March 2021. (Source: <https://www.federalreserve.gov/econres/feds/files/2021035pap.pdf>)

But it is equally true that the Federal Reserve acquired securities and made loans to the tune of \$4.7 trillion (net), expanding broad money (M2) by as much as \$6.2 trillion between March 2020 and March 2022. In other words, both fiscal and monetary policy were highly expansionary. But it is highly doubtful that the fiscal expansion could have been impactful without the simultaneous monetary expansion.

Many economists make the case that the Fed, the BoE, the ECB and other central banks kept interest rates too low for too long (Figure 2, centre) in 2021-2022. This argument is both misdirected and wrong. It is misdirected because rates can stay low without generating inflation. For example, the Bank of Japan kept its main policy rate very low for almost three decades (from September 1995 when the official discount rate was reduced below 1%) without triggering inflation. The low rates were a result of prior low money growth and consequent low inflation or deflation. It is wrong because it is not low rates *per se* that produce inflation; it is excess money growth – as Japan discovered in 2022 as a result of the after-effects of more rapid M2 growth from March/April 2020 until a year later.

Finally, the argument is frequently made that labour shortages have precipitated – or have contributed to or are extending – the current episode of inflation. Although it is

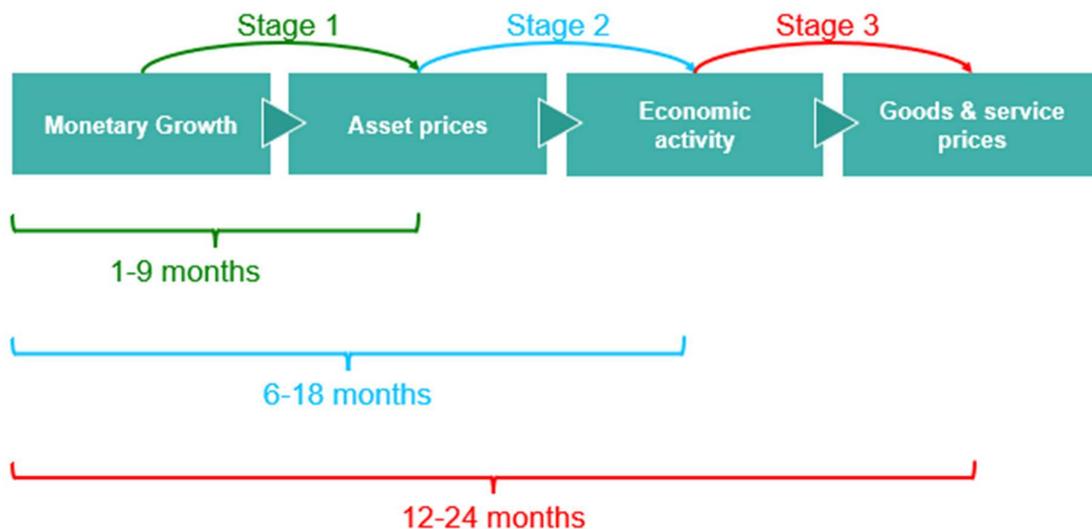


true that there are less workers in some countries than before the pandemic – a topic we shall discuss below – the problem here is basically a question of scale. The shortages of workers typically amount to a fraction of a percent of the entire workforce whereas the changes in broad money were vastly greater than that, with growth rates averaging 20% or more for a period of months in 2020-21. Since inflation is the difference between money growth and the amount of money absorbed by output growth (which includes increases in the labour force) and the incremental amounts of money that firms and households wish to hold, changes in the size of the labour force cannot hold a candle to changes in money growth as an explanation for the subsequent inflation.

In summary, all these non-monetary explanations for inflation are flawed in one way or another.

3. The Monetary Explanation of the Current Episode of Inflation.

Figure 3. The Monetary Transmission Mechanism and the Lags in Effect



The monetary theory of inflation relies on changes in the rate of growth of broad money (*not* interest rates) to generate changes in the price level (either inflation or deflation). The underlying theory is summarised in the well-known equation of exchange ($MV=PT$ or $MV=PY$) that has been used in quantitative studies by monetary economists since the early part of the twentieth century. This is not the place to spell out the details of the theory; our main purpose here is to demonstrate that the current episode of inflation (2021-2023) has been a textbook example of the operation of the quantity theory.

Very soon after the onset of the Covid-19 pandemic, central banks in many countries embarked on large-scale asset purchase operations (QE) that resulted directly in substantial accelerations of the quantity of money broadly defined (see Figure 4).

From growth rates in the low single digits, by yearend 2020 the year-on-year growth rates of M2 or similar magnitudes had accelerated substantially, continuing into 2021. In the table, the inflation rates in the first six economies listed have substantially exceeded those in the last four (Japan, Switzerland, China and India). This can be seen for the first six economies in the final column which tabulates the acceleration of money in percentage points . The accelerations of the last four were either very small in absolute terms – for example in China and India -- or, in the case of Japan and Switzerland, money growth had been at negligible rates of growth pre-Covid and increased to moderate rates during Covid. The net result was that all four economies experienced lower inflation surges than the first six economies listed.

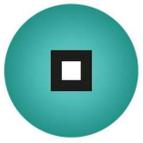
Figure 4. The Driver of Inflation was Monetary Acceleration in 2020.

Broad Money Acceleration in 10 Economies, Feb-Dec 2020.			
% year-on-year	Feb 2020 % year-on-year	Dec 2020 % year-on-year	Change in Percentage Points
US M2	6.8%	24.8%	+18.0
UK M4x	4.6%	13.8%	+9.2
Euro area M3	5.6%	11.3%	+5.7
Canada M3	8.6%	11.7% (*)	+3.1
Australia M3	2.3%	12.7%	+10.4
New Zealand M3	5.6%	12.2%	+6.6
Japan M2	2.9%	9.3%	+6.4
Switzerland M3	0.1%	6.5%	+6.4
China M2	8.8%	10.1%	+1.3
India M3	10.4%	12.3%	+1.9

(*) Canada's M3 accelerated to 16.3% in June 2020, but decelerated in the second half of 2020, accelerating again in 2021-22.

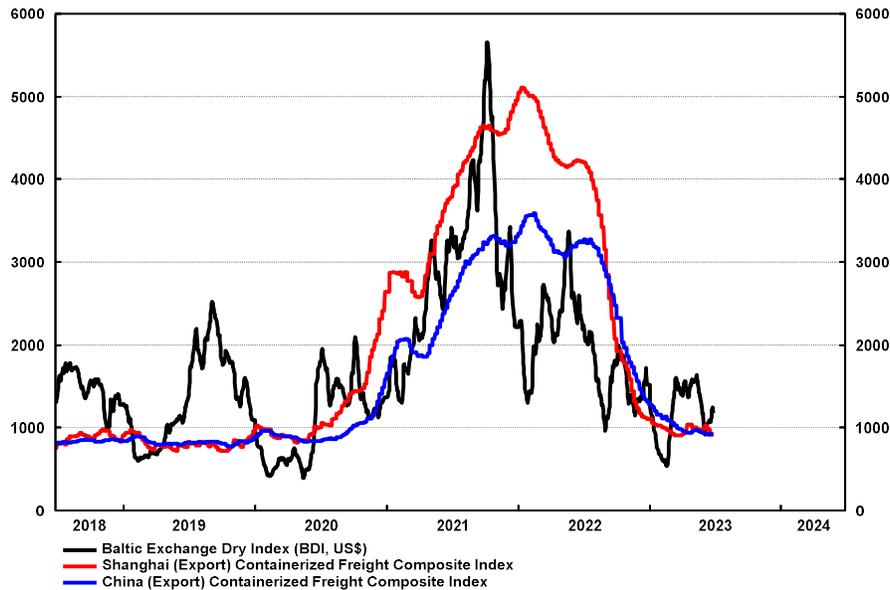
The first set of impacts, as shown in Figure 3, was on asset prices. Prices of bonds, equities, residential real estate, as well as sensitive commodities and freight rates required to meet the switch in expenditures from services to goods during lockdown, all increased steeply in the early months of the pandemic. The surge in consumer prices started in April or May 2020 and continued through 2021 and – in some cases – into 2022. Some prices have already peaked out and have fallen sharply as demand has shifted or as the amount of monetary stimulus has diminished. Freight rates, which reflect both aggregate and sectoral demand, have been especially interesting (Figure 5, PTO), initially surging, but have now returned to their pre-Covid levels.

One aspect of this monetary analysis is that it provides an explanation for the behaviour of asset prices in the early stages of the pandemic which the standard, consensus view generally ignores or fails to explain. If inflation were a “transitory” phenomenon (to use the consensus term so prevalent in 2021) explained by temporary shortages of goods or components such as electronic chips, how does consensus economics explain the surge in the prices of so many asset classes? Why should house prices have surged? Why should equity prices unrelated to the pandemic have also surged? The basic problem with the consensus view is that it is



not a complete theory of money, asset prices, the business cycle and changes in the overall level of goods and service prices.

Figure 5. International Freight Rates Have Returned to pre-Covid Levels.
BAL TIC & CHINA FREIGHT RATES (US\$, and Points)



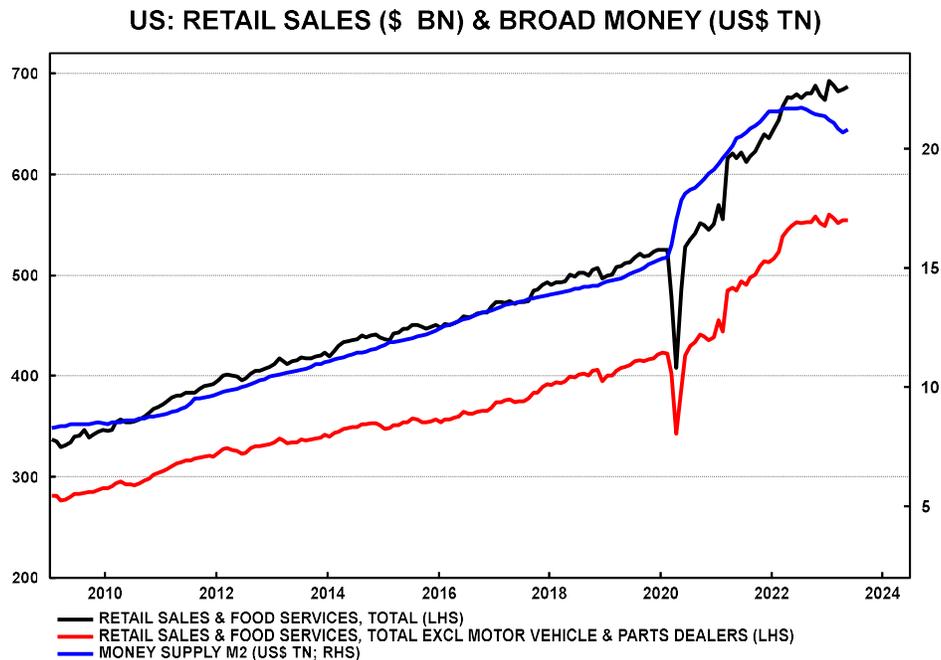
Source: Refinitiv Datastream

The second set of impacts was on economic activity. The easing of lockdowns alone would have generated a bounce-back in economic activity, but, when combined with the huge stimulus from rapid money growth and the build-up of household cash balances, the resurgence of real GDP was very strong in many countries. A very clear illustration is provided by the impact on retail sales in the U.S. (Figure 6, PTO). After a sharp dip in sales in March and April 2020, both the total and ex-auto figures bounced back in May and June, maintaining their pre-Covid trend until the early months of 2021 when sales moved sharply upwards. This effect lasted until mid-2022 when sales began to flatten in real terms and to moderate in nominal terms. The timing has been a good demonstration of the widely observed tendency for the lag in effect from monetary growth to economic activity to be typically from six to eighteen months (Figure 3).

Finally, the third set of effects has been on goods and service prices as well as on wages and salaries. As discussed above (p.3), inflation emerged in the spring of 2021, just over one year after the surge in money growth and continued to rise through much of 2022. In fact, the effects are still percolating to those parts of the economy that have not yet adjusted their prices upward to restore lost purchasing power. In brief, both the ordering and the timing of the transmission process – from asset prices to economic activity to goods and service prices – replicates the classic pattern of the lagged effects of monetary growth which were clearly laid out in the monetarist literature of the 1960s by authors such as Milton Friedman and Anna Schwartz.



Figure 6. Retail Sales have been elevated and above trend since early 2021.



The corollary is that the non-monetary explanations of inflation regularly cited by central bankers and consensus or Keynesian economists – such as supply chain disruptions, energy and food price shocks, corporate profiteering, or threats of a wage-price spiral etc – are simply vacuous.

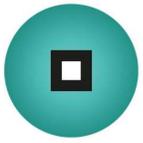
4. Labour Shortages following the Pandemic.

Following the Covid-19 pandemic, many developed economies have reported labour shortages or lower participation rates than pre-Covid. Among the main sources of the tightness in labour markets are the following factors:

- Early retirement (especially among post-war baby-boomers)
- Long-term sickness e.g., in August 2022 the UK's ONS reported 2.5 million sick, up from 2.0 million in 2019. Sicknesses cited included long Covid, but respondents to surveys also highlighted ageing and extended NHS waiting times.
- A greater number of potential young workers staying in education.

In the UK there have been some additional local factors:

- The UK was hit by post-Brexit restrictions on immigration which came into force in January 2022.
- In the UK, employers have been reporting shortages of staff, but one in 20 job seekers could not find employment. A June 2021 survey found that sectors where such problems were acute included hospitality, trucking, and healthcare.
- The increase in vacancies was mainly driven by low-pay occupations.



- In hospitality, part-time jobs were down from 34% to 31%, impeding the recovery.
- Restaurants were especially hard hit by Omicron restrictions, which discouraged recruitment.
- In healthcare, 6% of nurses' jobs were vacant, while 10% of doctors' jobs were vacant.

Mainly on account of these declines in their respective labour forces, the trends of employment in the UK and US, despite seeming buoyant, have remained below their pre-Covid trend rates. The trends are shown by the dashed lines in Figure 7.

Figure 7. Employment levels in the US and UK are still to return to their pre-Covid trends.

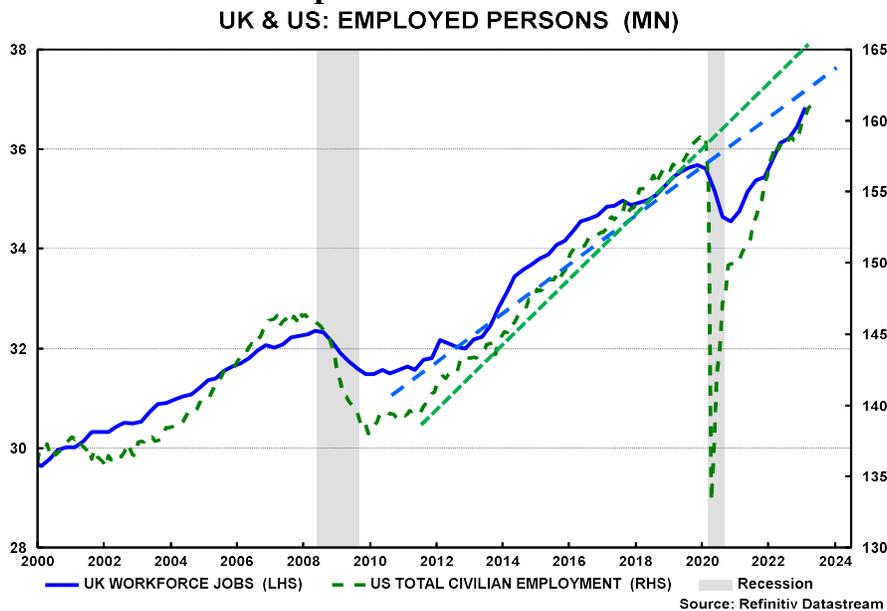
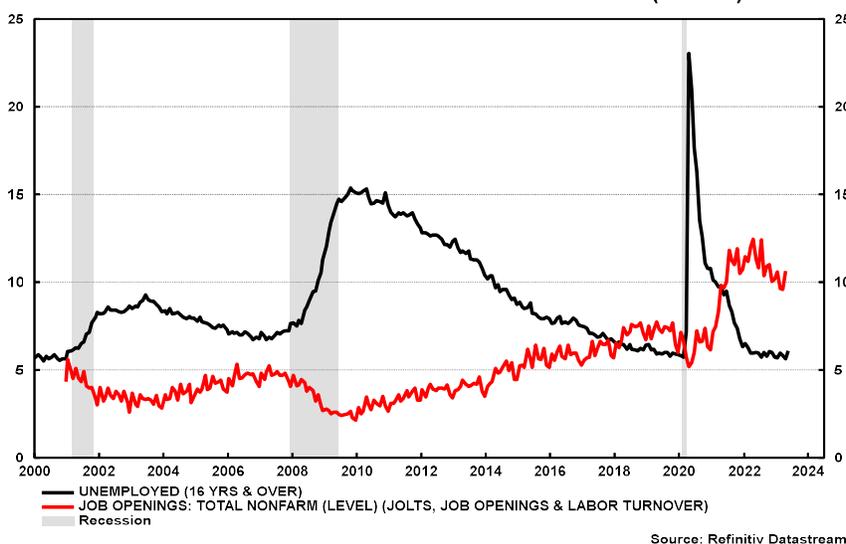


Figure 8. The US ratio of Unemployed to Vacancies reached 2.0.



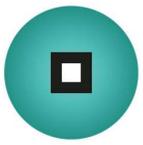
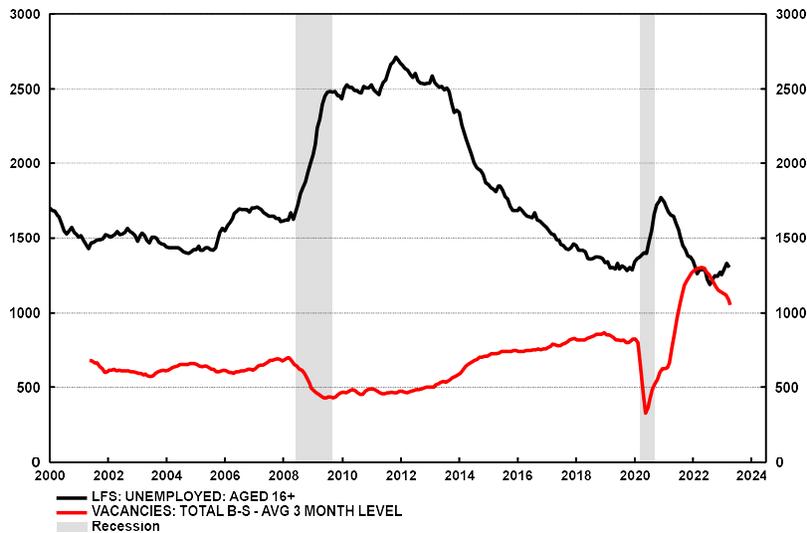
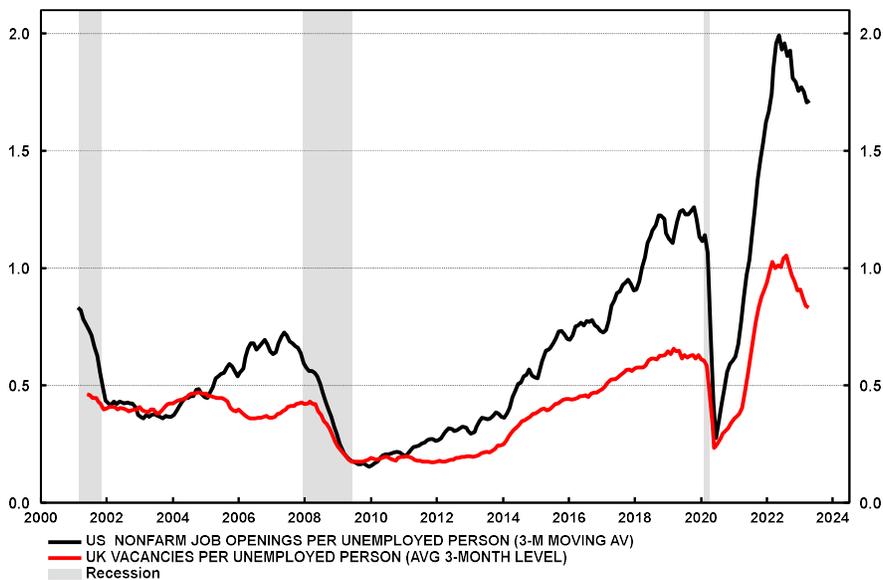


Figure 9. The UK ratio of Unemployed to Vacancies has been over 1.0.
UK : UNEMPLOYED PERSONS & VACANCIES (Thousand)



An indicator of the tightness of the labour market can be constructed from the ratio of vacancies to unemployed persons for the US (Figure 8) and the UK (Figure 9). In the US this ratio peaked at 1.993 in May 2022, while in the UK it peaked at 1.055 in July 2022 (Figure 10). Both peaks were at new highs, although it should be acknowledged that the time series in each case are relatively short.

Figure 10. UK & US Ratios of Vacancies per Unemployed Person Indicate Tight Labour Markets
US & UK : VACANCIES PER UNEMPLOYED PERSON (Ratio)



The question that interests us is whether the tightness in the two labour markets indicates anything about either wage growth in each economy or the likely persistence of the underlying rate of inflation. Unfortunately, it is unlikely to do so.



In the first instance the decline in both ratios in 2020 was the result of the Covid-19 pandemic hitting all major economies. Therefore, the steep subsequent rise in the two vacancies-to-unemployed ratios in 2021-22 reflected the special circumstances of the period. The loss of many workers for the various reasons spelled out on p. 9 above (such as sickness, early retirement, extension of education etc) reduced supply, while demand was boosted by an unprecedented injection of spending power into both economies from the exceptionally rapid money growth rates engineered by the Federal Reserve and the Bank of England. The demand for labour, after all, is subject to the purchasing power of firms and households, which had been stimulated in a quite extraordinary manner by very rapid broad money growth.

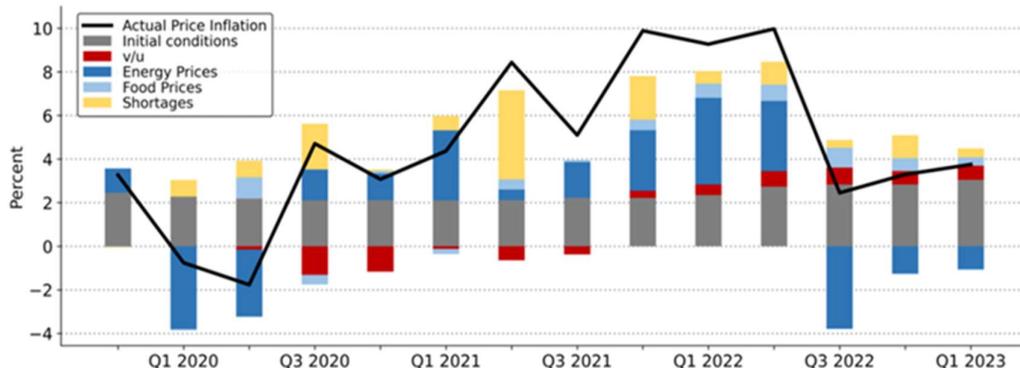
5. Measuring the Excess of Purchasing Power

Our closing question, therefore, is whether the ratio of vacancies-to-unemployed can give us any insight into the possible magnitude or duration of the current inflationary episode? Or is it better to rely on monetary measures of spending power?

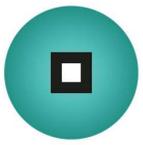
The ratio of vacancies-to-unemployed, a comparatively new measure, was used, for example, in a recent [paper](#) by Ben Bernanke and Olivier Blanchard (“What Caused the U.S. Pandemic-Era Inflation?” presented at a Brookings conference, May 23, 2023) along with other variables to “explain” the forces driving the current inflation. In a fawning commentary in the New York Times Paul Krugman wrote that he thought the paper, and another delivered at the same conference, indicated “growing agreement among many (although not all) economists about both the causes of and, more important, the future prospects for inflation.”

The two authors presented a model of inflation which has as its four main independent (explanatory) variables an index of shortages, food prices, energy prices, the vacancy-to-unemployment ratio, in addition to the initial starting conditions as shown in Figure 11. In a passage approvingly quoted by Krugman they summarize that “We find that contrary to early concerns that inflation would be spurred by overheated labor markets, most of the inflation surge that began in 2021

Figure 11. The “Sources” of Inflation, 2020Q1 to 2023 Q1



Bernanke and Blanchard (2023)



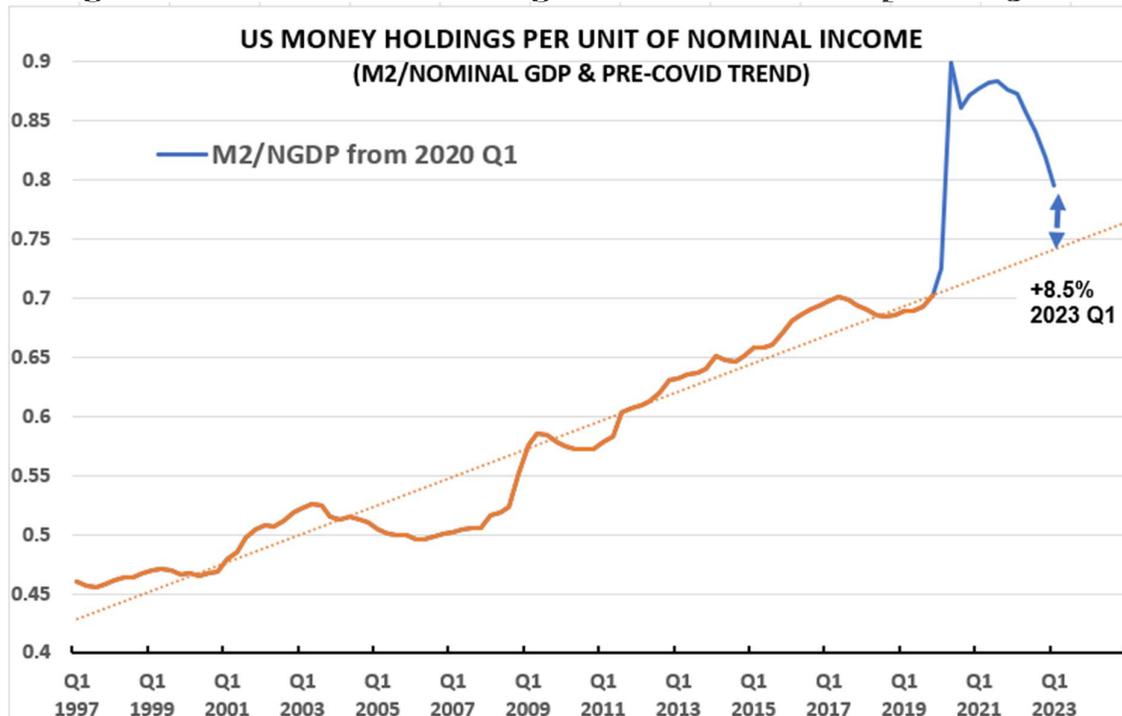
was the result of shocks to prices given wages, including sharp increases in commodity prices and sectoral shortages.” In Twitter messages on May 25 Blanchard [explained](#) that initially spending was also boosted by “too strong aggregate demand” from overly aggressive fiscal stimulus and the shift of demand from services to goods.

Basically, the Keynesian-consensus story is that inflation resulted from an unanticipated series of external shocks, leading to adverse changes in the terms of trade. In other words, inflation was due to a series of non-monetary causes. The problem with this story is that it completely fails to explain the prior asset price inflation, or the data in Figure 4, i.e., why inflation was high in some economies but low in others.

By contrast, the monetary story remains much simpler, arguing that inflation was inevitable in those economies that had allowed large-scale monetary expansion. The monetary accelerations in 2020-21 together with the behaviour of the variables in the quantity theory of money were the key to understanding or predicting increases in the aggregate or overall price level. Moreover, as in all prior inflations, the precise timing of the relative price changes in different sectors could not be known in advance, but these have merely formed part of the transmission process; they are not separate causes of the inflation.

A straightforward way to measure how much residual purchasing power remains in the US and UK economies is to examine the ratio of broad money to nominal GDP (the inverse of velocity) since this provides a measure of spending power per unit of income. Figures 12 and 13 present this data for the US and UK respectively. Just as

Figure 12. US Excess Purchasing Power will be Used Up in 2023 H2.



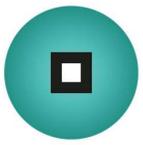
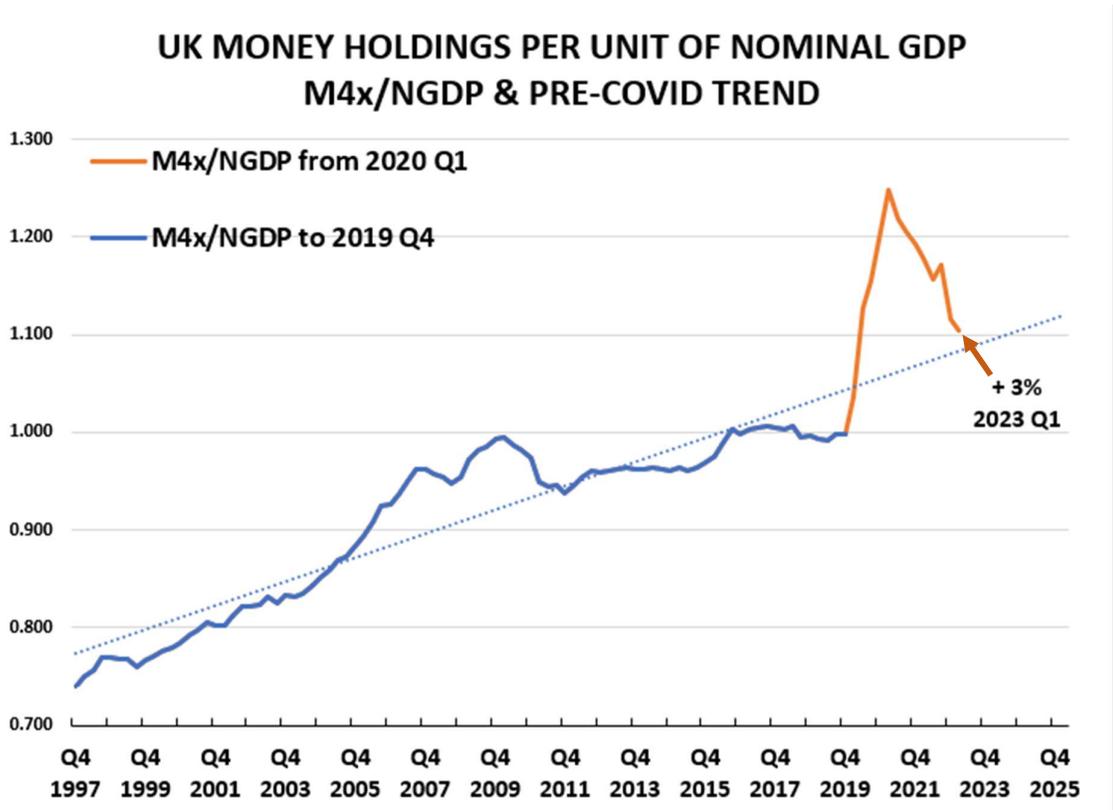


Figure 13. UK Excess Purchasing Power is Disappearing Rapidly.

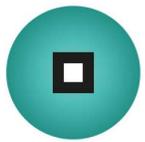


income velocity (Nominal GDP/Money) is trend-reverting, so is its reciprocal (Money/Nominal GDP).

In both charts the trend of the ratio of broad money to nominal income is shown for the period 1997-2019. The big deviation from trend due to the initial collapse of spending (measured by nominal GDP) in early 2020 and the surge in broad money growth from March 2020 is shown in a different colour.

In the US case (Figure 11) the starting point pre-Covid was exactly on the pre-Covid trend. The ratio peaked at 27.5% above trend in 2020 Q2 but had fallen to just 8.5% above the pre-Covid trend in 2023 Q1. Of course, we cannot be sure that the ratio will revert precisely to trend, and there may well be some overshooting, but it is clear that the excess of spendable money balances relative to nominal GDP has significantly diminished.

In the UK (Figure 13), at 2019 Q4 immediately pre-Covid the recorded value of the ratio was 4.2 % **below trend** and the peak in 2021 Q1 was 19.2% **above trend**, giving an increase of 23.4 percentage points. By 2023 Q1 the deviation from trend had declined to 3%, or **7.2 percentage points** above its starting point relative to trend. As explained in IMM Newsletter #21 (“Britain’s Sticky Inflation,” 11 May 2023), there are several reasons why the UK’s inflation is remaining higher for



longer, but these factors will quickly disappear once the excess of M4x purchasing power relative to spending (or nominal GDP) is eliminated.

In both economies – allowing for overshoots and some degree of catch-up behaviours over the next few quarters as different service or wage-earning sectors seek to restore their positions – we can say that the inflationary impulse from excess money is mostly spent. The excess of money balances that remains to be spent is limited, and therefore inflation should fall rapidly in the immediate quarters ahead.

As we have long argued, this episode of inflation was likely to be a single – albeit persistent – event, not the precursor to an era of sustained higher inflation as some economists have gloomily predicted. Moreover, as excess spending power is whittled away, labour markets are likely to weaken sharply. As an indicator that is coincident with economic activity (the third of element of the flow chart in Figure 3), there is very little predictive power in the current state of the labour market; fundamentally its strength reflects the amount of purchasing power previously injected. Purchasing power is not a consequence of strong labour markets since they are both determined by the same prior expansion of money growth.

It follows that labour markets will stay tight only as long as excess purchasing power from prior excess money growth remains in the economy. As soon as that excess becomes a shortage due to overly tight monetary policy (i.e., money growth that is too slow), labour markets will weaken abruptly. Both the US and UK economies are currently (at the start of 2023 Q3) at the point where any excess purchasing power is disappearing and therefore it is likely that over the next year or so the slow or contracting money growth of the past 5-6 quarters will dominate economic activity and inflation.

In closing I wish to emphasise that the views expressed here are not new¹. They stem from a lifetime of study of the relation between money and asset prices, economic activity, and inflation – many case histories from different eras under differing monetary systems. The abruptness and the duration of the downturns in monetary growth since mid-2022 in both the US and the UK are unprecedented in post-war economic history. It would be highly unusual if these monetary squeezes did not result in significant declines in asset prices, economic activity, and inflation. Not only do the monetary contractions imply a substantial probability of recession starting in late 2023 or early 2024, but they also imply an inflation (or deflation) rate in 2024 and 2025 that is far below most consensus expectations.

¹ For a fuller explanation of my views readers should refer to an article in the Journal of Applied Corporate Finance, Fall 2021 co-authored with Steve H. Hanke: [On Monetary Growth and Inflation in Leading Economies, 2021-2022: Relative Prices and the Overall Price Level - Greenwood - 2021 - Journal of Applied Corporate Finance - Wiley Online Library](#). For articles on US inflation, readers are also referred to a series of op-eds by the same two authors in the Wall Street Journal, beginning with “The Money Boom Is Already Here,” February 22, 2021.



Summary and Investment Implications

- There are really only two theories of inflation: a **monetary** theory and a series of *ad hoc*, **non-monetary** explanations.
- The non-monetary explanations of inflation highlight specific events within the transmission process, elevating them from symptoms to causes.
- Specifically, in the current episode of inflation they have focused on shortages of semi-conductors (electronic chips), disruptions to supply chains including those for energy, food, and fertilizers. More recently wage increases and alleged profiteering by firms have been included in the non-monetary narrative of inflation. But all these are symptoms, not causes of inflation.
- Non-monetary explanations have also emphasized large-scale fiscal spending, the failure of central banks to raise interest rates early enough, and labour shortages. The first does not necessarily create money; the latter two are part of the narrative of the inflation story of the past two years, not causes.
- The monetary theory is altogether simpler: central banks embarked on QE policies in 2020-21 that led directly to enormous increases in the broad quantity of money, far more than needed by most economies.
- The result has been (1) asset price inflation followed next by (2) a surge in economic activity and finally (3) by inflation of goods and service prices. This sequence has precisely followed the standard template of monetary transmission laid out in the late 1950s and early 1960s by Milton Friedman and Anna Schwartz, which was based on their extensive studies.
- Where inflation continues today, it is largely due to the overhang of excess money still in the system from the over-supply in 2020-21.
- However, as soon as the excess money balances are burned up, inflationary pressures will subside. If monetary policies remain too tight, as at present, many economies will suffer recessions and labour markets will weaken abruptly.
- The investment implications of this analysis are that equity markets remain acutely vulnerable to recession, both on valuation and on earnings grounds. Investors should hold only deposits and short-term government bonds in those economies whose currencies can be relied on to hold up during the forthcoming recessions.

Disclaimer

The information in this report has been prepared by International Monetary Monitor Ltd. (IMM). Materials available herein have no regard to the specific business objectives, financial situation or particular needs of any specific recipient. The research is published for information purposes and is not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. The opinions, estimates and projections in this report reflect the current judgment and express views of the author as at the date of the report. They do not necessarily reflect the opinions of IMM and are subject to change without notice. Unless specifically stated otherwise, all price information is indicative only. No representation or warranty, either expressed or implied, is provided in relation to the accuracy, completeness, or reliability of the materials, nor are they a complete statement of the securities, markets or development referred to herein. The material should not be regarded by recipients as a substitute for the exercise of their own judgment. The financial instruments discussed in this report may not be suitable for all investors. Copyright © 2023 International Monetary Monitor, not for distribution without express permission.

Registered office: c/o PKF Littlejohn, 15 Westferry Circus, Canary Wharf, London E14 4HD, UK.