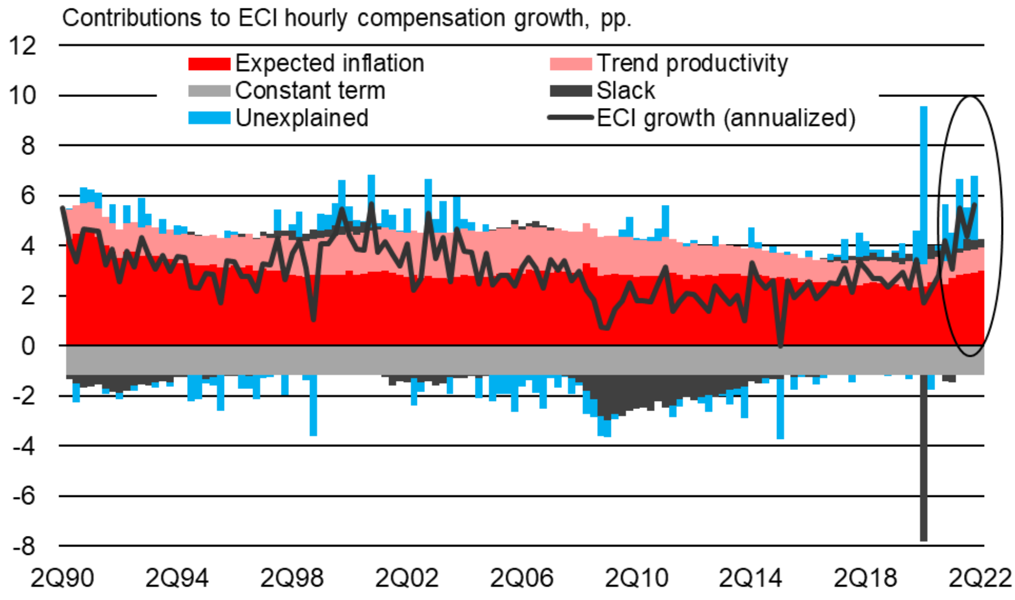
Little or no sign of a wage-price spiral in the US



Source: BLS, UniCredit Research

- In the US, amid rampant inflation and a very tight labor market, many are concerned that the economy could experience a 1970s-style wage-price spiral, which would likely require a much more aggressive tightening of monetary policy. Our *Chart of the Week* decomposes US wage growth into the contributions made by fundamentals: inflation expectations (red bars), labor market slack (dark grey bars) and underlying productivity growth (light red bars). These contributions are estimated from a simple model that relies on pre-pandemic relationships[1]. Wage growth (here measured by the Employment Cost Index, ECI) rose to an annualized rate of 5.6% in 1Q22, 3.3pp above pre-pandemic 4Q19 levels. According to the model, rising long-term inflation expectations[2] accounts for 0.4pp of the rise, labor market "slack" accounts for only 0.1pp, while trend productivity growth has had a negligible effect.[3] Evidence of a wage-price spiral would come from high inflation leading to rising inflation expectations and higher wages via the wage and price setting process, but the model-estimated contribution to rising wage growth from inflation expectations is currently small.

- The unexplained (or "residual") portion of the rise in wage growth has been unusually large recently, as indicated by the blue bars. To be sure, the model relies on pre-pandemic relationships. It's possible that something may have changed structurally in the post-pandemic era, and high wage growth could persist, for example driven by a rise in the equilibrium rate of unemployment, a steeper slope of the Phillips curve, and/or uncertainty about inflation expectations.

- However, our baseline is that high wage growth will be temporary, not structural, as the pre-pandemic forces have not gone away. In the pre-pandemic period, the unexplained component (blue bars) was mean zero and akin to white noise, whereby upward effects tended to be followed by downward effects. There are tentative signs that wage growth is already easing, as 3M/3M growth in average hourly earnings (an alternative and more timely measure of wage growth than the ECI) fell to 3.8% in May, down from 7.0% in January.

1. The wage growth model is loosely based on that in Yellen, Janet L. (2017). "Inflation, Uncertainty, and Monetary Policy," speech delivered at "Prospects for Growth: Reassessing the Fundamentals," 59th Annual Meeting of the National Association for Business Economics, held in Cleveland, Ohio, 26 September 2017.

   The estimated equation for the employment cost index (ECI) is:

   $ECI_t = -1.16 + 0.99*\pi^e_{t-1} - 0.30*SLACK_t - 0.45*\Delta SLACK_t + 0.66*PROD_t + \varepsilon_t$

   where ECI is the annualized log difference of the Employment Cost Index (ECI) for hourly compensation of private industry workers; π^e is the University of Michigan five-year ahead consumer inflation expectations; SLACK is the unemployment rate less the Congressional Budget Office's (CBO) estimate for the equilibrium unemployment rate; ΔSLACK is the first-difference of SLACK; PROD is an estimate of trend hourly labor productivity growth for the business sector; ε is an error term and t denotes time. Trend labor productivity is derived using the method detailed in Yellen (2017). The estimation sample is the pre-pandemic period 3Q90-4Q19 and the coefficients are estimated using ordinary least squares regression. All coefficients are statistically significant and the adjusted R-squared is 0.42. The pre-pandemic period, not the whole sample, is used for the estimation because we want to estimate the performance of the model in explaining recent (post-pandemic) wage growth. The estimated coefficients are used to produce out-of-sample forecasts for 1Q20-1Q22.

2. In the model, inflation expectations are proxied by the University of Michigan five-year ahead consumer inflation expectations, for reasons of goodness-of-fit and because it is a long-running survey. It performed better than the Survey of Professional Forecasters (SPF). We also tested short-term (one-year ahead) measures of inflation expectations, both from the University of Michigan consumer survey and the SPF, and both were found to be not statistically significant. This is important because one-year ahead inflation expectations have moved materially higher, while the rise in longer-run measures has been much more muted.

3. More recently, the preliminary estimate for June of the University of Michigan five-year ahead consumer inflation expectations jumped to 3.3%, up from 3.0% in May, something which Fed Chair Jerome Powell called "eye-catching" and one of the reasons why the FOMC chose to raise interest rates by 75bp instead of 50bp at its meeting earlier this month. It would have been consistent with a 0.3pp rise in the model's prediction for wage growth, taking it to 3.4%, all else equal. But in the final release of the University of Michigan June survey, published today, the preliminary reading was revised down significantly, to 3.1%.

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