

Economics  
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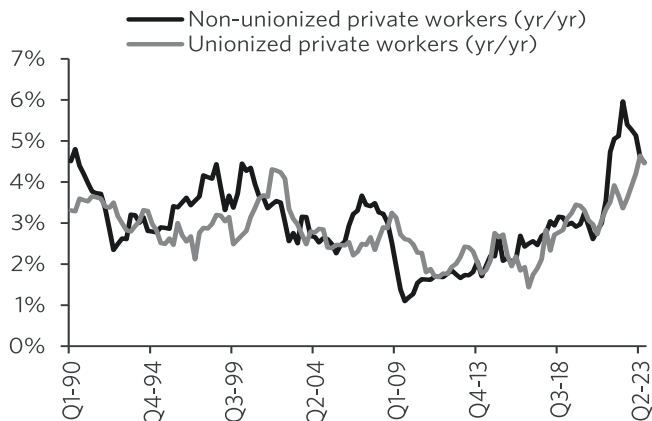
## Waging war on US wage inflation: Can the Fed cool the fires?

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In the battle to tame US inflation, America’s central bankers are keeping a close watch on wages, judging that pay gains in the 4-5% range are inconsistent with taming prices to their 2% target. After all, wage gains not only filter into labor costs, but also generate the spending power for households that allows higher prices to stick. So as much as everyone likes to see their own compensation on the rise, collectively, a cooling in wage inflation could be part of what’s needed to calm the price hikes that Americans would prefer not to face.

Markets could also get a bit hot under the collar about the threat from wage inflation as they ponder details of the settlements reached with the UAW. But rather than set a precedent for others, union wage gains tend to play catch-up those already received elsewhere (Chart 1), a reflection of the multi-year nature of their contracts, and only a very small fraction of America’s workforce is now unionized. What’s key is whether the economic conditions that drove non-union wages up in the last two years are set to turn enough to quell those pressures ahead.

**Chart 1: Unionized wage growth lags non-unionized workers**



Source: BLS, CIBC

Wage growth in the US since the pandemic has largely been in two main phases: a sharp rise and then a slow fall (Chart 2). Measured by the Fed’s preferred compensation metric, the employment cost index, wage growth jumped by about 2%-points above its pre-pandemic average in the year and half to the middle of 2021.

While it reached a peak at that point, the subsequent moderation hasn’t been nearly as dramatic, with the recent 4.5-5% quarterly annualized pace still above its pre-pandemic average. Typically, since productivity growth offsets some of the impact of wage gains on labor costs per unit of output, that pre-pandemic average pace of 3% to 3.5% would generally be seen as consistent with labor costs, and prices, rising in line with the Fed’s 2% inflation target.

### The chicken or the egg?

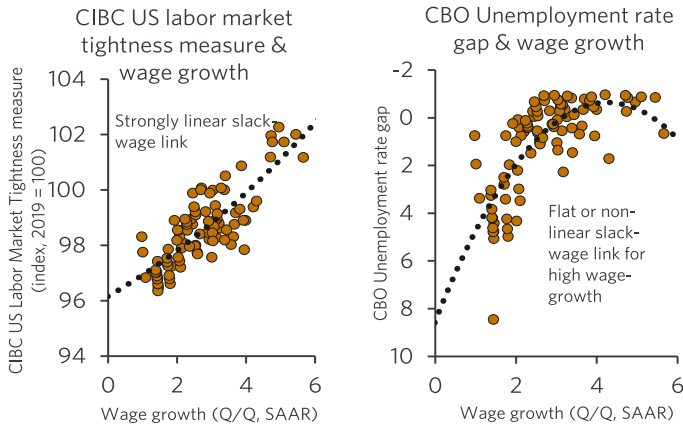
To understand why wages are running faster than the pre-pandemic trend, and what could turn that tide, we need to isolate the roles played by labor market tightness or slack,

**Chart 2: Wage growth phases over the pandemic: a sharp rise and a slow fall**



Source: BLS, CIBC

**Chart 3: CIBC’s US labor market tightness measure (L) has better explained wage growth than traditional slack measures (R)**

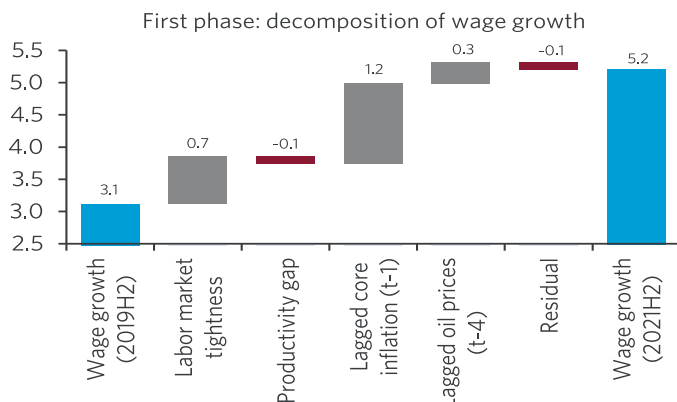


Source: BEA, CBO, BLS, CIBC calculations

productivity (relative to its longer term trend), and inflation in prices, in determining what employers have offered up. While most think of wages as a cost factor in driving prices up, the issue of whether prices or wage move first is inflation’s version of the chicken or the egg question. *Past* price gains, especially those unrelated to the labor market such as from higher oil prices, can increase the pressure on workers to seek out higher pay, and when inflation is trending higher, businesses can have greater confidence that they’ll be able to pass on higher labor costs in their own price hikes. Then, those higher wages feed into business’ plans about its *current* and *future* prices. But ultimately, it is labor market tightness that wages are most sensitive to when inflation expectations are anchored – which they have mostly been during this cycle.

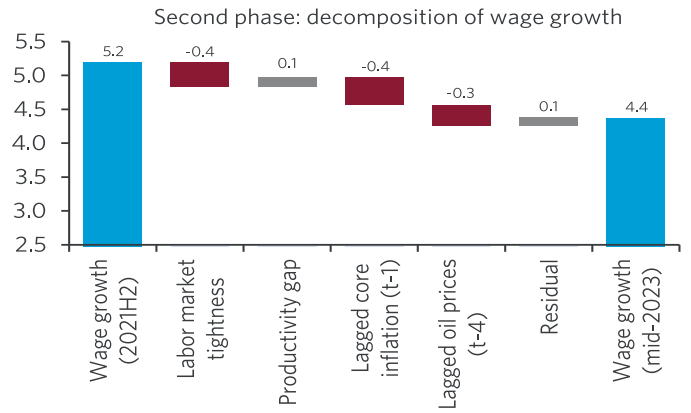
Most economists use the gap between the unemployment rate and an estimate of the natural (or noninflationary) unemployment rate to measure labor market tightness. But an aging population and the resulting scarcity of workers, made firms reluctant to shed workers in bad times for fear of

**Chart 4: Past inflation accounts for about 70% of rapid rise in wage growth until late 2021**



Source: BEA, CME, BLS, CIBC calculations

**Chart 5: Deceleration in wage growth since late 2021 has mostly reflected a slowdown in past inflation**



Source: BEA, CME, BLS, CIBC calculations

being unable to find them when business picked up, so the unemployment rate didn’t always capture the true degree of demand for workers in the prior decade. It also suffers from the fact that the natural rate of unemployment can’t be directly observed and estimates of where it sits can differ widely.

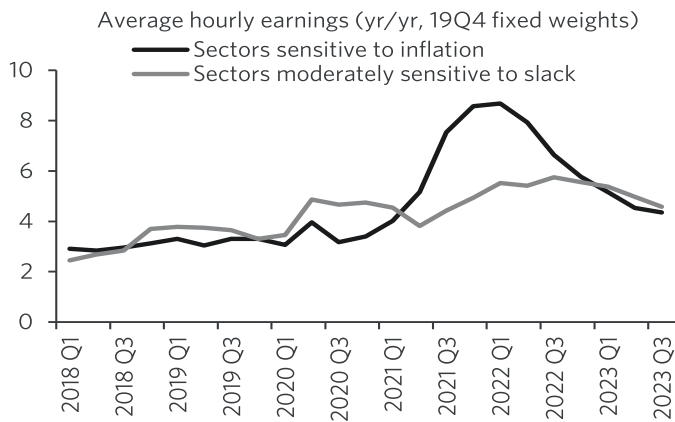
CIBC’s modified measure of tightness provides a much better fit to actual US wage inflation trends (Chart 3). It incorporates the “quits rate”, which captures the share of workers who are actively seeking out new opportunities and higher wages, and combines that with the job vacancy-to-unemployment ratio, with a high ratio making firms more desperate to pay up to retain workers who fit their needs.

### Mostly “Catch Up” wage growth

The statistical evidence shows that initial acceleration in wages in the year and half after the pandemic’s onset was largely a catch-up to the run-up in inflation, with lagged measures of core CPI and oil prices explaining about 70% of the acceleration in the employment cost index (Chart 4). That inflation was sparked by supply shocks from the pandemic and the war in Ukraine that lifted both core inflation and energy prices. Firms were compensating workers for high inflation, allowing wages to “catch up” with the rising cost of living, perhaps feeling that a high inflation environment would allow them to pass on these pay hikes in their own prices down the road. The other 30% — a non-trivial 0.7%-points — was due to the increase in our measure of labor market tightness.

The phase from mid-2022 to the present has seen wages slowing from 5.2% to a still-brisk 4.4%. About two thirds of that deceleration can be tied to core inflation and oil prices moderating, given the link to lagged inflation trends (Chart 5). The remaining third is a mix of factors, including reduced labor market tightness as quits and job vacancies came down.

**Chart 6: Run up in wages mainly due to sectors where wages are sensitive to past inflation**



Source: BLS, CIBC calculations

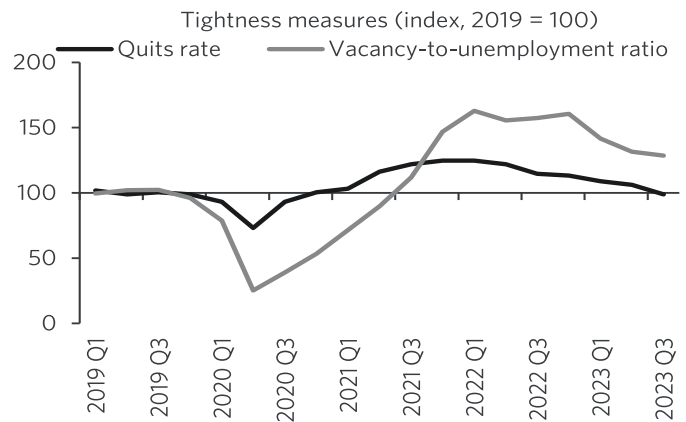
Digging into similar data for individual industries provides some further color. Statistically, we find that several sectors are particularly sensitive to measures of labor market tightness: mining and oil/gas, durables manufacturing durables (which would include auto workers), non-durables manufacturing, leisure/hospitality, transportation/warehousing, and education/health. The remaining sectors — retail, wholesale, finance, construction, utilities and information — we classify as less sensitive to past inflation and moderately more sensitive to slack.

Consistent with what we found in the aggregate data, most of the initial run-up in inflation was due to sectors where wages are more sensitive to lagged inflation (Chart 6), and wage growth in these sectors has shown significant moderation since peaking in the middle of 2021. But this is only half the story. In sectors where wages are more sensitive to labor market tightness, wage growth has just recently peaked in year-over-year terms and likely has some way to go down.

The main take away from both the aggregate and disaggregated approaches is that the recent moderation in inflation in the US is going to help slow wage growth as firms won't and face as onerous "catch up" demands from workers. But to the extent that CPI moderation starts to peter out, having been tied to supply chain improvements that are now behind us in many cases, we'll need to make more progress on reducing labor market tightness, with a further drop in job vacancies or a rise in unemployment, for example.

That's also reflected in the lack of wage deceleration in sectors where job market tightness historically has been the biggest driver of pay scales. As a result, the last mile of bringing wage growth down to a range consistent with 2% inflation will entail some economic hardship that the US economy has largely managed to avoid thus far.

**Chart 7: Vacancy-to-unemployment ratio still has some way to go before normalizing while the quits rate is back to pre-pandemic levels**



Source: BLS, CIBC calculations

## Lost workers and job vacancies: Two sides of the same coin

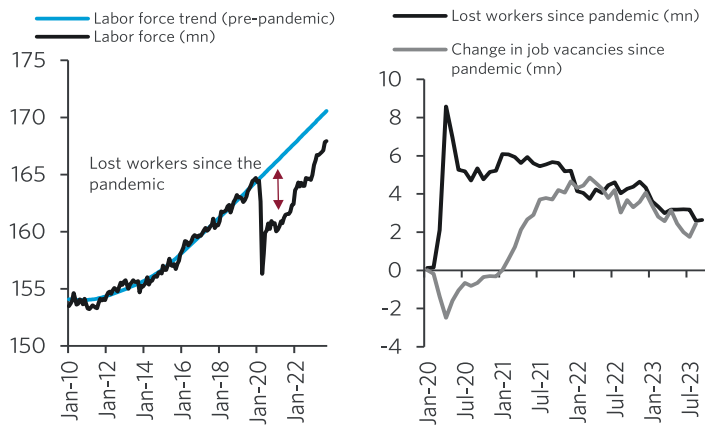
Of the two key measures of labor market tightness we focus on, one of them has normalized (Chart 7). The quits rate has come back to its pre-pandemic rate signalling that the era of the "Great Resignation" is over, reducing the need for employers to pay up to prevent workers from walking out the door.

But the vacancy-to-unemployment ratio remains fairly elevated at 1.5, well above its pre-pandemic range of 1-1.2 openings for each unemployed worker, so business still have reason to fear that if they lose an employee, they'll join a long line of those seeking workers amongst a lean group of job seekers. The pace of decline in that ratio has also showed signs of slowing as well. Bringing that measure into balance is going to be key to having wages closer to the range that the Fed will see as non-inflationary.

As the economy slows in the face of higher interest rates, businesses will cut back on staffing levels, reduce postings for new jobs, and add to the pool of unemployed. But that pool might advance only slowly, as an aging population means that businesses will achieve some of their desired workforce downsizing through retirements, adding to those who have left the workforce in recent years as baby boomers hit retirement age.

During the pandemic, there was a large exodus of workers for a variety of reasons. Early retirements, concerns about health risks, changes in attitudes and desire for more leisure amongst other factors. That began to normalize in early 2022, those in their prime working age started to return to the workforce. As they've accepted offers of employment, they've contributed to the declines in job vacancies that we've been seeing

**Chart 8: Lost workers since the pandemic (L) are contributing to elevated job vacancies (R)**



Source: BLS, CIBC calculations

But the level of the labor force remains below its pre-pandemic trend level (Chart 8, left). Since those who have existed from the job market don't count as unemployed (because they aren't seeking work), the remaining labor force gap continues to contribute to the elevated level of the job vacancies-to-unemployed ratio, if less dramatically than was the case in early 2022 (Chart 8, right).

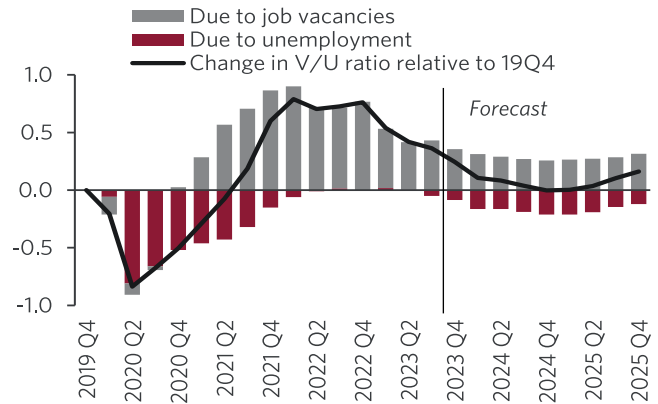
But we were doomed to fall below a straight line trend because demographic factors now fully explain where most of these missing workers are: they've retired. And even over the medium term, exits from the workforce due to retirement, unless countered by more immigration or support for child care that increases participation by both parents, will make it more challenging to fill job vacancies. That could imply a somewhat firmer trend for compensation that businesses will need to offset with investments that enhance productivity.

## How much pain for how much gain?

Our models suggest that supply chain improvements and the resulting drop in lagged inflation, or falling vacancies filled by returning workers, won't be as important in slowing wage inflation from here. With those easy parts of the wage deceleration story behind us, how much economic pain will we need for how much gain in slowing wage inflation's contribution to price pressures?

Using the same wage-Philips curve model that we employed to explain the pandemic's run-up and recent cooling, we can simulate the implications of our US economic forecast for the employment cost index. Assuming productivity grows in line with its longer term trend, a growth slowdown that takes hold in early 2024 should see unemployment rise and the jobless rate peaking above 4%. For job vacancies, we combine the demographic effect with how job vacancies respond to real policy rates using a structural vector autoregression. This approach suggests vacancies should trough around the low 8k

**Chart 9: Vacancy-to-unemployment ratio to normalize slowly given upward pressure from lost workers**



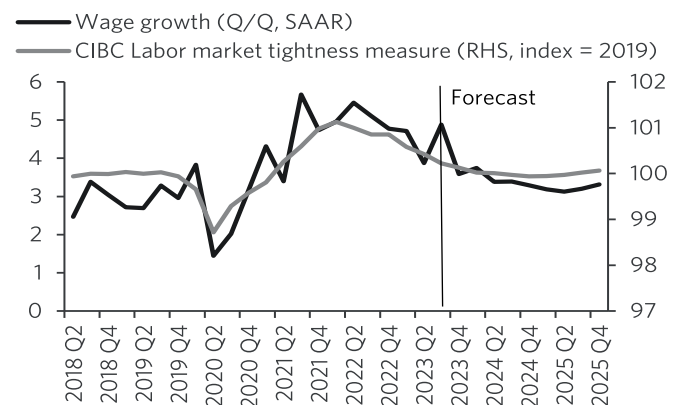
Source: BLS, CIBC calculations

mark. Putting this all together implies that job vacancy-to-unemployment ratio will take some time to normalize (Chart 9). Our estimates imply that it will only reach its pre-pandemic level by late next year or early 2025.

This gradual easing in labor market tightness will also portend a softer pace of wage gains, which as they feed into inflation, also helps promote a further slowing in compensation ahead. All told, that base case scenario has the ECI decelerating back to about 3% by late 2024 or early 2025 (Chart 10).

That's still consistent with a soft landing, being close to but not quite meeting the conditions for an outright recession. But it's not a pain-free exercise, and given the resilience we've seen in US growth, will likely require at least one further quarter point rate hike, and only a gradual easing in rates later in 2024, to put a sufficient squeeze on labor demand. The Fed can win the war on wage inflation, but not without some casualties in the economy that so far we've managed to avoid.

**Chart 10: Wage growth to gradually decelerate to 3% by late 2024 or early 2025**



Source: BLS, CIBC calculations

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