

ADP chief economist Nela Richardson

Jackson Hole remarks, 2023

Thank you to the Jackson Hole Symposium organizers for providing this topic, “Structural Constraints on Growth”, to orient thoughts on the dynamics of the current labor market. My remarks are heavily informed by ADP’s extensive data on the workforce.

ADP provides payroll services for more than 25 million U.S. workers, or about 1 in 6 workers in the United States, and 40 million workers worldwide. We operate in 140 countries. Last year, we processed 75 million U.S. tax records and moved \$2.7 trillion in client funds around the world. To sum that all up, we have a lot of data.

And because my remarks come between those of two esteemed academic economists, I’d like to appeal to the non-economists in the room with data storytelling examples to showcase the shifting dynamics present in the current labor market and how those shifts effect long-term economic growth.

My main example of the structural constraints on growth comes from the care economy, a sector of the labor market that is rarely highlighted in monetary policy discussions but is essential to worker productivity and long-term economic growth.

Before turning to the care economy, I’d like to provide a broad view of the labor market for some context. Workforce data from the last three years – the pandemic period – show that the labor market is both incredibly strong and incredibly fragmented.

At the macroeconomic level, economists generally discuss the labor market like it's one thing, but it's not. Rather, collections of microcosms collide to form the labor market. This fragmentation has been exacerbated by the pandemic.

There are five areas of fragmentation that I'd like to highlight, then connect to the worker experiences seen in the care economy.

I. Fragmentation and the Labor Market

I.A Demographic fragmentation

The first area of fragmentation is demographics. It’s generally recognized that major economies such as the United States and Europe are aging. But that’s only part of the story.

Last year, the ADP Research Institute looked into school-bus drivers. We were inspired by headlines, in Chicago especially, about shortages of school bus and their impact on education. Kids were late to school because there weren’t enough bus drivers. Classes were forced to start late, and students returned home well into the evening because there were too few drivers.

We went into the data to see what happened to all the bus drivers after schools reopened after the pandemic. Our hypothesis, based on what we knew about the demographics of bus drivers, was that this is an occupation with a high concentration of older workers. We surmised that this cohort of workers

would be reluctant to drive a bus of mobile germs (otherwise known as children) during a pandemic. So, they left the profession.

Well, we were right about the demographics of the drivers. About 51 percent of the post-pandemic school-bus driver population were 55 or older. But we were totally wrong on who was leaving the profession. It wasn't the older drivers who left, it was the younger ones. Thirty percent of drivers aged 25 to 35 left the profession in the two years after the pandemic. Why?

The rise of the digital economy – driven by heavy consumer demand for buying goods online and having those goods delivered – changed the incentive structure for workers who held a commercial driving license. With so many people ordering groceries for delivery, for example, young drivers were incentivized to switch from education to transportation and warehousing jobs.

Wages for school-bus drivers stayed relatively low, while wages for delivery drivers soared. This wage shift led the demographic impact to play out differently than expected.

I.B Competitiveness fragmentation

The second source of labor market fragmentation is competition for workers. A great example of is found in the leisure and hospitality industry, where many jobs have few skill requirements. It's also an industry where, before the pandemic, wages didn't keep up with inflation. Workers who switched jobs actually made less money, not more.

Before the pandemic, real wages for workers on average in this industry barely treaded water – pay grew neck-and-neck with inflation. That has changed radically post-pandemic. In fact, leisure and hospitality was the lead driver of super-charged wage growth over the entire post-recovery period.

Using anonymized worker-level data from ADP payroll systems shows median pay growth for the leisure and hospitality sector peaked at nearly 17 percent year-over year growth in March 2022. Pay growth has slowed a great deal since then. As of July 2023, median pay for the sector grew by 7.2 percent from the previous year.

Even with this slowdown, pay growth is much higher than it was before the pandemic and arguably inconsistent with a 2 percent inflation target.

So, the question is, have low-skilled workers become more competitive in the labor market? Is that a change? Is that a fragmentation that we're seeing? In my view, wages are what bridge the labor market and inflation. You want to make sure that that bridge is pointing to lower inflation, not higher inflation.

Whether there's been a structural shift in the wage dynamics for low-skill workers over the long term remains an open question. The job market might return to a modest trajectory of low-skill wage growth characteristic of the pre-pandemic time period. Alternatively, the labor market might have seen a permanent shift in the competitiveness of low-skill workers due to persistent labor shortages, one that results in a higher trajectory of pay growth.

It's also important to do a sanity check here. The rapid wage growth over the last year amounted to just a \$5,000 average increase for leisure and hospitality jobs, from peak wage growth to now. Five thousand

dollars. That's not much in a household budget strained by inflation, and that's why it's important to look at levels, not just growth rates.

I.C Churn fragmentation

The third area of fragmentation is churn. Workforce churn has three dimensions that are relevant to structural constraints on the labor market:

1. Ease of entry
2. Turnover
3. Rejoin rates

The first churn indicator is the ease by which workers can move between and within jobs. Industries with high skill, education, or licensing requirements limit worker mobility both at the geographic and sector levels.

One way to quantify an industry's barriers to entry is to measure the percentage of new hires in a given month. We define new hires as workers who joined their employer in the previous three months. This percentage varies dramatically by industry.

For example, the information industry is a relatively high-skill sector comprising workers in software, publishing, and communication. Less than 2 percent of workers in this industry were hired in the last three months, according to the ADP Research Institute.

In contrast, the professional business services sector includes a wide range of skill levels. Workers span the spectrum, from highly skilled professionals such as accountants and lawyers to office managers and support staff. In contrast to the information industry, 22 percent of workers in the professional business services sector in the last three months were new hires.

This pattern of skill barriers and new-hire percentages is seen across industries, including leisure and hospitality, where 16 percent of workers are new hires, manufacturing (10 percent), and construction (less than 4 percent).

The second indicator of workforce churn is turnover, which skyrocketed in the aftermath of the pandemic. Turnover has normalized since those early days, but there are industries where seasonal turnover trends are deeper now than they were before the pandemic.

Given its seasonal nature and low barriers to entry, leisure and hospitality is a sector with high turnover. Surprisingly, another seasonally driven sector is education. A large proportion of teachers leave their employers at the end of the school year. We don't think of this as a high-turnover industry, but in fact there's a seasonal component to the turnover.

The third component of workforce churn is what we call the rejoin rate. When we look at quits and the overall data, we think of people who leave with a permanent goodbye to their employer. Oftentimes, however, the relationship between employer and employee is more like a revolving door. People come back. We saw a big pickup in rejoin rates during the pandemic.

The biggest jump in the number of workers rejoining former employers came in June 2020, when companies hired 4.8 million workers. The rejoin rate exploded. Many people went back to their former employers, rehired after being furloughed. We also see a high rejoining rate in the teaching profession.

People leave, there's a separation, they come back. But to foreshadow insights from our care economy analysis, this trend is changing.

I.D Geographic fragmentation

The fourth place of fragmentation in the market is geography. From the worker's perspective, geography is defined not just by a job's location, but also its cost of living.

The pandemic transformed geographic fragmentation after a shortage of affordable housing in major job centers collided with the adoption of technology to aid remote collaboration. As a result of these two trends, jobs are becoming more geographically concentrated based on pay level.

Analysis by my team at the ADP Research Institute found that high-value, C-suite executives are becoming concentrated in San Francisco, New York, and Washington, D.C., while less valued, lower-skilled occupations such as customer service support jobs, are being relocated to more affordable cities.

This geographic job diffusion is relevant not only to the labor market; it has important social and political implications as well.

I.E Worker sentiment

Worker sentiment plays a significant role in employee behavior. The sentiment behind the Great Resignation is a canonical example of how people's thoughts and feelings effect their work choices.

Since the peak of the Great Resignation, there have been attempts to put new taglines on worker sentiment. The Great Resignation was followed by the Big Stay, where workers opted to stay put as job openings started to decline and layoffs at big companies started making headlines.

Another sentiment-inspired tagline was Quiet Quitting, doing the minimum required for a job, and there was even Bare-Minimum Mondays, in which workers were encouraged to take Monday as a self-care day and ease into the week.

But behind taglines is the fact that worker sentiment can and should be measured as an important signal of labor market participation.

At the ADP Research Institute, we've spent more than a decade measuring worker sentiment globally. We think worker sentiment is a state, not a trait, one that changes over time.

We recently developed a tool to measure worker sentiment based on 490,000 survey responses in 49 countries. We call it the Employee Motivation and Commitment Index. This index measures how employees feel about their place at work and whether they're thriving and growing. Because the index changes over time depending on individual and collective circumstances, it can provide context on the state of specific industries, the labor force, and the economy.

An index value of more than 100 is consistent with growing commitment and motivation. A value of less than 100 signals diminishing levels of these states. In August 2023, the EMC Index fell from 108 to 100, its lowest point since June 2022. The index peaked in December 2022 at 121 after a year of robust pay growth, strong hiring, and the rise of remote work.

II. The example of the care economy

I chose the care economy because it's personal. I've interacted professionally with the labor market as a mother. Without the care economy, frankly, I wouldn't be here. To be even more direct, even the collective brain power in this room at Jackson Hole has to be nurtured, maintained, and educated.

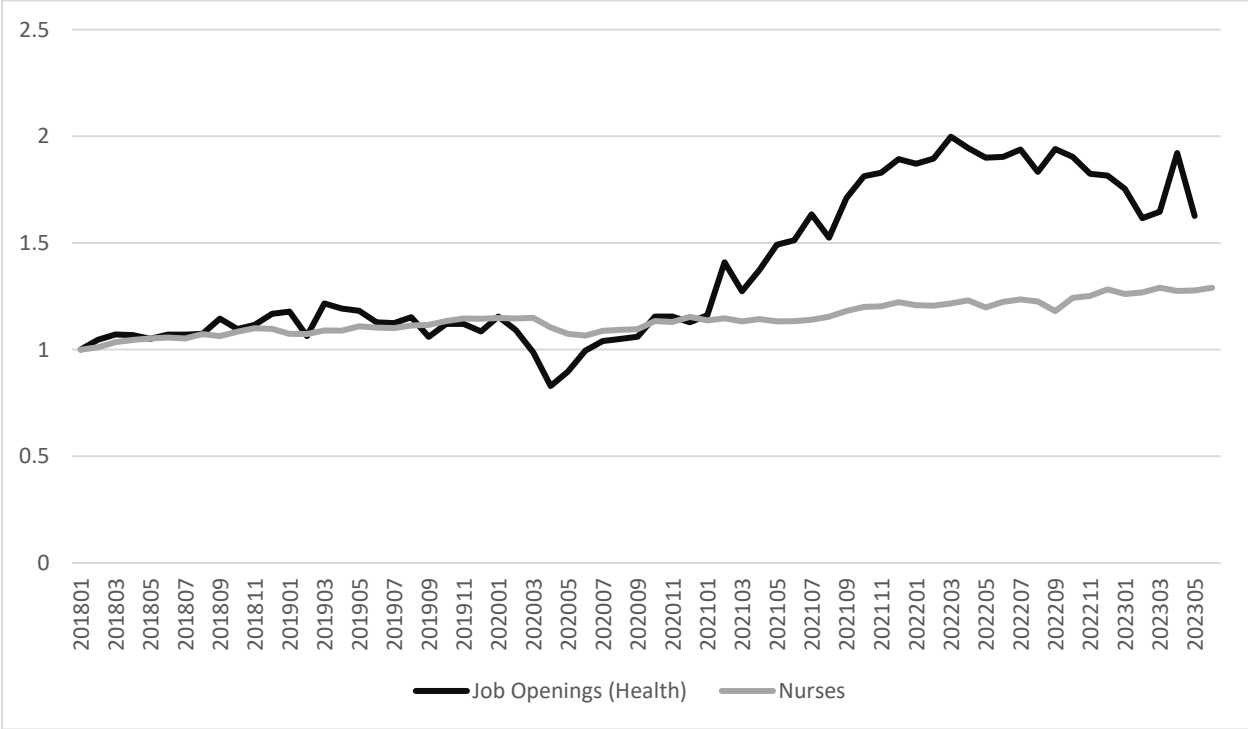
Without the care economy, great ideas, innovative technologies, and new markets can't be developed. The care economy is important to the workforce productivity growth that drives a thriving economy.

I focused on nurses and teachers because they're easily recognizable as hallmark occupations of the care economy, occupations in which the majority of professionals are women and people of color.

II.A Supply gaps in the care economy

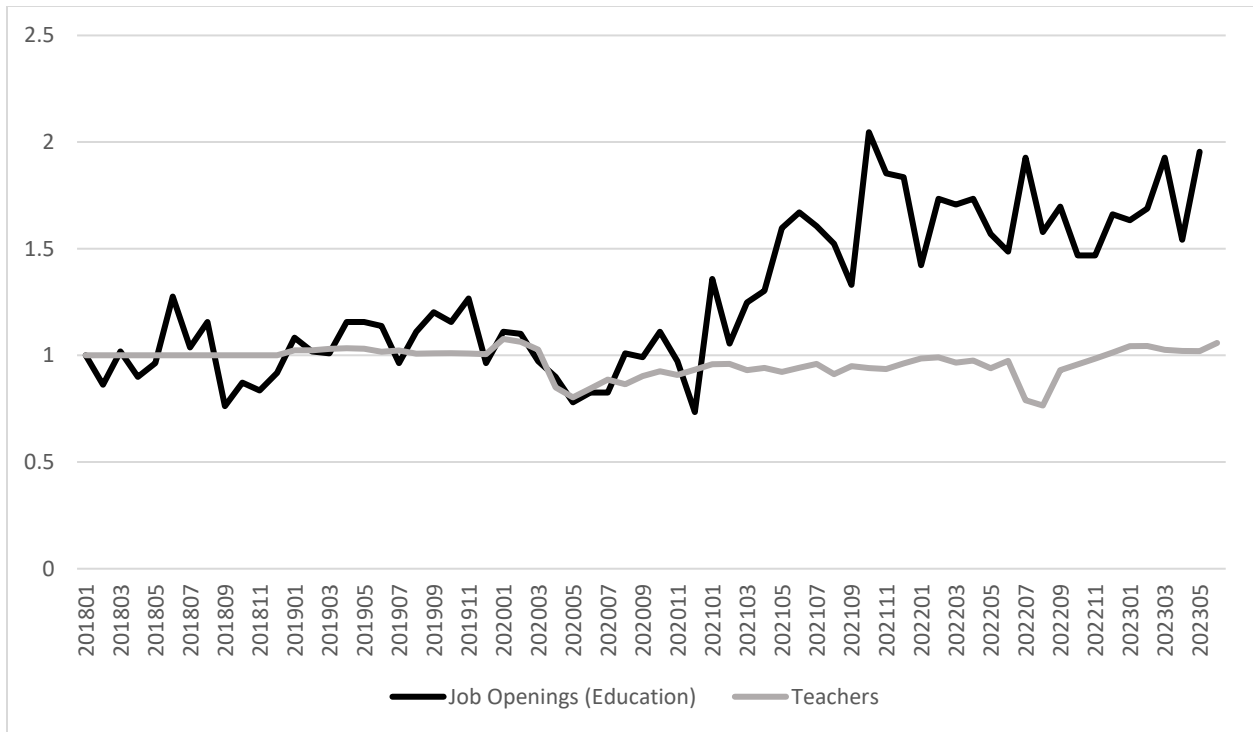
Figures 1 and 2 show that the post-pandemic demand for nurses and teachers is far outstripping supply.

Figure 1: Job Openings (Health) vs. the Nursing Employment Index



Source: Bureau of Labor Statistics, the ADP Research Institute

Figure 2: Job Openings (Education) vs. Teacher Employment Index



Source: Bureau of Labor Statistics, ADP Research Institute

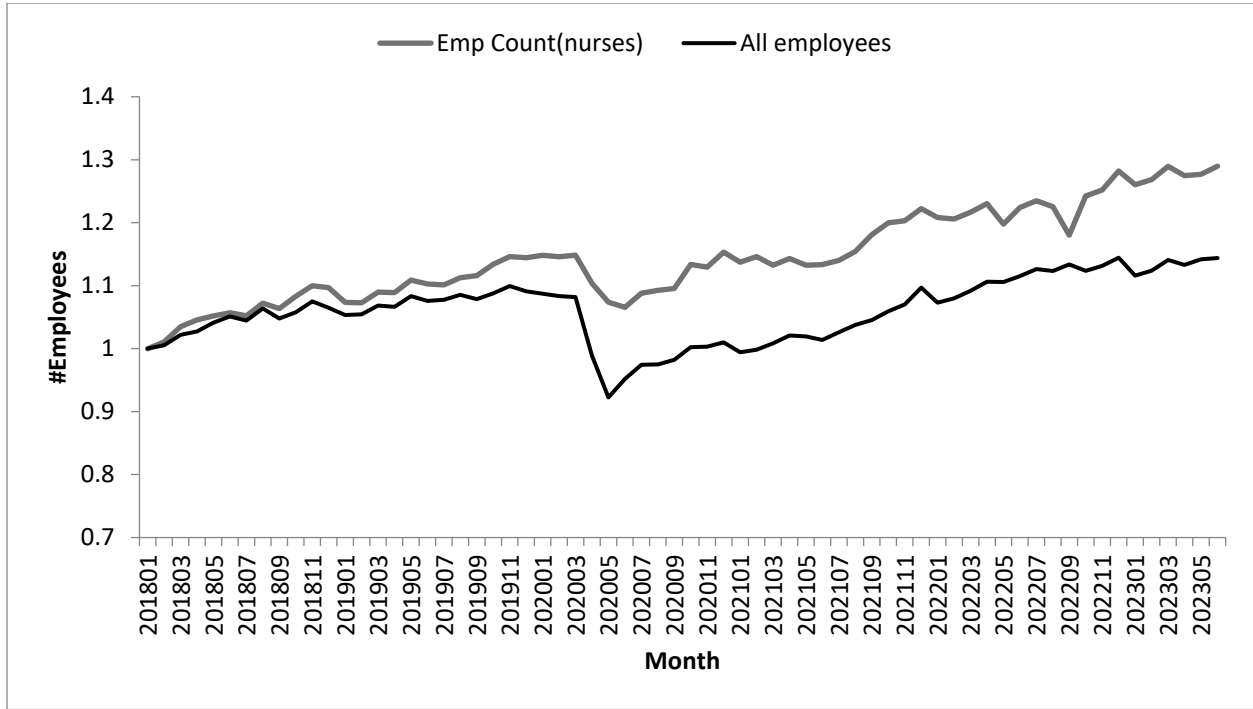
According to the Bureau of Labor Statistics, job openings in health are up 62 percent. But ADP data for a sample of employers present in our database from 2018 through 2023 shows nursing employment up just 30 percent.

The demand-supply gap in teaching is much more dire. Job openings in education are up 95 percent since 2018, but employment in teaching has gone up only 5 percent.

II.B New hires

Figure 3 shows that nursing is growing faster than the overall employee market.

Figure 3: Nursing Employment Index, YOY change

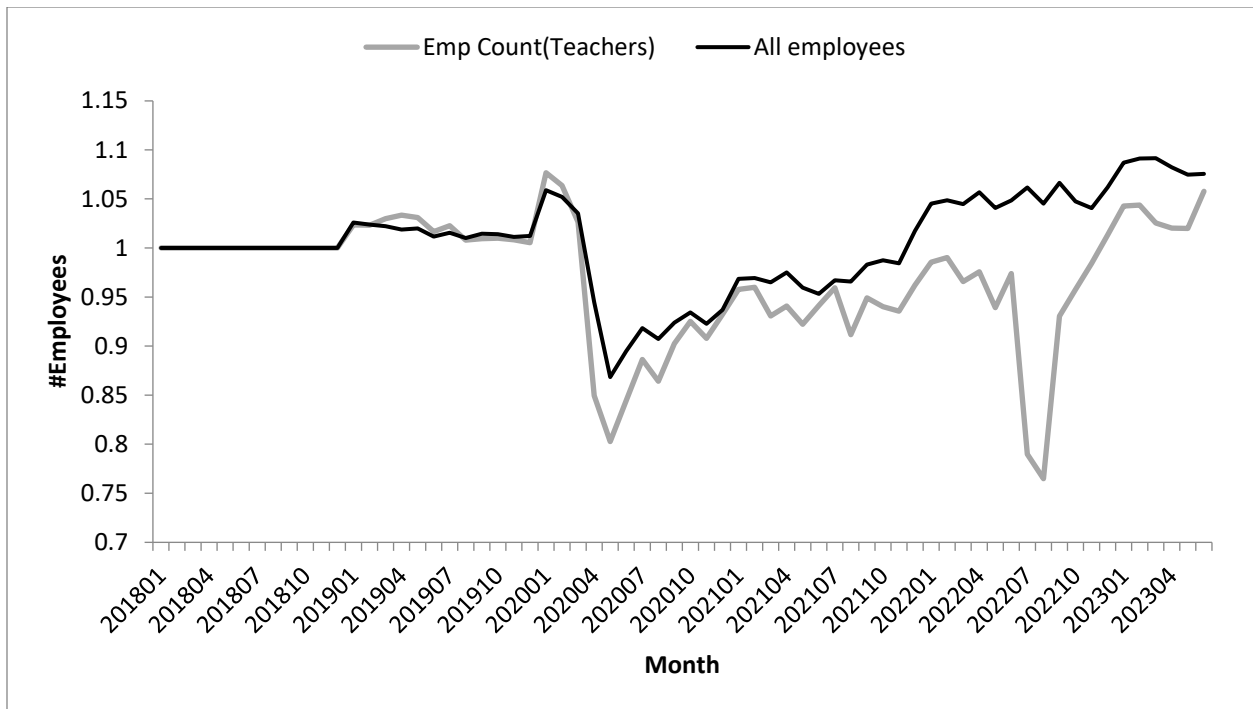


Source: The ADP Research Institute

There was a pandemic dip in March and April 2020, but it was much shallower than the dip in the overall market. The post-pandemic growth rate has been stronger.

Figure 4 shows that teaching employment is lagging the overall market.

Figure 4: Teaching Employment Index, YOY change



Source: The ADP Research Institute

The pandemic dip for teaching employment was deep and teacher employment continues to track lower relative to the broader labor market.

We also saw something interesting that we've never seen before, and I had to spend the remaining of my time on this slide. I think it's worth illustrating.

There was also a big dip in employment for teachers last year. Now, that's not entirely surprising. There's generally a seasonal dip in employment from June to July, at the end of the school year. But this regular dip in employment typically coincides with a drop in tenure and age, which suggests older workers leaving the profession consistent with retirements.

In June 2022, however, not only was there a much bigger decline in employment, but the average age and tenure of teachers increased. This is consistent with younger professionals leaving the labor market just like we saw in the school bus driver analysis.

II. C Pay trends

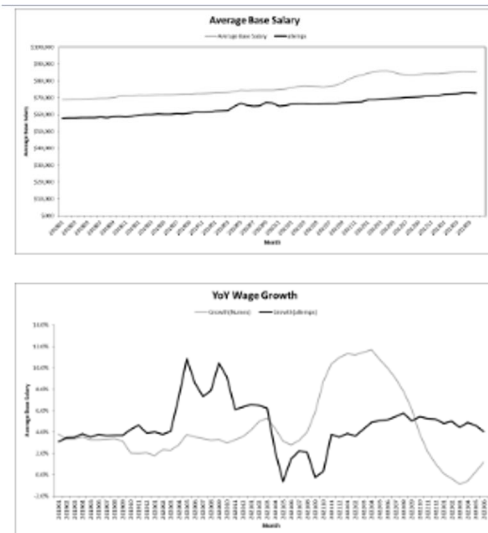
Shifts in pay trends after the pandemic can explain changes in employment.

For example, nurses are paid well in comparison to all workers, as shown in Figure 5. Additionally, the gender gap is narrow, unlike with most occupations where women make 80 percent of base salary compared to men.

However, recent pay growth for nurses has lagged.

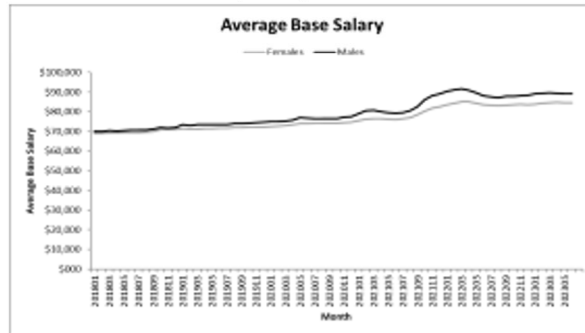
Figure 5: Wage dynamics for nurses

While average salaries for nurses are higher than for most other professions, recent growth rates have not kept pace



Pay trends (as of June 2023)

- Average salary for female nurses: \$84k
- Average salary for male nurses: \$89k
- Ratio of female to male salary: 96%
- The trend in salaries shows a slight widening of the gap as male salaries are outpacing female salaries.

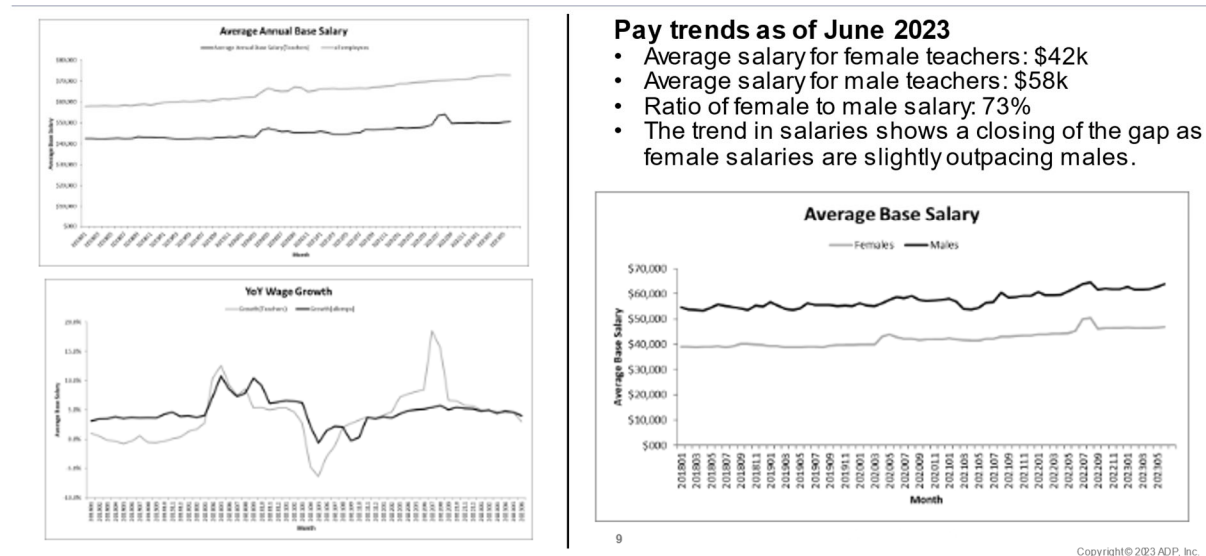


Source: The ADP Research Institute

For teachers, the story is different, as we see in Figure 6. The ratio of female salaries to male salaries is 73 percent, highlighting the gender pay gap in this sector.

Figure 6: Wage dynamics for teachers

Average teacher salaries are lower than for employees overall, wage growth is also lower



Source: The ADP Research Institute

Average teacher's salaries are lower than for all employees overall. Wage growth is also lower, except for that June 2022 employment dip that I pointed out earlier.

The data also shows a huge response by schools. Wage growth accelerated quickly after the drop in employment, suggesting that employers had a strong desire to get these workers back.

Schools were largely successful in recovering from the employment dip at the end of the 2023 school year. This year's June-July drop was not as extreme as last year's, as a result of the big push in wage growth.

The results on demographics were more mixed. The average age of teachers fell, but average tenure rose. This could signal a possible boom-bust wage cycle in education in which younger people leave, then schools raise wages to lure them back, only to let pay growth slide again the following year.

II. D What's next for the care economy

The upshot of this analysis is that the care economy is undergoing crosscurrents of structural change that could limit the ability of working families to participate fully in the labor market.

As care demands grow, a shortage of reliable child and elder care, health care, and other social support could restrict progress in overall employment, worker productivity, and economic growth.

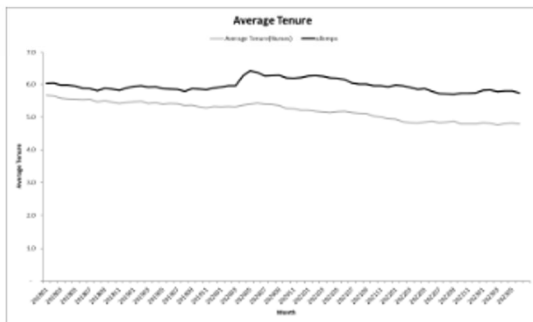
Figure 7 highlights these concerns. Data suggests that experienced nurses are leaving the profession. Over the last five years, average tenure has fallen from 5.7 years to 4.8 years.

Tenure hasn't fully recovered either, as younger teachers were more likely to be furloughed or laid off.

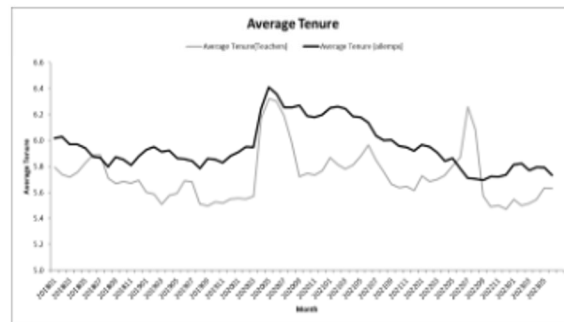
Figure 7: Average Tenure Trends

The pandemic altered tenure trends for both nurses and teachers

Sharp decline in tenure indicates nurses are leaving the profession



Tenure increased when the pandemic hit, likely due to less tenured teachers being disproportionately furloughed

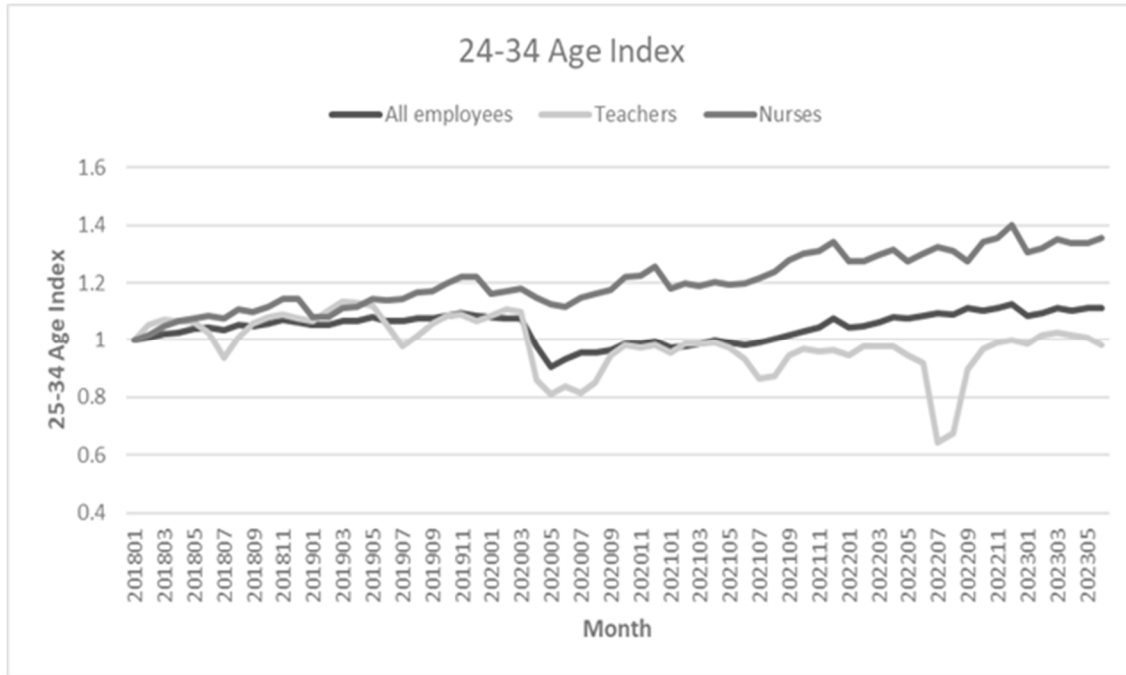


Source: The ADP Research Institute

Moreover, demographics are driving changes in employment. As seen in Figure 8, while the number of entry-level nurses continues to climb, fewer young people are going into teaching.

The bad news in both occupations is that the growth rate of entry-level workers is not keeping up with demand.

Figure 8: Entry-level workers in the care economy



Source: The ADP Research Institute

III. Conclusion

The care economy has always been a critical, yet rarely discussed, feature of a productive workforce. The labor market fragmentation we see more broadly has an even more pronounced impact on the care economy and its ability to support a thriving and productive workforce. Fractures in this industry could ultimately pose a constraint on economic growth over the longer term.