

How Curved is the Curve

- The US labour market is gently cooling, but we think the Fed will remain on its guard.
- Isabel Schnabel's take on the Phillips curve still comes with hawkish undertones.

The payroll data came out exactly like Jay Powell would probably have wanted them: the downward revision to the previous months in job creation solidifies a move into below-trend territory, while a lower-than-expected wage print came as an additional boon. It would now take a very bad surprise in the inflation print for August to convince the FOMC to hike again on 20 September, and this adds to our belief that "peak Fed Funds" was hit in July.

We explore this week in more details the "Waller hypothesis," i.e., the possibility that US inflation could go back to 2% with merely a decline in job opportunities – i.e., the possibility to change to new jobs – rather than a decline in existing jobs. A paper by Benigno and Eggertsson suggests that the Phillips curve gets particularly steep once job vacancies exceed the number of employment seekers, providing a persuasive explanation of the recent inflation wave. This could be good news: indeed, symmetrically, a steeper curve would be consistent with a swift decline in inflation once labour market loosens via a decline in openings without necessarily entailing much job destruction. This approach does not consider second-round effects though, such as the memory of the inflation shock which could trigger some wage/inflation catch-ups. In any case, even if they have improved, indicators of labour market tension such as the job opening and quit rates are still visibly above their pre-Covid levels. We think the Fed will err on the side of caution – consistent with our long-held view that rate cuts will take their time.

Arguably, the same phenomena could be at work in the Euro area. We note however that in her speech last week, Isabel Schnabel focused on another approach to the Phillips curve, based on firms' strategic pricing behaviour, which provides a more hawkish alternative to the Benigno-Eggertsson model. With core inflation only marginally receding, the ECB hawks are not lowering their guard, even if some of them – including Schnabel – now accepts the possibility – but not the certainty – of a "skip" at the September meeting (but a skip would not necessarily be the prologue to a plateau but could be a short pause).



Gracefully gliding down

September meeting. Indeed, even if the tightening bias is still very much here in the central bank's communication, it was clear since the July hike that the Fed was in a Bartelby mood and "would prefer not" to hike again if it could, which we think is wise given the quantum of accumulated tightening now percolating through the system. As we discussed last week, this reluctance to tighten further was however challenged by the resilience of the United States (US) economy, with a strong focus on the labour market, and we were counting on a "soft enough" payroll print to support our call that the post-July pause would turn into a long plateau. This is what we had on Friday. The August headline number was a bit higher than expected – 187K against 170K – but it came with some sizeable downward revision to the previous months to confirm the US labour market, while not exactly correcting yet, is now gracefully gliding down.

The trend in job creation is clearly down, albeit slowly, and a key development in our view is that employment growth has been standing below the pre-Covid trend (1.9%) since spring on a three-month annualised basis (see Exhibit 1). Another positive development – from the Fed's point of view - is that the monthly gain in wages per hour came out below expectations and, at 2.4% on an annualized basis, could be consistent with a return to targeted inflation, even if positing weak productivity gains. We would however caution against over-enthusing over a single data point. On a three-month annualised basis – our usual gauge of the recent "momentum" – wage growth is still markedly above the pre-Covid trend of 2.4% (see Exhibit 2). What is striking actually is the stability of the gains over the last 12 months.

Exhibit 1 – Below trend job creation ...

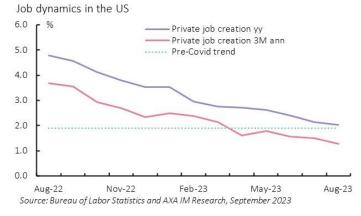
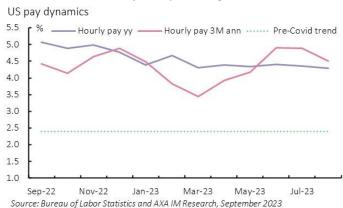


Exhibit 2 – But the trajectory for wages remains unclear



To some extent, this can be the result of the normal sequencing: wages react to the changes in the quantum of labour with a lag. But this explanation is however partly contradicted by other indicators which point to still significant tension on the US labour market. The job opening rate is heading down, but still remains higher than before the pandemic, and symmetrically is the "quits rate" (see Exhibit 3). We are far from a normalized labour market in the US, and the point was forcefully made by Federal Open Market Committee (FOMC) member Loretta Mester in an address just after the release, even if she conceded there were some signs of cooling. Although she is not voting this year, she probably expressed the view of the FOMC hawks for whom the resilience of the labour market remains a key concern. The doves at the Fed would probably point at the rise in the participation rate to 62.8% in August which, although still below the pre-Covid level, helps to explain why the unemployment rate moved up from 3.5% to 3.8% last month and suggests labour supply is reacting to the rise in wages, as another sign of normalisation, but the debate remains probably still open.

Even if the picture remains murky, it would take a particularly big surprise in the inflation print to be released on 13 September for the Fed to hike a week later. The market was however already more focused on the November meeting when bond yields were rising fast in August. Habitual readers of Macrocast will know that we've been expecting for a while that the dataflow would be bad enough by the end of the year to turn seal the deal on July 2023 marking the peak of the current Fed tightening phase, but we will still keep an open mind, since we have been surprised by the resilience in the US data before.





Source: Bureau of Labor Statistics and AXA IM Research, September 2023

Exhibit 3 – In the right direction, but still far from normal

The Phillips curve is the nagging issue

While we think it is far too early to bet on such an outcome – which would defy most precedents - we want to explore this week the ramifications of a "no landing" normalisation of inflation, i.e., a situation in which inflation would return to 2% without a significant rise in unemployment nor GDP contraction. This is slightly different from our discussion of Peter Hooper's "soft landing" hypothesis back in July, since he was primarily interested in listing the reasons US economy would be resilient to the monetary tightening. Ignoring for now "mega trends" such as the change in demographic conditions we discussed last week, or the likely inflationary impact of the Green Transition, the right ingredients would be: (i) unit labour costs decelerating enough to bring down the growth in non-housing services prices, (ii) rents continuing to slow down as a lagged function of property prices, and (iii) manufactured and energy prices remaining tamed by low world demand (in particular a lack of traction from China).

Even if Beijing has announced more stimulus measures last week, we think (iii) is likely to persist. On (ii), we have been quite confident for months in the capacity of the old but robust lagged relationship between house prices and rents to hold this time again and counting on more deceleration in rents is rational in our view given the level of mortgage rates, even if the housing market has on the whole been more resilient than we would have expected.

The productivity/wages nexus is the most uncertain in our view. With hours worked falling while GDP growth remains healthy, productivity has been rebounding lately, posting a strong 3.7% annualized gain in Q2 2023, but such trajectory is sustainable only if "proper" gains — beyond the cyclical pattern - emerge. We can hardly see a divergence between the number of hours and GDP settle in permanently in the US. The promise of Artificial Intelligence (AI) of course deserves to be considered seriously, and so does a potential boost from the implementation of Inflation Reduction Act (IRA) but given the poor performance of productivity in the decade before COVID, maintaining unit labour costs growth on the recent low pace (1.6% annualized in Q2) would be more likely to come from wage moderation. And then, as usual, we return to the "Waller hypothesis," the possibility that a reduction in employment opportunities — i.e., a normalization in the job opening rate — without a decline in employment proper would suffice to bring wage growth down.

The relationship between the job opening rate and the unemployment rate, was very stable between the Great Financial Crisis and the pandemic. To bring openings back to the pre-Covid level – arguably where they would need to be to be consistent with 2% inflation - the unemployment rate would still need to move up by nearly 2.5 percentage points to 6.25% based on the coefficients estimated over 2010-2019. Such a shift in unemployment would in all likelihood take a significant recession. So much for "no landing." A major problem though is that, as is plain to see in Exhibit 4, the relationship between the unemployment rate and job opening has completely broken during the pandemic, so that in our view it is in anyone's guess where the "new normal" should be.



Exhibit 4 – In the right direction, but still far from normal



Source: Bureau of Labour Statistics, AXA IM Research, September 2023

Since Covid, those alternative indicators of the labour market have been much better at predicting inflation than the unemployment rate. This was the approach developed in a <u>recent paper by Benigno and Eggertsson</u>, who explore in detail non-linearities in the Phillips curve. Instead of using the canonical unemployment rate as a measure of labour market slack, they use the "labour tightness index" which is the ratio of vacancies to unemployed persons. They run their regressions over 1960-2022 and 2008-2022, distinguishing between two regimes depending on whether tightness is particularly high (they use a threshold of 1, when even putting all unemployed people to work would not fill the vacancies). They find a much steeper relationship (roughly 10 times steeper) between inflation and labour market conditions during these peaks of tightness. We are currently in such a situation. But non-linearities cut both ways: once measures of tightness come back to a more reasonable level, inflation should also decelerate very fast.

This comforting result would however fail to hold if wage bargaining is durably hit by the inflation shock, in a sort of "hysteresis" phenomenon. Arguably, without the labour market tightness episode of the late 1960s, the oil shock of 1973 may not have triggered such a massive and lasting inflation drift. Benigno and Eggertsson look into the 1970s experience but to a large extent "bat it away" by focusing on the lack of inflation anchoring at the time, due to the hesitations of the Fed. Inflation expectations are undeniably much better anchored in the current episode, but even without a de-anchoring, it is not absolutely obvious to us that a mere reversion to the pre-Covid opening rate would necessarily trigger a return to the pre-Covid wage trend. This would imply that wage bargaining operates without memory, i.e., reacts only to the current state of job opportunities, as an indicator of the leverage employees have over their employers by threatening to quit, without any impact from the past deterioration in real wages. In this memory-less model, the US would be lucky enough to completely avoid the wage catch-up which is now so prevalent in Europe. We have been arguing for a long while that the institutional set-up varies a lot across the Atlantic, and the higher degree of unionisation and centralisation of wage bargaining in Europe makes the region more prone to wage catch-ups in times of inflation, but it does not mean this effect is completely absent in the US. For instance, the decision by the car-workers union on 25 August to go on strike in the "Detroit three" car markers amid a dispute over pay deserves to be monitored.

To be clear, we are not arguing a "no landing" is impossible, and the probability of a significant recession is in our view declining. What we are arguing is that the "burden of proof" for such an outcome is likely to be heavy, and that the market should continue to focus on two less palatable scenarios. First — and that would be problematic for the equity market — it is by no means unlikely that the economy ultimately plunges under the weight of the accumulated tightening, and that a hard landing ultimately happens irrespective of what would in fact be necessary to bring inflation back to target (inflation could even undershoot). Second, and symmetrically, there is a case for seeing the Fed forced in the end to bring its policy rate further up to deal with a resilient inflation. The baseline scenario should be that the central bank will err on the side of caution, i.e., will refuse to lower its guard quickly, i.e., wait for longer to start cutting rates (we don't expect any before June 2024).



Not that much clearer for the ECB

The shape of the Phillips curve is also a key issue for the European Central Bank (ECB), and it was addressed head-on in her latest speech by Isabel Schnabel. It is fair to say that she is not convinced by the reversibility of the "steeper Phillips curve" argument. Indeed, while she explicitly referred to Benigno and Eggertsson's paper, her point was straightforward: "the question, then, is whether the Phillips curve continues to be as steep today as it has been in the recent past. If it were, the sharp decline in marginal costs on the back of the fall in energy prices would drive inflation down just as quickly as higher costs had pushed it up. However, there are reasons to believe that this may not be the case."

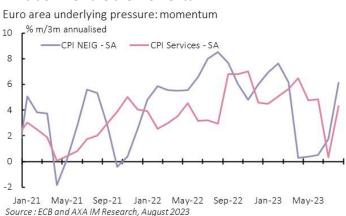
True, she acknowledges that, when correcting for the different levels of structural unemployment across the two regions, the current situation in the Euro area could just as in the US be characterized as "being in the steep part of the Phillips curve," pointing to measures of labour shortage on this side of the pond. Yet, she also moved away from the traditional approach to the Phillips curve – focusing on labour market dynamics – to explore microeconomic behaviours. One of her points was that firms could be asymmetric in their reaction to large input price shocks. While they would be keen to quickly align their prices up when their input costs go up, they would be reluctant to cut on the way down because they know that prices have an upward trend (the central bank targets 2% inflation, not zero), so that the general price level will on trend catch up with their specific prices at some point in the future. Beyond the Philips curve discussion, she made sure to mention that some of the current weakness in the real economy could be ascribed to structural factors (code words in ECB-speak for "this would not be considered in our reaction function." Her hawkish proclivities are still very much here.

The market reacted to Isabel Schnabel in a very dovish way because she acknowledged the deterioration of cyclical conditions in the Euro area and explicitly mentioned the possibility to "skip" the September meeting, while her hawkish partners in the Governing Council who have been on the wire recently have re-stated their strong preference to hike again on 14 September. It was still a very considered approach — a skip in her speech is a possibility but did not come up as more heavily weighted in terms of probability than a hike — and we think the market re-pricing was too large.

Exhibit 5 – Core not easing fast yet

ECB underlying inflationnary pressures forecasts HICP Headline - AXA IM forecasts 11 HICP Core - AXA IM forecasts 10 FCB Supercore 9 8 HICP Core momentum, %m/3m ann 7 PCCI, %3mma 6 Core PCCI, %3mma 5 4 3 0 Jan-19 Jul-19 Jan-20 Jul-20 Jan-21 Jul-21 Jan-22 Jul-22 Jan-23 Jul-23 Jan-24 Jul-24 Source: Eurostat, ECB and AXA IM Research, August 2023. NB: PCCI stands for Peristent and Common Component of inflation

Exhibit 6 – Beware the momentum



We think the debate is still very finely balanced between hiking and not. The dataflow should be the "justice of peace" but as far as inflation is concerned, it is not sending a clear signal. Some of the most sophisticated measures of core inflation, e.g., the "supercore" of the "Persistent and Common Component of Inflation (PCCI) have pointed to a clear inflexion several months ago...but the message from the basic core inflation prints remains problematic (see Exhibit 5). True, inflation excluding energy and food decelerated by 0.2 percentage points in August, but it has remained in the "5%+" corridor in which it has been wallowing since December 2022. When using the ECB's seasonally adjusted data, the 3-month annualized change in both services and manufactured goods' prices has even rebounded in August (see Exhibit 6).

We want to get the whole of the pre-Governing Council "ECB-speak" this week before finally making up our mind on the outcome of the 14 September meeting. We acknowledge our call for one last 25bps hike is now hanging by a thread, but this possibility still looks more material to us than what the market is now ready to price.



| Country/F | Region | What we focused on last week | What we will focus on in next weeks |
|-------------------|---|--|---|
| | • US previous 18m • JOL¹ leap • GDF • PCE | payrolls (Aug) rose by 187k, with a sharp 110k sion to prior months. Unemp rose to 3.8% - an high — and earnings slowed to 0.2%mom TS vacancies (Jul) fell to 8.8m; Challenger job cuts at 267%yoy; jobless claims subdued (Q2) revised lower to 2.1% (saar) from 2.4% deflator (Jul) 3.3% (3.0%), core 4.2% (4.1%) sonal spending (Jul) jumped 0.8%, saving rate fell .5% - likely unsustainable over coming months | ISM services (Aug) watch for slip after strong June/July spending figures Fed publishes Beige Book Weekly jobless claims – for any signs of softening following Challenger increases MBA weekly mortgage applications – still falling? Productivity and unit labour costs (Q2) for signs of stabilising around inflation mandate consistent rates |
| € ** € | while Euro mes wea Creo | o area flash August HICP was unchanged at 5.3%yoy, le core slowed down 0.2pp also to 5.3%yoy opean Commission surveys confirmed key sages from August PMIs: Momentum in services in the last of the la | Final euro area Q2 GDP and employment prints Final service August PMIs Final ECB speeches before quiet period starts ahead is of 14th September ECB meeting |
| | mtg • BoE as c • Min | ionwide house prices (Aug) down -0.8%mom and e approvals (Jul) down to 49.4k as rate rises bite HH lending data points to slowing consumption onsumer credit growth continues to slow i cabinet reshuffle – Grant Shapps replaces Ben lace as Defence Secretary | BRC retail sales (Aug) Final PMIs (Aug) Halifax house prices (Aug) likely to mirror declines seen in other measures |
| | driv wea • IP (J • Labo | ail sales (Jul) rose 2.1%mom more than expected en by strong summer demand supported by hot other ul) down 2%mom our market (Jul); u/rate expected rose to 2.7%, bu s not signal deterioration in conditions | Household spending (Jul) Final PMIs (Aug) Trade balance and CA balance (Jul) Second Q2 GDP estimate, we see some chance that 1.5%qoq is revised down slightly to 1.3% (cons) |
| * | 47.3 (Jul) • PBo • PBo | Mfg PMI increase marginally to 49.7 (Aug) from 8 (Jul); Caixin Mfg PMI rose to 51.0 (Aug) to 49.2 , indicating early sign of pickup in Mfg sector C (31 Aug) announced policies on mortgage easing C (1 Sept) cut FX RRR by 200bps to 4%, amid the reciation pressure on the currency | Tue (5 Sep): Trade data (Aug)Sat (9 Sep): CPI (Aug), PPI (Aug) |
| EMERGIN | its 1 • Infla • Q2 • Hun • PMI | a-day deposit rate by 100bps to 14% ation fell to 10.0% in Poland in August GDP rose 7.8%yoy in India while it fell 2.4%yoy in gary | CB: Mexico (11.25%), Malaysia (3.0%) & Poland (6.75%) to stay on hold Q2 GDP: Korea & Romania Aug CPI: Colombia, Chile, Hungary, Mexico, Taiwan & Thailand July ind production: Czechia, Hungary & Mexico |
| Upcoming events | US: | | ul), Services PMI (Aug), ISM non-mfg index (Aug), Federal Sep), Non-farm productivity (Q2), Unit labour costs (Q2) |
| | Euro Area: | | (Jul); Wed: EA Retail sales (Jul), Ge new-mfg orders (Jul); HICP (Aug), Ge CPI (Aug), Fr, Sp Industrial production (Jul) |
| | UK: | Tue: BRC Retail sales (Aug), SMMT new car (Aug), S Halifax HPI (Aug) | Services PMI (Aug); Wed: Construction PMI (Aug); Thu: |
| | Japan: | Thu: Leading index (Jul); Fri: GDP (Q2), Trade bal Survey (Aug) | lance (Jul), Current acc balance (Jul), Economy Watchers |
| | China: | Tue (5 Sept): Trade data (Aug); Sat (9 Sep): CPI, I | PPI (Aug) |



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



About AXA Investment Managers

AXA Investment Managers (AXA IM) is a responsible asset manager, actively investing for the long-term to help its clients, its people and the world to prosper. Our high conviction approach enables us to uncover what we believe to be the best global investment opportunities across alternative and traditional asset classes, managing approximately €840* billion in assets as at the end of June 2023.

AXA IM is a leading investor in green, social and sustainable markets, managing €489 billion of ESG-integrated, sustainable and impact assets as at the end of December 2022. We are committed to reaching net zero greenhouse gas emissions by 2050 across all our assets, and integrating ESG principles into our business, from stock selection to our corporate actions and culture. Our goal is to provide clients with a true value responsible investment solution, while driving meaningful change for society and the environment.

At end of December 2022, AXA IM employs over 2,600 employees around the world, operates out of 24 offices across 18 countries and is part of the AXA Group, a worldwide leader in insurance and asset management.

* Includes the contribution from Architas and AXA IM Prime, net of intercompany elimination.

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 2023. All rights reserved