

US Daily: Q&A on the Revisions in the July Employment Report (Abecasis/Walker)

- The July employment report was weak across the board, with July payroll growth below expectations, a decline in household employment, an increase in the unemployment rate, and—most surprisingly—sharp downward revisions to payroll growth in April and May. In this *Daily*, we answer common client questions about the revisions.
- The net downward revision of 258k to May and June payroll growth was the largest two-month revision since 1968 outside of NBER-defined recessions (assuming the economy is not in recession now). The revision was roughly evenly split between public- and private-sector jobs. The revision to public-sector payroll growth mostly reflected lower state and local government job gains (-109k), reversing an initially estimated spike that itself likely reflected estimation challenges around the end of the school year. The revision to private-sector job gains was concentrated in the underlying response data, which we see as more meaningful than a revision to the seasonal factors.
- Payroll growth also slowed and was revised down substantially around the same time last year. However, last year's revisions were only about half as large as this year's, and they were more concentrated in the public sector and seasonal factors for the private sector. That said, last year's revisions were accompanied by a sharper increase in the unemployment rate than we have seen so far this year.
- The Bureau of Labor Statistics (BLS) will publish a preliminary estimate of the benchmark revision to March 2025 nonfarm payrolls on September 9th. We estimate a downward revision on the order of 550-950k (or a 45-80k downward revision to monthly payroll growth over April 2024-March 2025). However, persistent *upward* revisions to the source data and difficulties accounting for unauthorized immigrants could cause it to understate job growth. And while the BLS's birth-death adjustment for nonfarm payrolls was probably too generous in 2024H2, we estimate that the overstatement has since narrowed to around 10k jobs/month, cautioning against extrapolating too much from the benchmark revision. Undercounting of unauthorized workers in the benchmark should be less of an issue going forward, reflecting the sharp slowdown in immigration.
- Friday's payrolls report brings payroll growth closer in line with big data indicators of job gains and the broader growth dataset, both of which have slowed significantly in recent months. Taken together, the economic data confirm our view that the US economy is growing at a below-potential pace.

Jan Hatzius

+1(212)902-0394 | jan.hatzius@gs.com Goldman Sachs & Co. LLC

Alec Phillins

+1(202)637-3746 | alec.phillips@gs.com Goldman Sachs & Co. LLC

David Mericle

+1(212)357-2619 | david.mericle@gs.com Goldman Sachs & Co. LLC

Ronnie Walker

+1(917)343-4543 | ronnie.walker@gs.com Goldman Sachs & Co. LLC

Manuel Abecasis

+1(212)902-8357 | manuel.abecasis@gs.com Goldman Sachs & Co. LLC

Elsie Peng

+1(212)357-3137 | elsie.peng@gs.com Goldman Sachs & Co. LLC

Jessica Rindels

+1(9/2)368-1516 | jessica.rindels@gs.com Goldman Sachs & Co. LLC

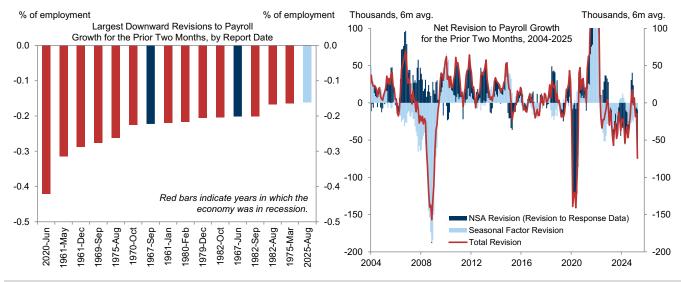
Q&A on the Revisions in the July Employment Report

The July employment report was <u>weak across the board</u>, with July payroll growth below expectations, a decline in household employment, an increase in the unemployment rate, and—most surprisingly—sharp downward revisions to payroll growth in April and May. In this *Daily*, we answer common client questions about the revisions.

How abnormal is a revision this large?

The net downward revision of 258k to May and June payroll growth was one of the largest in the last several decades. The left side of Exhibit 1 shows that every downward revision larger than this one occurred during an NBER-defined recession except for two in 1967, a near-recession year. In addition, this revision comes after a string of negative revisions over the last several months (right side of Exhibit 1).

Exhibit 1: The Downward Revision to Payroll Growth for the Prior Two Months in the July Report Was One of the Largest Since 1960, and It Came Alongside Several Months of Downward Revisions Before That



Source: Department of Labor, Goldman Sachs Global Investment Research

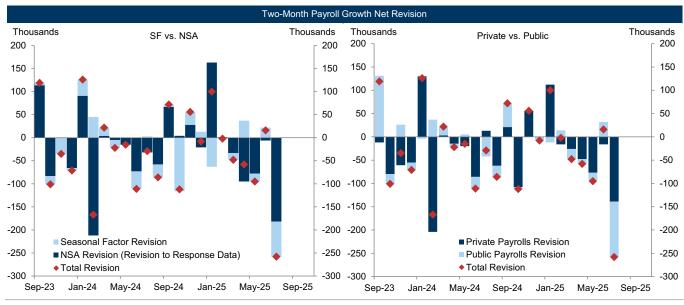
Where was the revision concentrated?

Revisions to payroll growth can come from two sources: new responses that cause the BLS to revise its estimates of non-seasonally-adjusted (NSA) payroll growth, and revisions to the seasonal factors, which only affect the seasonally-adjusted numbers. We see revisions to the NSA data as somewhat more meaningful than revisions to the seasonal factors because they reflect a change in underlying job counts rather than changes in the BLS's model estimates of seasonal patterns across the year. The left side of Exhibit 2 shows that around 70% of the two-month revision in the July jobs report this year reflected NSA revisions rather than revisions to the seasonal factors.

The right side of Exhibit 2 shows that the revision in this year's July jobs report was roughly evenly-split between public- and private-sector payroll growth, with each being revised down by about 130k on net across the two months. We see the revision to public-sector job growth as less concerning because government hiring carries less of a

signal about the underlying strength of aggregate demand than private hiring.

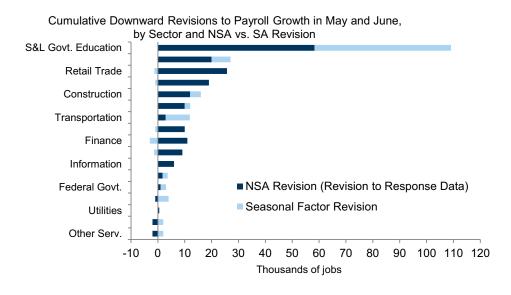
Exhibit 2: Most of the Revision Reflected Lower Estimates of Underlying Employment Rather Than Changes to the BLS's Estimates of the Seasonal Factors; It Was Roughly Evenly Split Between the Public and Private Sectors



Source: Department of Labor, Goldman Sachs Global Investment Research

Exhibit 3 breaks down the revision across different industries. The state and local (S&L) government education sector accounted for more than 40% of the overall revision—around 109k—with roughly half of that revision coming from a re-estimated seasonal factor. Still, the private-sector revision was concentrated in the NSA component and was broad-based across industries.

Exhibit 3: The 109k Downward Revision to State and Local Government Education Payrolls Accounted for About 40% of the Overall Revision; The Other 149k Mostly Reflected Downward Revisions to Non-Seasonally-Adjusted Payrolls Across the Private Sector



Source: Department of Labor, Goldman Sachs Global Investment Research

What could have contributed to it?

The revision to S&L government employment partly reflected a normalization of the initial spike in the initial June estimate, which initially <u>suggested</u> that the sector added 64k jobs month-over-month. We and many other economists did not <u>take</u> that spike at face value, in part because the end of the school year makes May and June especially hard months to seasonally adjust. And indeed, the seasonal factor revision to S&L education payrolls accounts for 51k of the downward revision across the two months, or about 20% of the overall revision. The NSA revision in this sector may have also been affected by the end of the school year, which might induce changes in schools' response patterns.

But this still leaves a large portion of the revision unaccounted for by special factors. Part of the explanation could reflect the combination of a slowing underlying trend in job growth and the "concurrent seasonal adjustment" methodology that the BLS uses to estimate payrolls seasonal factors, which we have previously <u>noted</u> could result in persistent revisions.

Under concurrent seasonal adjustment, seasonal factors are recalculated in "real time" as each new data point is released, effectively subsuming part of any deviation from the norm into the seasonal factor. When payroll growth slows, the seasonal adjustment process mistakenly attributes some of the slowing in payroll growth at its endpoint to evolving seasonality. As a result, the seasonal factor becomes more supportive for a month's initial readings and overstates the strength of payroll growth on a seasonally-adjusted basis. As additional readings also come in softer, the process learns that the slowdown was not the result of evolving seasonality but rather a slowing trend. The seasonal factors are subsequently corrected to be less supportive, resulting in downward revisions to seasonally-adjusted payroll growth.

The monthly pattern of the revision supports this hypothesis. Exhibit 4 shows that more than all of the revision to the payrolls seasonal factor took place in May, which would be consistent with a reevaluation of the slowdown in job gains in May by the seasonal adjustment process as new data became available for June and July.

Thousands Thousands Revisions to NSA Payroll Growth vs. the Seasonal Factors 50 50 0 0 -50 -50 -100 -100 -150 -150 ■ NSA Revision (Revision to Response Data) Revision to the Seasonal Factor -200 -200 May June Cumulative

Exhibit 4: All of the Downward Revision to the Seasonal Factors Took Place in May, Suggesting That the Seasonal Adjustment Model's Initial Assessment That May Payroll Growth Was Weak Because of Changing Seasonality Was Revised Away in Light of Weaker Payroll Growth in June and July

Source: Department of Labor, Goldman Sachs Global Investment Research

Another possible explanation for the revision could be an ongoing deterioration in data quality. While the response rates for the first and second estimates of June and May payrolls respectively were not unusually low relative to the recent trend, overall response rates to the establishment survey have been declining consistently for several years. This could also explain why the pattern of revisions to payroll growth has been noticeably more volatile in the post-pandemic period than before (see right side of Exhibit 1).

Didn't job growth slow down last summer too? Could this be residual seasonality?

It is possible that seasonal patterns in hiring have evolved in a way that the BLS's seasonal adjustment model still does not fully capture. If job growth stabilizes or recovers for the remainder of the year, the BLS's re-estimated seasonal factors will surely become more supportive in the summer months and less supportive in the winter months. It is also possible that the low-hiring, low-firing environment that has characterized the US labor market over the last couple of years leaves a different seasonal footprint from that of more normal labor markets.

But while this year's pattern of slowing job gains in the summer has been similar to last year's, the BLS took steps a while ago to prevent extreme pandemic volatility from distorting the seasonal factors, and we believe the evidence of an obvious seasonal adjustment problem in payroll growth is weaker than for other indicators like initial jobless claims.

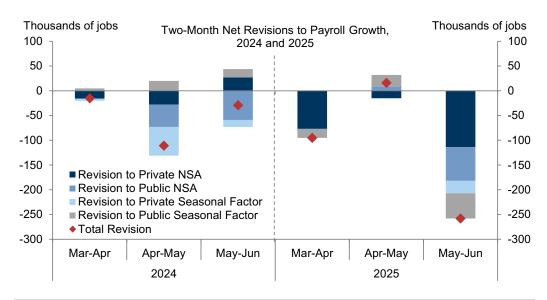
Weren't there large downward revisions at this time last year too? How did they compare to this year's?

Not only did job growth slow markedly last year, but there were sizeable downward

revisions as well. However, we see a few important differences between the two episodes. First, last year's revisions were substantially smaller than this year's, with the largest revision (in the June 2024 employment report for April and May) only about half as large as this month's revision. The pace of payroll growth was also stronger then (payrolls had increased by 170k/month on a three-month average basis in the July 2024 employment report) than now, when payroll growth has slowed to only 35k on a three-month average basis, although slower immigration is likely contributing to part of the deceleration.

Second, the details of the revisions were different. While last year's revisions were mostly concentrated in the public sector and the seasonal factors for the private sector, private NSA revisions account for almost half of this year's revision (Exhibit 5). That being said, last year's slowdown and downward revisions were accompanied by a sharper increase in the unemployment rate than we have seen so far this year, which may have made them more concerning to Fed officials and market participants.

Exhibit 5: Last Year's Revisions Were Smaller Than This Year's Overall, and They Were Also More Concentrated in Public Payrolls and the Seasonal Factors for Private Payrolls Than This Year's Revisions



Source: Department of Labor, Goldman Sachs Global Investment Research

Are there further downward revisions to come from the QCEW and annual benchmark to nonfarm payrolls?

On September 9th, the Bureau of Labor Statistics will publish a preliminary estimate of the benchmark revision to the level of nonfarm payrolls for March 2025. The final benchmark revision will be issued and incorporated into nonfarm payrolls alongside the January 2026 employment report in February 2026.

The key source data for the benchmark revision comes from the Quarterly Census of Employment and Wages (QCEW), which is derived from state unemployment insurance records. The March 2025 QCEW data will be released at the same time as the preliminary benchmark estimate, introducing uncertainty around the ultimate size of the revision. However, based on the nine months of data released since the last

benchmarked period, March 2024, a large downward revision appears likely (Exhibit 6, left panel). We expect a preliminary downward revision on the order of 550k-950k (Exhibit 6, right panel), which would translate to 45-80k downward revision to monthly payroll growth over April 2024-March 2025. A final revision of this magnitude would mark the largest downward revision to nonfarm payrolls since 2010, and result in the average pace of payroll growth over April 2024-March 2025 being revised down from about 145k/month currently to 65-100k/month.

Millions Thousands Thousands YoY Change in Employment 1000 1000 8 8 Annual Benchmark Revision to Nonfarm Payrolls OCFW Nonfarm Payrolls ■ Preliminary estimate 750 750 7 7 Actual revision 500 6 6 500 GS assumption 250 250 5 5 relim. estimate: -550k to -950k 4 4 0 0 -250 3 3 -250 2 2 -500 -500 -750 -750 1 -1000 -1000 Jan-22 Jul-22 Jan-23 Jul-23 Jul-25 2018 2019 2020 2021 2022 2023 2024 2025 Jan-24 Jul-24 Jan-25

Exhibit 6: Employment Growth in the QCEW Has Sharply Underperformed Nonfarm Payrolls Over the Last Year, Suggesting a Downward Revision to Nonfarm Payrolls as Large as 550k-950k in the Annual Benchmarking

Source: Department of Labor, Goldman Sachs Global Investment Research

However, we think the estimate will likely revise lower payroll growth down by too much, for two reasons. First, as we <u>noted last year</u>, since the QCEW is based on unemployment insurance records, it likely excludes most unauthorized immigrants, who contributed strongly to employment growth over the last few years. Undercounting of unauthorized workers should be less of an issue going forward given the <u>sharp slowdown in immigration</u>.

Second, the QCEW itself has been revised up in every quarter since 2019 with the exception of 2020H1. The right panel of Exhibit 6 shows that the preliminary estimate for the benchmark revision has correspondingly been below the final revision in each of the last five years, by 119k on average. Revisions to the QCEW are one reason why the BLS only benchmarks the payrolls data to the QCEW annually and with a fairly long lag.

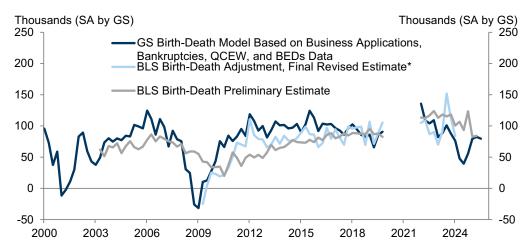
Does that mean that current payroll growth is overstated?

Besides immigration and the recent persistent upward revisions to the QCEW, job gains in the QCEW and establishment survey can differ because the QCEW offers a more comprehensive picture of net job gains from opening and closing businesses. The establishment survey does not capture employment at opening firms. As a result, the BLS excludes job losses at closing firms and imputes net job creation from business openings and closings—the birth-death model.

To check whether the birth-death model may be leading payroll job gains to be

overstated, in Exhibit 7 we update our <u>model</u> of net job gains based on higher-frequency business formation and bankruptcies data as well as detailed data from the business employment dynamics (BED) program. Our model suggests that the birth-death model probably overstated payroll gains in 2024H2—and would justify about 45k/month of the large downward revision from the QCEW—but that that overstatement has shrunk more recently, as the birth-death estimates have come down somewhat and net business formation has stabilized.

Exhibit 7: The Birth-Death Model Could Be Leading Payrolls to Overstate the Pace of Job Growth by a Small Amount; We Estimate That the Overstatement Was Wider in 202403 but Has Shrunk Since

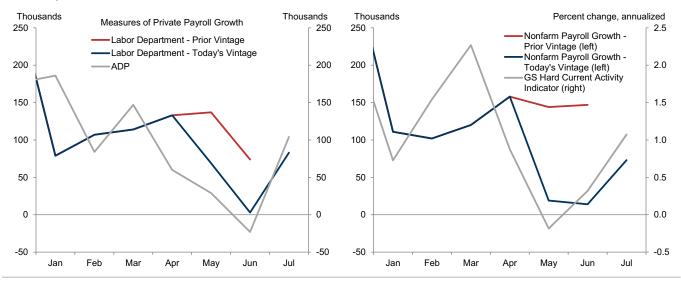


Note: We use outliers throughout 2020 and 2021 in our seasonal adjustment procedure.

Source: Department of Labor, Goldman Sachs Global Investment Research

In our view, the payrolls data had been a bit more puzzling *before* today's downward revisions. Payroll growth had sharply outperformed the signal from big data indicators of job growth over the past couple of months, and now has decelerated to a pace that is closer to what other indicators show (Exhibit 8, left panel). Similarly, the activity data had <u>decelerated markedly</u> in recent months, but payroll growth did not show a corresponding slowdown until today (Exhibit 8, right panel).

Exhibit 8: After the Downward Revisions, the BLS Payrolls Measures Are More in Line with the Signal From Other Measures of Job Growth and Activity Growth in Recent Months



Source: Department of Labor, ADP, Goldman Sachs Global Investment Research

Taken together, Friday's payrolls report confirms the message from the broader economic dataset that activity growth has slowed markedly in recent months. While a substantial portion of the revision reflected weaker public-sector job gains that carry little signal about broader economic conditions, around half of the revision reflected lower private payroll growth and was unrelated to the seasonal factors. In addition, July job growth was itself underwhelming—albeit only modestly below our estimate of the breakeven pace—with a below-consensus 73k increase in payroll growth that was fairly narrowly concentrated in a small number of industries (healthcare job gains alone equaled overall job gains, at 73k). Overall, the data now support our view that the economy is clearly growing below potential.

Manuel Abecasis

Ronnie Walker

Disclosure Appendix

Reg AC

We, Jan Hatzius, Alec Phillips, David Mericle, Ronnie Walker, Manuel Abecasis, Elsie Peng and Jessica Rindels, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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