

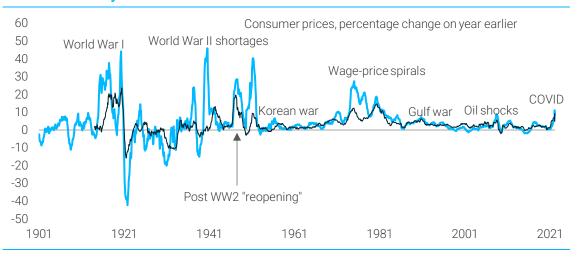
Macro Picture

TRANSITORY INFLATION - TWO YEARS ON

Dario Perkins

Economists continue to debate the causes of an inflation outbreak that was supposed to be "transitory". While there is clear evidence of disinflation in global goods markets, Team Transitory underestimated the role of lingering supply-side destruction. Inflation is coming down, but to what level? Are central banks willing to tolerate a further inflation overshoot?

Chart 1: A history of inflation outbreaks



Source: FRED, Bank of England, TS Lombard

TWO YEARS LATER

The global inflation outbreak has been much worse – and lingered for a lot longer – than the consensus expected. While the disinflationary process has started, it is happening more slowly and has required a more forceful policy response than anticipated by Team Transitory. We look at what when wrong and ask whether anything is still salvageable from the transitory thesis.

PERSISTENT THREATS

There are various reasons why inflation has remained high, including unexpectedly long lags (as cost pressures that started in manufacturing eventually spread to the services sector), pent-up demand/stimulus overhang, overheating in labour markets and profiteering by companies to take advantage of unusual circumstances. Supply-side factors take a large part of the blame, too.

HOW THE STORY ENDS

The worst of the inflation outbreak appears to be behind us, especially as central banks have engineered significant demand destruction. While there are doubts about whether inflation will decline all the way back to central banks' 2% targets, it is likely to reach levels that the authorities would tolerate (sub-4%). The main risk lies in the interaction between wages and profits margins.



TRANSITORY INFLATION – TWO YEARS ON

It is two years since the start of the most serious outbreak of inflation for half a century. Back then, the overwhelming consensus was that inflation would be "transitory", the result of large – but temporary – policy stimulus, massive – but fleeting – relative demand shifts and severe pandemic-related disruption to global supply chains. Clearly, something went wrong for the economists formerly known as Team Transitory. But what? While it is clear Team Transitory underestimated the magnitude and persistence of the inflationary surprise, we are now seeing genuine signs that disinflation has started in the places where Team Transitory expected it. Goods prices have stabilized as supply chains have normalized, and manufacturing is in the grip of a powerful bullwhip recession as demand shifts back to pre-COVID spending patterns (leaving producers with an overhang of inventories). The problem, of course, is that a rapid acceleration in services prices is now obscuring the disinflationary progress that has been made in global goods markets. This rotation in the source of inflation does not necessarily invalidate the transitory thesis – because it could be part of the same one-off shift in price levels rather than the start of a more persistent dynamic – but it certainly tilts the debate towards more "structural" explanations. And it has forced a big response from central banks, which leaves the t-word redundant.

While Team Transitory underestimated the lags in their own thesis, attention has shifted to other sources of inflation persistence. One idea, popular among critics of the COVID policy response, is that there is still an overhang of stimulus in the global economy. The monetary and fiscal response was large, leaving households and businesses with significant excess savings, which eventually fuelled "overheating" in labour markets. According to recent analysis from Ben Bernanke and Olivier Blanchard, tight labour markets are now the main force keeping inflation above central banks' targets. Yet, it is important to recognize that there has also been serious supply destruction over the past three years. Energy prices and production costs have increased, especially in Europe, and the labour force has deteriorated – even shrinking in some parts of the world. Real GDP in most DMs is lower than where the IMF thought it would be before the pandemic; and, except in the US, savings rates have stayed elevated. This is not what we would expect if the inflation problem was due to an overhang of policy stimulus. In fact, even labour markets would not look wildly different from their pre-COVID norms without lingering supply impairment. And with real wages falling significantly, any "second-round effects" have been – so far, at least – the result of shifts in corporate pricing strategies, not worker power.

How does this story end? There is every reason to think the worst of the post-COVID inflation outbreak is over. Disinflation in global goods markets, which always seemed inevitable, is set to continue and will eventually spread to the services sector. Thanks to the aggressive response from monetary policy, we are now also seeing significant global demand destruction particularly in housing markets and the durable goods sectors - which will only reinforce the disinflationary trends through the remainder of this year. But it is important to remember that aggressive monetary tightening was never part of the transitory inflation thesis, which means the cost of restoring price stability could end up being significantly greater than the consensus realized two years ago. Recession risks have increased even if, for now, the world remains on track for a historically improbable "soft landing". In the end, the collateral damage to the world economy from this inflation episode is likely to depend on how quickly consumer prices return to a trajectory that is tolerable for central banks. While the authorities do not need to hit their 2% targets imminently, they do need to be able to retain a degree of "plausible deniability" about letting those targets drift higher. Right now, the clearest threat of lingering inflation lies in the potential interaction between continued labour shortages and corporate pricing strategies. If workers are successful in clawing back lost purchasing power, will companies accept a modest squeeze on their (record-high) profit margins? The answer could determine what happens next.



1. TWO YEARS LATER

It is the two-year anniversary of the most serious outbreak of inflation in almost half a century. US inflation first broke above 5% between May and June 2021 and has remained above that level ever since. Many other parts of the world have suffered even faster price increases, with Europe and most other DMs recording double-digit rates of inflation – something that, at least for Europe, seemed unimaginable two years ago. It is fair to say that the magnitude and persistence of this inflation outbreak has caught the vast majority of investors (and policymakers) by surprise. Back in 2021, the overwhelming consensus was that inflation would be "transitory", a term first adopted (and eventually abandoned) by the chairman of the Federal Reserve. Prices would never revert to their pre-COVID levels, but inflation (the rate of change in prices) would quickly settle back to the sort of readings that were common during the 2010s. Two years on, it is important to understand went wrong for the inflation forecasters previously known as Team Transitory. Did they just getting their timing wrong or has something more "structural" happened to shift the trajectory of the global CPI? The answers could have profound implications for, both for investors worrying about imminent recession risks and for longer-term market trends.

Chart 2: Supply chains have normalized



Source: New York Fed

Chart 3: Shipping chaos has ended



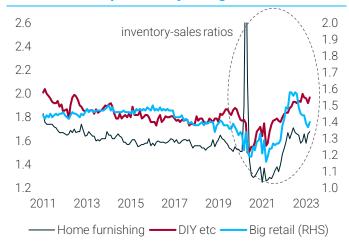
Source: Datastream, TS Lombard

Team Transitory not totally wrong

Team Transitory blamed the initial inflation surge on a variety of factors, including large (but ultimately one-off) policy stimulus, massive lockdown-induced shifts in *relative* demand and severe pandemic-related disruptions to global supply chains. Their thesis was a simple one. Governments used large-scale fiscal support programmes to protect peoples' incomes during the pandemic while simultaneously imposing strict controls on how they could spend that cash. Unable to engage in "high-contact" activities such as travelling or eating out, most of this stimulus was diverted into global goods markets, putting enormous pressure on manufacturing, international trade, wholesaling, and distribution. Supply chains buckled, especially as producers also had to cope with rolling lockdowns, new social distancing rules, logistical chaos at the ports and massive uncertainty (which only compounded the world's logistical problems). Crucially, however, Team Transitory believed all these problems would disappear quickly. Supply chains would catch up and spending patterns would return to normal once the pandemic was over.

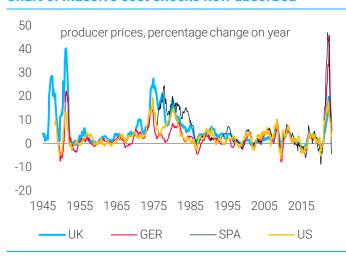


Chart 4: Bullwhip inventory swings



Source: Census Bureau, TS Lombard

Chart 5: Massive cost shocks now absorbed

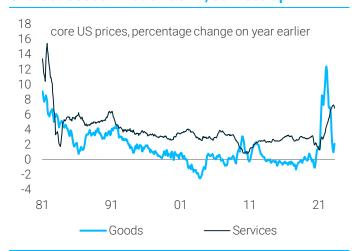


Source: National sources, Datastream, TS Lombard

Bullwhip recession

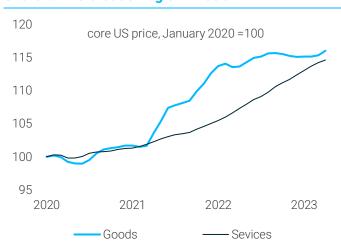
Two years later, there is now clear disinflation in the areas where Team Transitory expected it. Policy stimulus has ended, the relative demand for goods has declined, and supply chains have recovered. In fact, the bullwhip effect that contributed to a burst of inflation in traded goods prices has now swung into reverse, as companies that built up large inventories – presumably in the expectation of permanent scarcity – are struggling to sell those items. Commodity prices are down significantly; and with global manufacturing and world trade now contracting, traded goods prices look set to experience outright deflation. The problem, however, is that other sources of inflation have since taken over. Goods prices have slowed, but services prices have accelerated. This is what finally killed the transitory inflation thesis and forced an aggressive response from central banks. Once it became clear that inflation was broadening beyond the distortions directly associated with the pandemic, the authorities felt they had no choice but to tighten monetary policy. And since the whole basis of Team Transitory's argument was that central banks would not need to respond, the t-word was redundant. Team Transitory had lost the debate.

Chart 6: Goods inflation down, services up



Source: BLS, TS Lombard

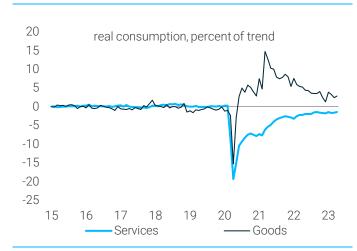
Chart 7: The broadening of inflation



Source: BLS, TS Lombard

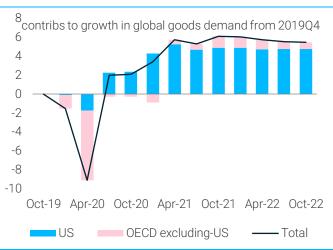


Chart 8: Demand patterns gradually shifting back



Source: BEA, TS Lombard

Chart 9: Blame US consumers!



Source: OECD, TS Lombard

Broader = more persistent?

There were two reasons why central banks abandoned Team Transitory as soon as they saw inflation migrate from the goods to services sectors. First, it was no longer sufficient to blame specific issues in areas such as used car prices, which meant the authorities had to accept the possibility that something "fundamental" had changed in the inflationary process (such as a shift in business or consumer psychology). A "broader" inflation problem was more likely to become a persistent problem. Second, services prices are supposed, in theory, to reflect "domestically generated" inflation pressures, in contrast with goods prices, which are determined on international markets. This made life particularly hard for the likes of the ECB and the BoE because they could no longer point to developments beyond their control. Whereas much of the initial surge in global goods demand seemed to reflect the spending behaviour of US consumers, the authorities were now seeing price pressures emerge in sectors that were supposed to be relatively insulated from international developments. Again, this hinted at more serious and persistent inflation problems.

What went wrong?

As inflation spread – both internationally and across sectors – Team Transitory was quickly disbanded, and even its <u>founding members</u> wished they had never mentioned the t-word. But what went wrong? Why is inflation still a problem two years later? While the debate about the causes of inflation will continue (it's like <u>the economist joke</u> about how the French revolution affected global growth – answer: it's too early to tell), there are several possible explanations:

- (i) Team Transitory got their timing wrong: Perhaps Team Transitory was correct about the underlying nature of post-COVID inflation i.e., that it was a one-off shock to the level of prices rather than a shift in the underlying CPI trend but they just vastly underestimated both the magnitude of the adjustment and how long it would take to complete the transition. Whereas most members of Team Transitory thought the inflation problem would disappear within 6-12 months, evidence from previous inflation outbreaks (such as WWII) suggested that 18-24 months would have been a more reasonable estimate. But central banks were never going to wait that long.
- (ii) Excess saving and policy overhang: Given the enormous size of the COVID-19 policy response, it is possible that we are still feeling the inflationary consequences of

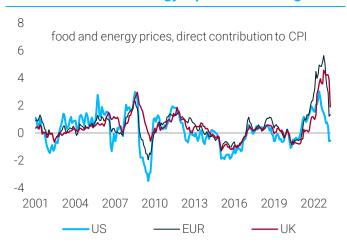


those actions. Consumers all over the developed world built up large "excess savings" during the pandemic and these funds have supported spending even as central banks have tightened monetary policy. Once these excess savings disappear, demand will sag and inflation will return to more normal levels.

- (iii) Overheating in labour markets: While the COVID policy stimulus was a one-off, it produced a global economic boom that eventually forced unemployment rates down to unsustainably low levels. With labour markets now overheating, wages are growing significantly faster than productivity, which is creating sustained cost-push inflation. Central banks must reduce labour demand and rebalance their labour markets or remain stuck with inflation that continues to exceed their 2% targets.
- (iv) Supply-side destruction: Even as the immediate supply-chain problems in global goods markets have eased, it is likely that the transitory inflation thesis paid insufficient attention to deeper supply-side impairment, particularly in labour markets. And, of course, the war in Ukraine compounded these problems in 2022, by further raising the costs of production particularly for businesses in Europe.
- (v) Profiteering and 'excuseflation': Companies have discovered that they have a lot more pricing power than they imagined before the crisis. They can raise prices and blame Vladimir Putin or point to a specific "shortage" or supply issue that has been well publicized in the international media. Not only have consumers been surprisingly willing to accept these prices hikes, but their competitors have typically followed suit which means the companies engaged in such activities do not necessarily lose market share.

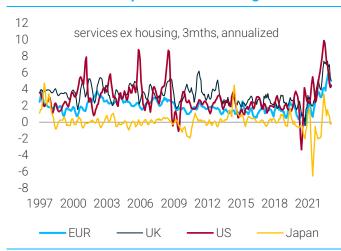
In Section 2 of this Macro Picture, we will focus on explanations points (ii) to (v) rather than try to resuscitate the transitory view of inflation. Because of the aggressive response from central banks, we will never know what would have happened if the authorities had followed the advice of Team Transitory and kept interest rates low. That said, it is worth remembering that the migration of inflation from goods to services does not necessary disprove the transitory thesis, especially as many service-sector providers were also facing large (but essentially one-off) increases in their operating costs. In this sense, a large part of what we have seen in global services prices could simply be a lagged response to what was happening to global goods prices.

Chart 10: Food and energy squeeze is ending



Source: Eurostat. ONS, BLS

Chart 11: Services pressures have lingered

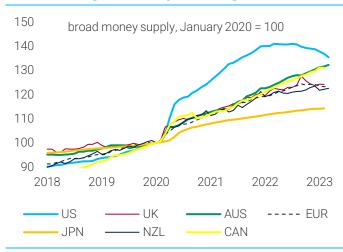


Source: Eurostat. ONS, BLS, Datastream



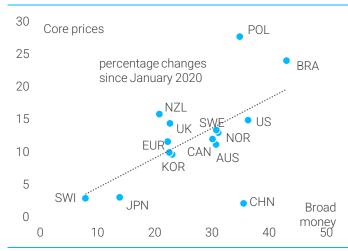
We see the goods to services contagion most clearly in Europe, where surging food and energy prices after the Ukraine war triggered significant "passthrough" to other components of the CPI. Recent analysis by the BoE's Swati Dhingra reminds us that modern supply chains tend to amplify such pressures at every stage of production, which is why we need to take account of these intricate input-output linkages when calculating the "true" influence of such cost pressures in the CPI. On her estimates, passthrough from food, energy and imported goods prices can explain the vast majority of the gains in services prices in the UK. These issues have been less acute in the US, but even the Fed's favourite measure of "underlying" inflation (core services excluding housing) has not been immune to cost pressures that would have gone away even without rapid monetary tightening¹.

Chart 12: Large monetary overhang



Source: OECD, TS Lombard

Chart 13: More stimulus, more inflation?



Source: OECD, TS Lombard

2. PERSISTENT THREATS

Many commentators, particularly critics of the COVID policy response, blame an overhang of fiscal and monetary stimulus for the inflation persistence we see today. Consumers built up large excess savings during the pandemic and these funds have allowed the private sector to keep spending even as the authorities have rapidly reversed their policy boost. On this narrative, labour market "overheating" is now at the epicentre of the inflation problem because low unemployment is boosting wages, which in many parts of the world are running ahead of lacklustre productivity growth. While there is no doubt that large policy stimulus and strong demand have contributed to the stubbornly high inflation rates we see today, it is also true that the consensus explanation has vastly underestimated the importance of other factors, namely, persistent supply impairment and shifts in the perceived "pricing power" of many producers. Investors need to take account of all these influences to understand what is now needed to get inflation down. And that understanding is also central to the debate about whether the world is facing an imminent recession.

Unfortunate events or original sin?

While most economists identified as members of Team Transitory back in 2021, the transitory inflation thesis had a number of high-profile critics, including the former Washington insiders

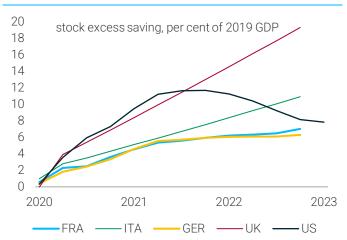
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¹ Fed officials tend to ignore such passthrough, assuming instead that core services prices are mainly a reflection of domestic labour costs. A <u>new paper</u> by Adam Shapiro suggests this assumption is false.



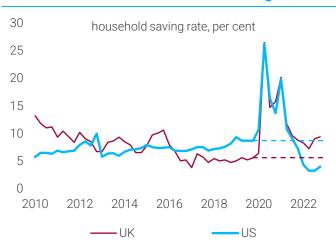
Larry Summers and Jason Furman. From the start, they believed that governments were massively overstimulating their economies and that the resulting inflation would linger until central banks tightened policy sufficiently to reduce aggregate demand, which would probably involve a recession. Their analysis was remarkably straightforward: they simply compared the size of the policy response, which was massive by historical standards, with the likely shortfall in economic activity once the worst of the pandemic was over. Since policymakers, particularly the US government, had provided a stimulus several times what was "required", the supply side of the economy was never going to be able to cope, which is what triggered the powerful increase in prices. According to Team Persistence, aggregate – not relative – demand was what mattered; and the chaos in supply chains was the inevitable result of the stimulus, not COVID disruption. In a presentation last month, Jason Furman blamed "original sin, not a series of unfortunate events".

Chart 14: Post-pandemic 'excess savings'



Source: National sources, Datastream, TS Lombard

Chart 15: US consumers run down savings



Source: ONS, BEA, TS Lombard

Pent-up demand

While the COVID policy response was massive, it was also short-lived. Since then, governments have tightened fiscal policy and central banks have raised interest rates. So, how might what is, in effect, a "one-one" stimulus programme generate such a persistent inflation problem? In principle, there are two possible explanations. The first focuses on the distinction between the "stock" of policy stimulus and the "flow". The second highlights the knock-on effects from the stimulus, particularly in terms of broad capacity utilization and labour-market "overheating". We can understand the first of these arguments just by looking at how the level of the money supply has changed since 2020. While broad money is now contracting at the margin, the level remains significantly higher than where it was at the start of the pandemic. To the extent people are holding excess amounts of cash, they may be inclined to spend this down – stimulating demand.

Excess saving

The stock vs flow argument is most popular in the "excess savings" thesis. Many households and businesses built up large excess savings during the pandemic because their consumption opportunities were limited, but governments continued to protect their incomes. Back in 2021, there was an argument that all this excess cash would find its way back into the economy, which would create enormous pent-up demand – particularly in high-contact areas such as transport and hospitality. While consumer spending has generally fallen short of those bullish narratives – nobody talks about the YOLO economy anymore – we do see a weaker version of the excess savings story in the US, where households have reduced their saving rate below pre-COVID levels.

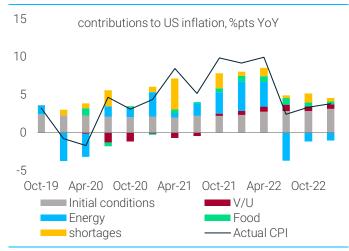


In aggregate, US households appear to be treating their excess savings as a sort of wealth effect, money they inherited from themselves during the pandemic. These funds have not flooded their way back into the economy, contrary to what proponents of this thesis initially claimed; but they have made US households inclined to spend a larger fraction of their recent earnings, which has supported demand (and potentially inflation) even after the end of the original stimulus.

Excess savings only 'works' in the US

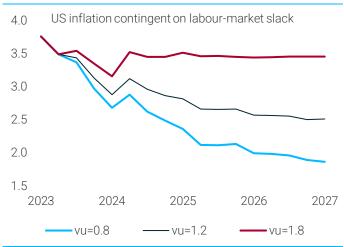
The problem with the excess savings thesis is that it seems to work only in the US. In other parts of the world, particularly in the euro area and the UK, there is no evidence that households have kept inflation high by running down the cash they accumulated during the pandemic. In fact, with saving rates still above pre-pandemic levels, European households are seeing their "stock of excess savings" continue to grow. This is a reminder that the decision to save is "dynamic" and depends on a variety of factors, including job security, wealth and income expectations – not just the amount of cash households already hold on their balance sheets. And, more generally, even if the excess saving thesis can explain part of the resilience of US inflation over the past two years, this story is now nearing an end. US saving rates are already edging higher again, and new analysis from the San Francisco Fed suggests that the savings accumulated during the pandemic are likely to be gone by the end of the year. Excess savings may have delayed the disinflationary process in the US, but even this seems a stretch given developments elsewhere.

Chart 16: The Bernanke-Blanchard decomposition



Source: What caused the US pandemic-era inflation? (2023)

Chart 17: US inflation will keep overshooting?



Source: What caused the US pandemic-era inflation? (2023)

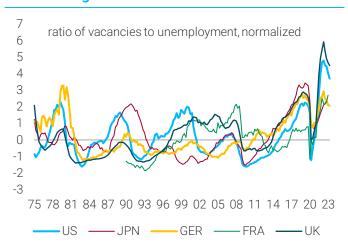
Overheating labour markets

Theoretically, labour-market "overheating" is the more compelling explanation as to how the COVID policy stimulus generated a persistent inflation problem. By forcing unemployment to historical lows, even a one-one fiscal expansion could generate sustained inflation if it produced lingering labour shortages and a sharp acceleration in wages – particularly as faster wages feed back into household incomes, providing a further consumer boost. An influential new paper from Ben Bernanke and Olivier Blanchard argues that this is indeed the dynamic we are seeing today. Bernanke and Blanchard use sophisticated econometric techniques to create Chart 16, which provides a detailed breakdown of US inflation since the start of the pandemic. Their analysis shows that the main drivers of the CPI have shifted over time, with what started out as a clear transitory story in 2021 – the result of one-off price shocks and temporary supply shortages – eventually evolving into a classic story of "overheating" labour markets. Though the contribution from the labour market (proxied by the ratio of job openings to unemployment) has been modest



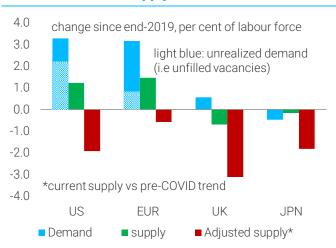
in the context of all the prices increases recorded during the past two years, Bernanke and Blanchard's analysis suggests it is this factor that will keep inflation above the Fed's target. If labour markets remain tight, they think inflation will stay in the 3-3.5% range.

Chart 18: Tight labour markets



Source: OECD, national sources, TS Lombard

Chart 19: Demand-supply labour imbalances



Source: National sources, TS Lombard

Supply-side destruction

It would be foolish to deny that large policy stimulus and strong aggregate demand have contributed to the stubbornness of inflation over the past two years. But it is also clear that consensus explanations have placed far too little emphasis on supply-side developments. To see why, take a look at Chart 20, which shows current DM GDP levels compared with where the IMF thought they would be before the pandemic. With one or two exceptions, most DMs have fallen well short of expectations. For some, such as the UK, Spain and Germany, we are talking about an enormous 5-7% shortfall in the level of economic activity. This is not what we would expect to see in a classic inflationary boom or an "overheating" economy. In fact, the combination of much higher inflation and severe economic weakness hints at one thing only – supply destruction. Even in labour markets, which according to the Bernanke and Blanchard analysis are now the main

Chart 20: Evidence of lasting supply impairment



Source: IMF, TS Lombard

Chart 21: Real GDP down, inflation up



Source: IMF, TS Lombard

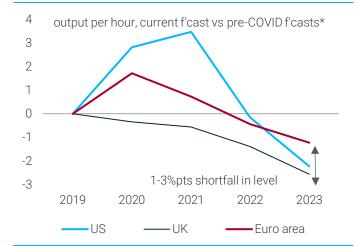


source of the overheating, real wages have continued to decline. Again, this is not what we would expect if low unemployment were fuelling a classic wage-led inflation problem.

The source of supply problems

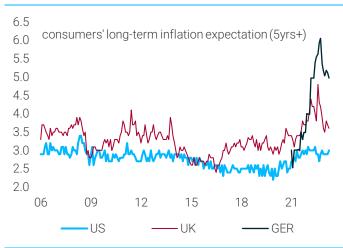
While the pandemic caused widely recognized supply-chain kinks in global goods market, it is clear that the world economy has also suffered a more serious and persistent form of supply impairment over the past three years, namely: (i) a major increase in global energy and other imported prices, which has raised the (non-labour) costs of production for many businesses; (ii) a serious slowdown in the global labour force, with some DM economies experiencing outright declines in their domestic workforce since the start of the pandemic; and (iii) an unexpected deterioration in productivity. Exposure to these different sources of supply weakness varies, which is why different parts of the world have had such contrasting experiences over the last three years (even if inflation outcomes have been highly correlated across all countries). For the economies of the euro area and (to a lesser extent) Japan, surging import prices have been the main supply-side problem since the start of the pandemic. For the US, most of the supply-side destruction has happened in the domestic labour market. And then there are economies, like the UK, that have suffered a toxic combination of all these problems, amplified by their own idiosyncrasies (which, in the case of the UK, include austerity, a failing health system and Brexit).

Chart 22: Productivity is lower than expected, too



Source: National sources, TS Lombard, *CBO. OBR and ECB forecasts

Chart 23: Inflation expectations have drifted?



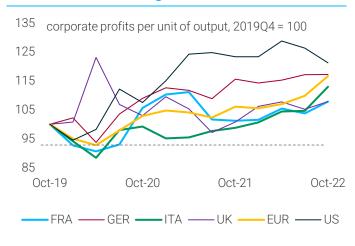
Source: Bundesbank, UMich, YouGov surveys

Second-round effects

Supply destruction would explain the combination of high inflation and weak real GDP since the start of the pandemic, but it does not necessarily explain the persistence of inflation – beyond the potential lags we identified in Section 1. This is why policymakers have been paying so much attention to labour markets, where they have been nervously watching for "second-round" effects. If workers are able protect their real wages or if labour-shortages are forcing companies to bid up nominal wages (perhaps because the NAIRU has increased), we could be stuck with a more persistent inflation problem. At the margin, there is some evidence to suggest worker power has increased, particularly in specific sectors with the most acute labour shortages. But for the post-COVID economy as a whole, it is a stretch to blame labour-market developments for the inflation pressures we are seeing today. This raises questions about whether the true "second-round" effects are happening on the corporate side, where companies have adjusted their pricing strategies since 2020. Perhaps it is the "price setters", not "wage setters", that have the power.



Chart 24: Evidence of 'greedflation'?



Source: National sources, TS Lombard estimates

Chart 25: Role of margins in US inflation



Source: BEA, TS Lombard

Profit-led inflation

Ever since the big reopening post-COVID, there has been a lively debate about whether "corporate greed" is to blame for high and lingering inflation. Some economists, particularly on the political left, highlight the rapid expansion in profit margins as evidence that companies have been profiteering – something we also saw in previous crises, including the two World Wars. (Back in 1947, John Kenneth Galbraith argued that this sort of behaviour was the main explanation for wartime inflation.) And as we have pointed out before, the arithmetic of pandemic-induced price pressures backs this up (sort of). Using the BEA's breakdown of unit prices, margins accounted for 70% of the price gains that had been recorded by the autumn of 2021. For some commentators, this was evidence that US companies were taking advantage of domestic markets that had become increasingly uncompetitive. Since US market concentration and price markups had been rising for decades, perhaps companies were exploiting their power.

Monopoly power?

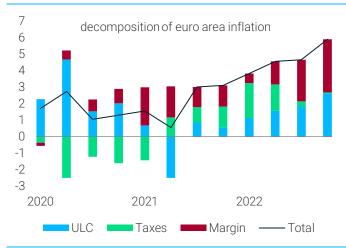
It is difficult to prove the so-called "greedflation" thesis. Corporate profits were always going to rise in response to large fiscal injections because this is just an accounting identity (the Levy-Kalecki effect); and, in any case, we would expect margins to expand as demand outstrips supply. Still, anyone who has been following corporate earnings reports since the pandemic knows that companies have been much more willing to raise prices, even if it means accepting a lower volume of sales. This suggests the phenomenon is not just about strong demand. And, interestingly, we have seen this shift everywhere, not only in the US. This is important because many other markets – in contrast with the situation in the US – have not experienced decades of increasing market concentration. In the euro area, for example, there is even evidence that the creation of the Single Market has made many economies more competitive, not less competitive, since the 1980s. Taken together, the evidence suggests that the emergence of greedflation would appear to be a response to the unique circumstances of the past three years, rather than a case of US companies suddenly exploiting the market power they had built up over previous decades.

As we explained elsewhere, Isabella Weber, from the University of Massachusetts Amherst, has produced the most compelling explanation for what she calls "profit-led" inflation since the pandemic. On the basis of actual corporate transcripts, Weber shows that market power is "dynamic" and that individual companies raise prices only when they expect other firms to do the same. The events of the past three years provided plenty of opportunities to justify large price



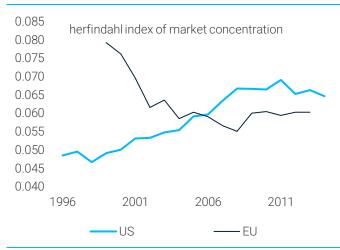
hikes because the cost pressures associated with COVID-19 and the war in Russia were broad based and supply shortages were all over the news, which meant consumers readily accepted their legitimacy (some are calling this "excuseflation" because companies always had a good excuse to raise prices). The question now is whether this dynamic will continue in a world where supply chains are normalizing, demand is slowing and central banks are threatening to create a recession. As we show in Section 3, whether businesses try to defend their margins could determine how this inflation story ends.

Chart 26: Greedflation in Europe as well?



Source: ECB staff estimates

Chart 27: European markets more competitive



Source: NBER paper

3. HOW THE STORY ENDS

The inflation that started in 2021 has come from several main sources, including robust demand (the lingering effects of policy stimulus and COVID reopening), deteriorating supply and a shift in corporate pricing strategies. Looking forward, there is every reason to think we are past the worst of this inflation outbreak. Disinflation in goods markets looks set to continue and will eventually spread to the services sector, supply chains have normalized and central banks have already engineered significant demand destruction. To the extent that part of the current imbalance between demand and supply remains "unrealized", with, for example, large numbers of unfilled job vacancies, there is a still decent chance this disinflation trend can gain traction even without a major recession. But much will depend on what happens to profit margins and whether central banks are prepared to tolerate a modest inflation overshoot. The risk is that tight labour markets continue to drive productivity-busting wage gains and that companies use staff shortages as another excuse to hike prices rather than accept even a gentle squeeze on their (record-high) margins. This would require a more forceful monetary response.

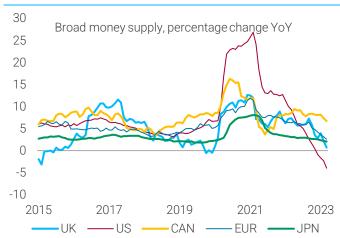
Goods disinflation is contagious

It seems inevitable that the goods disinflation we documented in Section 1 will eventually spread to the services sector. Global manufacturing is already in recession, commodity prices are down and supply chains have normalized, all of which will reduce the cost-pressures facing many service-sector providers. And, on top of the direct spillovers from manufacturing to services — which we think many economists are underestimating — it is also likely that service providers have sustained various other operating costs that were essentially one-off in nature and will diminish over time. Not only was it costly to reopen their businesses after the pandemic, but in some sectors they had to pay large one-off wage hikes to attract people back to work. As these



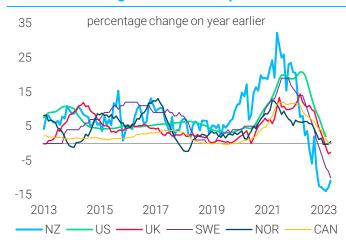
pressures fade, we should expect services inflation to start to decline, eventually following the disinflationary trend in the goods sector. This process is already under way in the US; and while other economies have lagged – particularly Europe, due to the further shocks associated with the Ukraine war – we should expect to see similar trends appear across most of the developed world.

Chart 28: The big monetary contraction



Source: OECD, TS Lombard

Chart 29: Housing markets under pressure



Source: BIS, TS Lombard

Demand destruction

While there is an ongoing debate about whether we would have been on the cusp of disinflation even without aggressive monetary tightening, it is clear that central banks' actions are only going to reinforce this trend over the next 6-12 months. The authorities have raised interest rates forcefully, and the most rate-sensitive parts of the global economy have already responded, with notable declines in housing activity, construction and demand for consumer durables. With the real-economy impact of higher borrowing costs already clear, we should also start to see a more discernible effect on inflation readings. US consumer prices are particularly sensitive to monetary tightening because housing costs have a relatively large weight in the CPI, unlike the situation in many other jurisdictions, where the authorities typically exclude the impact of homeowners' (implied) rental costs. Given that private-sector US rental metrics have already turned down significantly and the official measures tend to lag those readings by around 12 months, we should see a notable housing-induced slowdown in the core US CPI during H2. And, more generally, higher borrowing costs should squeeze households' purchasing power (particularly in countries with lots of variable-rate mortgages), which will also help curb core inflation.

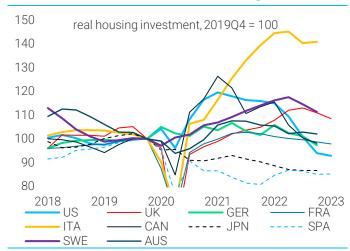
Collateral damage

Of course, a disinflationary process that entails aggressive monetary tightening – rather than just the unwinding of pure transitory pressures – is likely to involve a greater amount of collateral damage to the real economy. So, it is not surprising that most investors have been fixated on the threat of a policy-induced recession. Given the strains in the global banking system, this threat has surely increased since the start of the year (when recession was already the overwhelming consensus). Yet, the world economy has so far proved remarkably resilient, which is why many of the recessionistas have repeatedly had to postpone their forecasts of an imminent economic crash. One reason the consensus has underestimated the resilience of the global economy is that a significant part of the current imbalance between supply and demand is, in fact, "unrealized". Companies all over the world have been trying to hire additional workers to meet this demand, but, owing to lingering labour shortages post-pandemic, they have not been able to find the staff. This dynamic is important because it has meant that central banks can actively destroy demand,



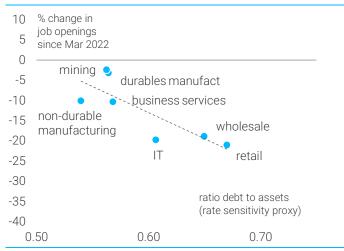
helping to rebalance their economies without putting people out of work. And without a rise in unemployment, you do not get the reflexivity of the classic recessionary process.

Chart 30: Rates have hit home building



Source: OECD, TS Lombard

Chart 31: Monetary policy already destroying jobs

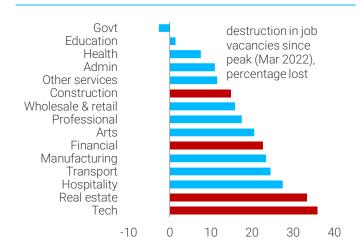


Source: Cleveland Fed analysis

Soft landing still on?

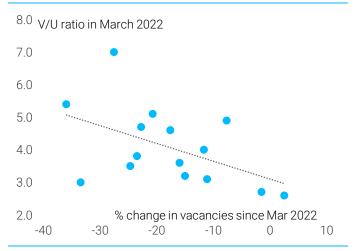
The main risk with monetary tightening is that interest rates are a blunt tool. Even with unrealized demand and aggregate labour shortages, there was a danger that central banks' actions would reduce activity in sectors that were not currently understaffed. This would cause "mismatch" in labour markets – between the jobs on offer and those being destroyed – which, in turn, would cause aggregate unemployment to rise (the Beveridge curve would shift outwards). But so far, the transition to tighter monetary policy seems to be going remarkably well. Higher interest rates have certainly reduced labour demand, particularly in the most-rate sensitive parts of the economy (see Chart 31, which replicates Cleveland Fed analysis) but since these were also the sectors with the most acute imbalances between demand and supply, vacancies have declined significantly without a material rise in unemployment. While there is no guarantee that economies will continue along this path to an improbable "soft landing" – particularly given the risk of an economy-wide credit crunch following the stress in the banking system – this is an encouraging sign that we might be able to repeat what happened in the immediate aftermath of WWII (still the most relevant historical template for the inflation outbreak we have experienced since COVID-19).

Chart 32: Bank of England destroying jobs, too



Source: ONS, TS Lombard

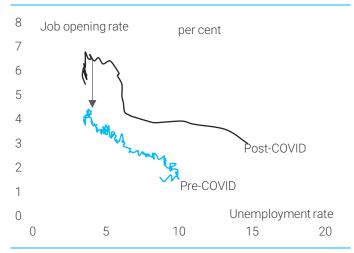
Chart 33: Jobs destroyed in the hottest sectors



Source: ONS, TS Lombard

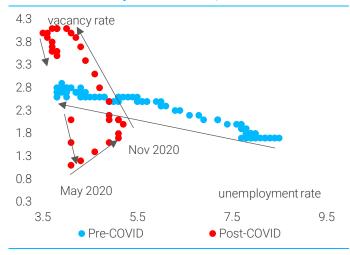


Chart 34: Path to a soft landing in the US



Source: BLS, TS Lombard

Chart 35: Similar path in the UK, so far...



Source: ONS, TS Lombard

Plausible deniability

Central banks are trying to strike the difficult balance between generating gradual (but sustained) disinflation and avoiding serious stress in the financial system and thereby dodging a nasty recession. Since inflation is still significantly above their targets, they will be able to achieve this outcome only if consumer prices continue to slow during the second half of the year. But how much disinflation is needed for authorities to keep on this "balanced" path rather than return to the extreme hawkishness of 2022? We suspect the answer comes down to "plausible deniability". While central banks are not going to abandon their 2% inflation targets over the medium term, we have always felt they would be willing to accept a period of sustained overshoot as long as inflation expectations were anchored and they could (credibly) argue that their targets had not changed. Right now, with underlying inflation looking sticky in the 4-5% range, central banks have no choice but to remain hawkish and continue to adjust interest rates higher. But once inflation dips to 3-4% – which is eminently plausible by the end of the year – we should discover that the authorities are willing to declare victory on inflation without driving their economies into the wall. Transitory or not, there is no doubt that central banks will want to take the credit for taming the worst inflation outbreak in half a century – and you can't argue with a counterfactual!

What could go wrong?

Naturally, any further deterioration in inflation would kill the prospect of plausible deniability, regardless of the underlying cause. Unexpectedly strong CPI readings have already forced the Reserve Bank of Australia to abandon its policy pause; and there is a risk of similar developments elsewhere (starting with the UK, where the latest CPI was a nasty shock for BoE officials). Yet, the clearest medium-term inflation threat lies in the interaction between labour shortages, wages and margins. While labour markets have played only a minor role in the inflation outbreak so far, most economies are now seeing nominal wages comfortably outstrip productivity. On one level, this is not surprising. IMF research has shown that, after a large decline in real incomes, it is normal for workers to claw back some of their lost spending power. Outside the 1970s, which had a very different balance of power in the economy, this has rarely set off a wage-price spiral. But the question today is whether companies would be willing to accept the implied margin squeeze. With profits at record levels, they certainly have the capacity to absorb a reduction in margins without immediately firing staff or going out of business. But given their recent behaviour, it would not be surprising if rising labour costs became the next excuse to hike prices. If so, central banks will feel they have no choice but to break corporate pricing power the hard way – by engineering a deeper economic contraction. Unfortunately, it is workers who would suffer.



Bottom line

It is two years since the start of the worst outbreak of inflation in half a century. Back then, the vast majority of investors believed the problem was transitory and would disappear within a matter of months even without a large countercyclical policy response. That thesis was wrong. Not only is inflation still significantly above central banks' targets, but the authorities have also engineered a severe tightening in monetary policy to try to force prices onto a lower trend. We look at what went wrong, and that includes (i) slower and broader passthrough than the consensus had assumed; (ii) pent-up demand and an overhang of fiscal stimulus; (iii) overheating in labour markets; (iv) unexpected supply-side impairment; and (v) shifts in corporate-pricing strategies (including so-called "excuseflation"). While all these forces have played a role (to differing degrees in different parts of the world), we suspect consensus explanations have put too much weight on excess demand and paid insufficient attention to supply-side problems and corporate-pricing strategies. The good news, however, is that we seem to be past the worst of the inflation outbreak. If the CPI data continue to improve, there is still a chance of what seemed an improbable soft landing. But as we are close to the limits of central banks' inflation tolerance, we clearly cannot afford any further deterioration in the CPI. The clearest medium-term risk lies in the interaction between labour shortages, nominal wages and profit margins. Companies have room to shrink their margins. But with their new-found pricing power, this might be too much to ask. If companies defend those margins, central banks will probably need to engineer more pain.