



### What Will It Take?

- We use the augmented Phillips Curve framework to work out how much of a labour market deterioration would be needed to cover the last mile of disinflation in the US. It may not take that much pain by historical standards.
- The most recent US dataflow supports the notion that the softness in Q1 GDP was not mere mean reversion.

Upon postponing the beginning of the Fed's change of stance, Jay Powell still maintained an easing bias. To some extent this may merely be about avoiding an overreaction – if for instance the resumption of hikes became the "talk of town" on the market – but he also made it plain that in his "personal forecast", more progress should be seen on the inflation front this year. At this stage, given stubborn price dynamics since the beginning of the year, the key issue is to determine what it would take to finally re-start the disinflation process. To explore this, we use a simple "augmented Phillips curve" in which observed inflation is the lagged product of consumers' expected inflation and the under-employment rate. If households were to keep their current price expectations unchanged the under-employment rate would need to rise by 3 percentage points to bring inflation back to target. This would be in line with the deterioration seen during the very shallow recession of 2001. This calculation however probably overstates the magnitude of the required softening of the economy. Indeed, consumers' price expectations would probably decline as the labour market deteriorates. Moreover, there are still some idiosyncratic factors pushing inflation up – e.g., car insurance and rents – which should fade this year irrespective of the state of the real economy.

Even if prudence is of the essence, the very latest US dataflow supports the assumption that the softer-than-expected print for Q1 GDP was not a mere mean reversion episode. We affirm our baseline scenario that the Fed will still be able to cut twice this year, starting in September. The "not so hawkish" performance by Powell and weaker than expected US data flow are good news for the ECB. The Governing Council should be encouraged to cut in June by the further deceleration in core consumer prices in April, but looking ahead, a higher probability of a change of stance by the Fed with a lag of only a few months would clear the way for more cuts in the Euro area in the second half of this year without too much concern about an exchange rate backlash.



# The Fed is still in easing bias mode

Triggering market over-reactions is always a key concern for central banks when they recalibrate their message, and this was clearly with such a risk in mind that Jay Powell took to the stage last week. After his public recognition days before the meeting of the Federal Open Market Committee (FOMC) that the Federal Reserve (Fed) could not ignore the disappointing signals from inflation readings since the beginning of the year, there was little suspense around his explicit postponement of the timeline for a possible change in stance. Yet, a too hawkish statement would have fuelled speculations in the market that maybe the Fed's next move would be to hike rates, with significant consequences for financial markets. We think Powell managed to strike the right balance, by ultimately exploring only two paths: either inflation persists, and the current stance will remain unchanged as long as needed (he made it plain he still considers the current level of Fed Funds as restrictive), or disinflation resumes, and they will be able to cut. When asked if the next move could be a hike, he said it was "unlikely" and avoided to elaborate much.

The "easing bias" remains, even if the level of confidence in being able to deliver cuts was of course revised down. We find it interesting that Powell chose to muse on his "personal forecast that we will begin to see further progress on inflation this year", even if this was immediately qualified by adding that he does not "know if this will be sufficient". The conclusion of this sentence ("we will need to let the data lead on that") should be taken at face value: the Fed is truly in a data dependent mode, but there is no sense of "panic" there. The Fed chair was lured several times in the Q&A into discussing whether the current stance is sufficiently restrictive, which would naturally call for more hikes if the answer is negative. He stuck to the point that "it is restrictive", finding evidence in the behaviour of the labour market — as some indicators of pressure are normalising — or interest-rate sensitive spending. He made it clear that the FOMC "does not see that the current stance is not appropriate".

# What would Phillips say?

We note however that Powell does not necessarily see a deterioration of the labour market as the only channel to disinflation. He continues to stress how supply conditions have improved and how disinflation could co-exist with still strong demand conditions, pointing to how in the second half of 2023 disinflation proceeded at a fast clip despite very good real economy data. To explore how such a rosy scenario could materialise and provide some quantification, we use a simple "augmented Phillips curve" framework.

The basics are intuitive: in an augmented Phillips curve observed inflation is the product of expected inflation — which can be proxied with surveys or with market pricing — and labour market pressure. For the first variable we use here the one-year ahead inflation forecast from the Michigan consumer survey. For the second we retained the "underemployment rate" calculated by the Bureau of Labor Statistics (BLS) which adds to the usual unemployment rate those who are only "loosely attached" to the labour market, a metric which has been consistently shown in the academic literature as a good gauge of employment pressure. We start by estimating over 2000-2019 how these two variables taken together can predict observed headline Consumer Price Index (CPI). The fit over the estimation period is decent, but unsurprisingly the model fails to predict the magnitude of the post-pandemic elevation in consumer prices (see Exhibit 1).

While one-year ahead expected inflation as captured by the Michigan survey gradually took on board some of the observed supply-side price shock triggered by the post-pandemic reopening – expectations are often largely retrospective, or "adaptative" to use the macroeconomic jargon – the model's miss for 2020 and 2021 was still massive. This probably reflects how everyone – and not just the Fed – saw the first months of steep inflation as a transitory phenomenon. What we find however reassuring is that **the model fit the observed data better over the last year, suggesting that as the supply-side shock fades, the usual macro mechanisms still work**. However, when looking at the contributions from the two explanatory variables separately (see Exhibit 2), the decline in observed inflation from a peak in mid-2022 all came from the normalisation of consumers' expected inflation, with underemployment moving too little after the initial shock of 2020 to bring anything meaningful to the process. In other words, **disinflation was a case of a supply-side shock gradually fading taken on board in households' expectations, with little role from demand.** This is consistent with the conclusions of Bernanke and Blanchard which we have been using as guide for months now (see link to their paper here).



Exhibit 1 – Testing the augmented Phillips curve

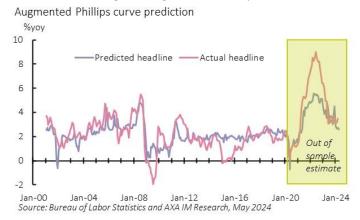
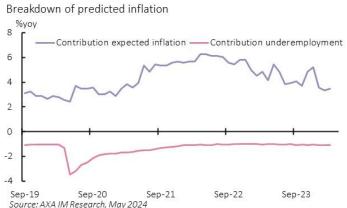


Exhibit 2 – Expectations reigned supreme



Assuming the pure "supply-side normalisation" phase of the disinflation process is over — a too strong hypothesis, as we will discuss later — and that consumers' price expectations won't improve further on their own — a prolongation of the recent stabilisation of expected inflation in the Michigan survey — we can use our model to compute by how big a jump in under-employment we need to see to get observed inflation fully under control. Based on the coefficients of our augmented Phillips Curve model, it would take a three percentage-point rise in the under-employment rate to offset the current level of expected inflation to get headline CPI back to 2.5% (assuming this is the actual Fed target given the usual Personal Consumption Expenditures (PCE)/CPI gap).

The underemployment rate came out at 7.4% in April 2024. It was the highest level since November 2021 and stood 0.5 percentage point above the pre-Covid level of December 2019, but the change from trough remains too small (0.8 pp) to really move the dial. What would be required is a rise of the same magnitude as what had been seen during the "mini recession" of 2001 (see Exhibit 3).

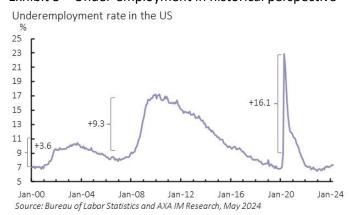


Exhibit 3 – Under-employment in historical perspective

This would hardly be a catastrophe. The 2001 episode would not have been considered as a recession at all when using the European definition since GDP did not fall then for two quarters in row. Moreover, the raw result of our computation probably overstates the quantum of labour market deterioration which would be needed to produce the required "last mile" of disinflation. Indeed, expected inflation and developments in the real economy are not disconnected. This is a clear limit to our over-simplistic model. On top of reaction to recent consumer prices developments, households adjust their forecasts for inflation by taking on board information on the labour market dynamics. Gradually, as the labour market starts softening, consumers' expected inflation should start falling as well and both forces push observed inflation down.



In addition, some elements of the adverse supply-side shock which have pushed inflation up over the last two years are probably still there and will likely gradually disappear independently of how cyclical conditions and households' perceptions evolve. We have already explored in Macrocast how car insurance prices for instance have been playing a disproportionate role in pushing CPI inflation up, while data on new leases suggest that rents in the CPI and PCE measures should start decelerating as well. This suggests that a less painful path, with only a moderate deterioration of the labour market and deceleration in economic activity, could also deliver the disinflation the Fed is after. Such configuration would of course be optimal for markets, since it would preserve corporate profit margins.

## Is it starting?

A fully data dependent central bank can be conducive to heightened financial market volatility since the dataflow is very rarely unambiguous in real time. We had an example of this last week with the release of the unit labour costs data for Q1. Mechanically, the unexpected softness in Q1 GDP contrasting with still robust job creation triggered a weakening in productivity (+0.3% annualised in Q1 against 3.5% in Q4) which in turn lifted unit labour costs to 4.7% from a flat reading in Q4, a very concerning development taken at face value. This kind of "snapshot" offers however very little in the way of understanding underlying cost dynamics. As we argued last week, some weakening in GDP growth is probably a pre-requisite for a clearer landing of wages and ultimately consumer prices, and transitorily this can raise unit labour costs since these processes take several quarters to run their course.

Exhibit 4 – Job creation slightly below trend

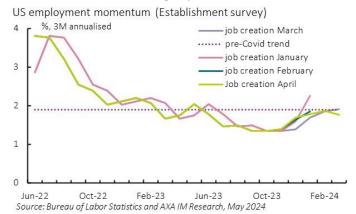
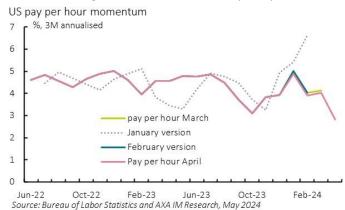


Exhibit 5 – Wages decelerated markedly in April



The payroll numbers for April released last week brought at last some reassurance about the immediate future of the disinflation process. We continue to call for prudence given the poor quality of first estimates in these series (Exhibits 4 and 5 provide a reminder of how wrong the signal was in January 2024), but from the Fed's point of view last week's batch was probably the best possible combination in the current circumstances. Fewer jobs than expected were created, a rare enough occurrence these days (167K against 193K for the private sector), but perhaps more importantly, the figure was within the range (160K to 200K) which the Brookings Institution now considers as the new sustainable – i.e. non-inflationary – pace when taking on board the higher immigration flows, as we explored in Macrocast a few weeks ago. In terms of momentum, on a 3-month annualised basis, the pace is back slightly under the pre-Covid trend. Moreover, pay per hour decelerated sharply in April, down from 4.0% in March to 2.8% (see Exhibit 5). This would help alleviate the concerns about unit labour costs which we mentioned earlier. Indeed, if wages decelerate fast enough, even less stellar productivity gains would not necessarily stand in the way of a resumption of disinflation.

There again, prudence is of the essence given past episodes of aborted landing in wages. In the early autumn of last year wages also transitorily decelerated. While this helped to correct the over-reaction of the US bond market when 10-year yields brushed past 5%, this was swiftly followed by a rebound in wages in Q1 – confirmed by the ECI reading also released last week.



The message from business surveys may help check whether we are dealing with more than random mean reversion in the payrolls. The headline reading of the ISM survey for services in April came out below expectations and fell in contraction territory (49.4) for the first time since December 2022. For manufacturing the ISM index relapsed in contraction territory after a brief respite in March. Looking into the details, we note that the employment component of the services ISM fell further to 45.9, a level that stand at three standard deviations below its long-term average (see Exhibit 6). An issue of course is that the employment component of the ISM index has been wallowing in depressed territory for quite some time now without providing much insight into "hard" measures of employment such as the payrolls: it completely missed the re-acceleration in job creation observed at the end of last year and in the first months of 2024. The same can be said about the price component of the ISM survey: it has been generally around its long-term average in the services sector since the spring of 2023, with some volatility, providing little information on the actual behaviour of consumer prices (see Exhibit 7).

#### Exhibit 6 – Business surveys' employment message

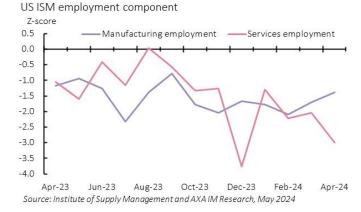
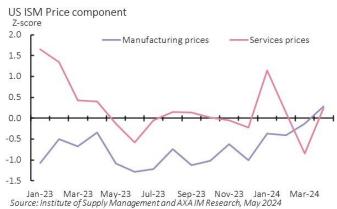


Exhibit 7 – Price behaviour still hard to read



Given all these caveats we would not say that the dataflow which came after last week's FOMC meeting amounts to a "smoking gun" providing the Fed with the level of confidence in the resumption of disinflation which Powell said was still missing. Yet, it brings some support to the assumption that the softer-than-expected GDP print for Q1 was not an isolated, random occurrence. The continuation of a gradual weakening in the US economy which ultimately could trigger the right quantum of disinflation is in our view the most plausible scenario. Accordingly, we affirm our forecast that the US central bank will be able to cut twice this year, starting in September.

This has also been the market's interpretation. Before Powell's press conference, possibly anticipating a quite hawkish tone, the probability of a cut in September was priced in at only 50% in the forward contracts. After he spoke, the probability rose to 64%, and hit 92% by Friday night after the payroll and ISM for April were released. 10-year yields corrected visibly, falling from a recent peak at 4.73% on 25 April to 4.50% last Friday.

These developments in the US come at the right moment for the European Central Bank (ECB). Indeed, while Euro area GDP for Q1 came out last week better than we (and the market consensus) expected, with a 0.3%qoq gain, we continue to think that monetary policy needs to be quickly made less restrictive in the Euro area irrespective of what the Fed will do. With the yoy change on services consumer prices finally declining below 4% – this was in our view the most critical point in last week's CPI release in the Euro area – the ECB should be confident that it makes sense to start reducing the quantum of policy restriction in June. But of course, a higher probability of an eventual cut by the Fed – even if it comes a few months after the ECB – would help put some of the exchange-rate related concerns at bay. The euro regained some ground last week under the combination of Powell's "not so hawkish" performance and weaker than expected dataflow in the US (from 1.065 USD just before Powell started speaking to 1.076 last Friday) even though market expectations for an ECB cut in June got firmer (from a probability of 88% to 96%).



China:

balance (Apr)

Country/Re	gion	What we focused on last week	What we will focus on in next weeks
	\$25 pre • Pay roso • ISM	MC left policy unch, but slowed pace of QT to sbn UST/mth from \$60bn. Powell gave measured as conference, said rate hikes "unlikely" rolls (Apr) rose by 175k, from 315k in Mar. Unempe to 3.9% and earnings posted 0.2%mom rise I (Apr) mfg dipped to 49.2, prices paid up to 60.9 of Bd cons conf (Apr) slipped to 2-yr low	<ul> <li>SNR Loan Officers Survey (May) watch for direction of lending conditions after sharp tightening across 2023</li> <li>Jobless claims – these continue to record low levels although eligibility issues may mask any signal</li> <li>Michigan consumer sentiment (May, p) – different trend to Conf Bd, look for convergence</li> </ul>
€ € € €	surp (+0. • Hea 2.79 • Eur	U Q1 GDP grew by 0.3%qoq in Q1, a strong upside orise. Sp and Po are strong outperformers again 7%qoq), Ge rebounding (+0.2%); Fr: +0.2% It: +0.3. adline and core HICP came at 2.4% (unch.) and %yoy (-0.2pp) respectively. Svcs were strong. opean Commission monthly (April) & quarterly iness survey (Q2) were more mixed than PMIs	<ul> <li>Industrial output data (Mar) in Germany and Italy</li> <li>Final PMIs (Apr)</li> <li>EMU producer prices (Mar) is expected to decline further (Consensus: -0.4%mom)</li> <li>Sentix index (May; EMU)</li> </ul>
	in N incr • Nat une	Use purchase mortgage approvals rose to 61.3K Mar., from 60.5K in Feb. Consumer credit reased by £1.6b in Mar reas	<ul> <li>BRC total sales likely rose to 3.5% in Apr, from 3.2%</li> <li>Construction PMI likely rose to 50.5 in Apr, from 50.2</li> <li>RICS house price balance to hold broadly steady at -4% in Apr.</li> <li>MPC to keep Bank Rate unchanged at 5.25% (0-7-2 in favour of cut). New forecasts to signal imminent cut.</li> </ul>
	Mo • Une • IP r • Ret	DJPY up 5% from 34-year low if 160.25 on nday; BoJ intervention to the tune of \$59bn emp. rate held steady at 2.6% in Mar ose by 3.8%mom in Mar, broadly as expected. ail sales fell by 1.2%mom in Mar is. Confidence fell to 38.3 in Apr, from 39.5	<ul> <li>USDJPY looks set to weaken from 153.07, due to unfavourable fundamentals. Intervention likely</li> <li>Av. cash earnings likely rose by 1.8%mom in Mar</li> <li>HH spending likely fell by around 0.5% mom in Mar</li> <li>Eco Watchers Survey outlook looks set to remain broadly unchanged at 51.2</li> </ul>
<b>*</b>	3.59 • NBS (Ma	ustrial profit (Q1): 4.3%yoy, implying a decline of % in March, a first drop since August 2023 5 PMI mfg (Apr): 50.4 (Mar: 50.8); non-mfg: 51.2 ar: 53.0) kin PMI mfg (Apr): 51.4 (Mar: 51.1)	<ul> <li>6 May: Caixin Services PMI (Apr)</li> <li>7 May: FX reserves (Apr)</li> <li>9 May: Exports and imports (Apr)</li> </ul>
EMERGING MARKETS	50b • Q1 • Apr • Apr • Apr	Czech CNB 50bp cut (5.25%), Colombia cut ops (11.75%) in line with expectations GDP Czech (0.5%qoq), Hungary (0.8%qoq), xico (0.2%qoq), Taiwan (6.5%yoy) il manufacturing PMI weak across CEE, mixed ops LatAm and SE Asia il inflation Indonesia (3%), Korea (2.9%), Thailand (2.4%), Poland (2.4%), Peru (2.4%), Turkey (69.8%)	
Upcoming	US:	Mon: Federal Reserve publish the SLOOS on Bank L Weekly jobless claims (4 May); Fri: Michigan consur	ending Practices; Wed: Wholesale inventories (Mar); Thu:
events	Euro Area:	Mon: Ez Composite PMI (Apr), Ez,Ge,Fr,It,Sp Service mfg orders (Mar); Wed: Ge Industrial production (Maeeting, It Industrial production (Mar)	es PMI (Apr), Ez PPI (Mar); Tue: Ez Retail sales (Mar), Ge New Mar); Fri: ECB publishes Monetary Policy account from April
	UK:	survey (Apr), MPC announcement, Andrew Bailey to GDP (Mar), Index of services (Mar), Industrial produ	registrations (Apr), Construction PMI (Apr); Thu: RICS Housing o lead Monetary Policy Report press conference; Fri: Monthly action (Mar), Mfg & construction output (Mar), GDP (Q1, p), Q1, p), Total trade balance (Mar), Trade in goods (Mar)
	Japan:		e (Mar), Trade balance (Mar), Economy Watchers Survey (Apr)

Mon: Caixin services PMI (Apr); Tue: Foreign exchange reserves (Apr); Thu: Exports (Apr), Imports (Apr), Trade



# Our Research is available online: www.axa-im.com/investment-institute



#### About AXA Investment Managers

AXA Investment Managers (AXA IM) is a leading global asset manager offering a diverse range of global investment opportunities in both alternative and traditional asset classes. Through our products we aim to diversify and grow portfolios, while delivering long-term investment performance and value for clients.

AXA IM manages approximately €844 billion in assets, of which €480 billion are categorised ESG-integrated, sustainable or impact as at the end of December 2023. We are committed to reaching net zero greenhouse gas emissions by 2050 across all eligible assets, and to integrating ESG principles across our business, from stock selection to our corporate actions and culture.

Part of the AXA Group, a worldwide leader in insurance and asset management, AXA IM employed over 2,700 employees and operates from 23 offices in 18 countries globally at end of December 2023

Visit our website: http://www.axa-im.com Follow us on Twitter: @AXAIM & @AXAIM UK

Follow us on LinkedIn: https://www.linkedin.com/company/axa-investment-managers

Visit our media centre: www.axa-im.com/en/media-centre

This document is for informational purposes only and does not constitute investment research or financial analysis relating to transactions in financial instruments as per MIF Directive (2014/65/EU), nor does it constitute on the part of AXA Investment Managers or its affiliated companies an offer to buy or sell any investments, products or services, and should not be considered as solicitation or investment, legal or tax advice, a recommendation for an investment strategy or a personalized recommendation to buy or sell securities.

It has been established on the basis of data, projections, forecasts, anticipations and hypothesis which are subjective. Its analysis and conclusions are the expression of an opinion, based on available data at a specific date.

All information in this document is established on data made public by official providers of economic and market statistics. AXA Investment Managers disclaims any and all liability relating to a decision based on or for reliance on this document. All exhibits included in this document, unless stated otherwise, are as of the publication date of this document.

Furthermore, due to the subjective nature of these opinions and analysis, these data, projections, forecasts, anticipations, hypothesis, etc. are not necessary used or followed by AXA IM's portfolio management teams or its affiliates, who may act based on their own opinions. Any reproduction of this information, in whole or in part is, unless otherwise authorised by AXA IM, prohibited.

Issued in the UK by AXA Investment Managers UK Limited, which is authorised and regulated by the Financial Conduct Authority in the UK. Registered in England and Wales No: 01431068. Registered Office: 22 Bishopsgate London EC2N 4BQ.

In other jurisdictions, this document is issued by AXA Investment Managers SA's affiliates in those countries.

© AXA Investment Managers 2024. All rights reserved