



Economics

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Hard data hardly supports labor hoarding story

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Introduction

A prevailing narrative has been that labor hoarding has been a primary driver of labor market dynamics since the pandemic and that recent layoff announcements could suggest this era of low firing – due to hoarding – is coming to an end.

But is the starting point of this narrative correct? Has labor hoarding been a primary motivation for the low-hiring/firing dynamic in the labor market?

We argue below that labor hoarding has not been the dominant story at the aggregate level, though it has been important for some sectors.

What is labor hoarding?

To answer whether labor hoarding has been an important factor in the labor market we first define the term. In our view, labor hoarding is a reluctance to fire workers / a desire to maintain existing worker-employer relationships even though firm activity/demand for goods and services does not require staff to be retained.

This narrative is compelling. Anecdotes abound that firms have been reluctant to lay off workers. A primary reason why this reluctance could be more intense today is that employers found it difficult and costly to re-hire workers after mass layoffs during the pandemic.

By this definition, signs of labor hoarding would include:

- Elevated employment levels relative to measures of business activity or demand
- Depressed labor utilization (e.g., productivity or average hours worked)

In short, we interpret labor hoarding as equivalent to having more workers than normal on payrolls that are producing less output than normal.

What do the data say?

The aggregate data have been generally inconsistent with this idea. Real final sales to private domestic purchasers – the main indicator of underlying activity in the US – is above trend (measured as the time trend from 2017 to 2019). At the same time, payrolls have remained short of the pre-covid trend by a large amount – current headline and private payrolls are 4.5-5.0 million short of the pre-covid trend. These data do not include the coming downgrade from the benchmark revisions which would widen this gap.



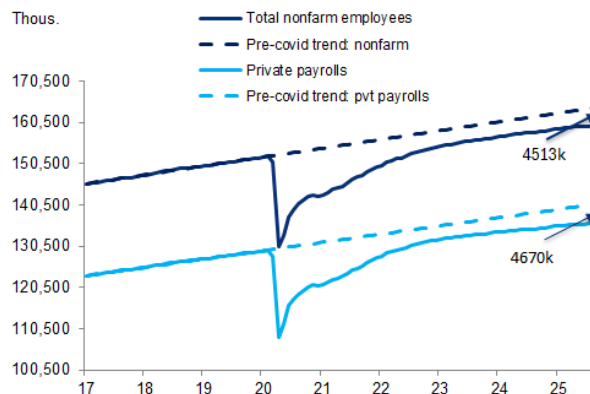
Consistent with the above, productivity has been well above trend, with real output per hour currently 1.7% above the trend captured by the three years before the pandemic. Finally, the average workweek is only modestly below the pre-covid trend, and only one-tenth below the reading in December 2019.

Figure 1: Real final sales to private domestic purchasers has stayed above pre-covid trend



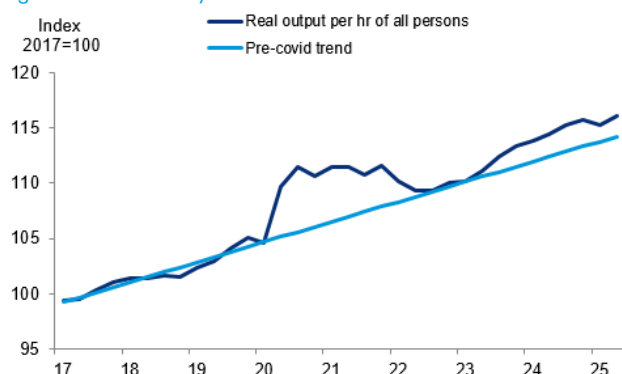
Source: BEA, Haver Analytics, Deutsche Bank Research

Figure 2: Payrolls are well below trend



Source: BLS, Haver Analytics, Deutsche Bank Research

Figure 3: Productivity is above trend



Source: BLS, Haver Analytics, Deutsche Bank Research

Figure 4: Average workweek is a bit below pre-Covid



Source: BLS, Haver Analytics, Deutsche Bank Research

The extent of the over-/under-shoots for these variables is somewhat sensitive to how the trend line is drawn, but the main conclusion is robust – measures of economic activity and productivity are above trend while payrolls are well below trend. This is the opposite of what we would expect to see if labor hoarding was the dominant factor in the economy.

If not labor hoarding, then what?

We consider cross sector data to investigate where labor hoarding has been prevalent and where other drivers may dominate. For each sector, we compute a pre-Covid trend (measured similar to the preceding section as the time trend from 2017 through 2019) and compare this to both real value add per sector and a measure of productivity – real value add per employee versus trend.

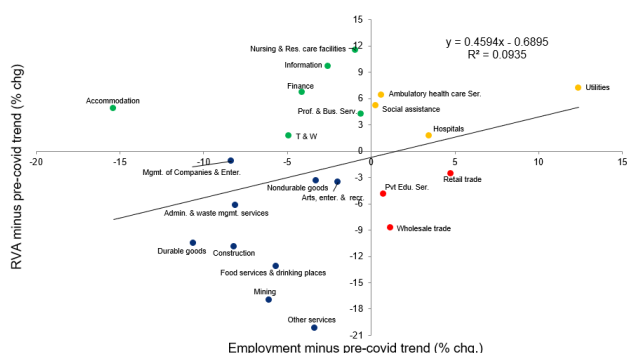
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As expected, the relationship between real value add and employment relative to trend is positive across sectors. That is, on average sectors with real value add above (below) trend tend to have employment levels that are above (below) trend. However, the relationship is very loose, with an r-squared of only 9%. There is, therefore, substantial variation in this relationship across sectors.

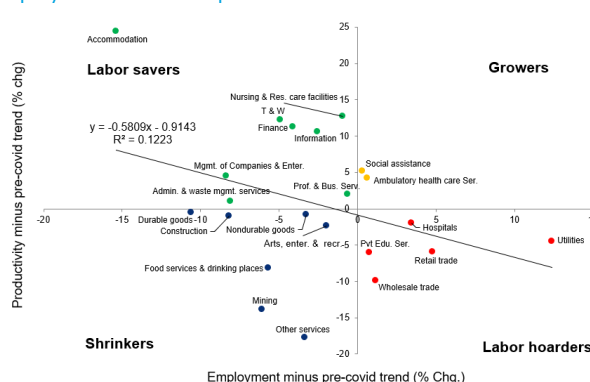
Conversely, there is an inverse relationship between productivity (real value add per employee) and employment relative to trend across sectors. That is, sectors with higher (lower) productivity relative to trend tend to have employment levels further below (above) trend. In other words, for some sectors productivity gains are substituting for employment losses to keep output at higher levels, while for other sectors productivity has remained subdued as employment levels have stayed elevated. These relationships broadly hold if we use aggregate hours worked rather than total employment.

Figure 5: Real value add versus employment relative to pre-Covid trends



Source: BEA, BLS, Haver Analytics, Deutsche Bank

Figure 6: Productivity (real value add per employee) versus employment relative to pre-Covid trends



Source: BEA, BLS, Haver Analytics, Deutsche Bank

On this breakdown there do appear to be some sectors where labor hoarding has been relevant – these sectors are in the lower right quadrant of the scatter plots, where employment is above pre-covid employment trends, but value add and/or productivity growth are below trend. These sectors include wholesale and retail trade and to a lesser extent private education services (also potentially hospitals and utilities). Notably, wholesale and retail trade both benefited from the post-Covid shift towards goods spending that has been unwinding.



Figure 7: Wholesale trade looks like a labor hoarder with employment falling back to trend



Source: BLS, Haver Analytics, Deutsche Bank Research

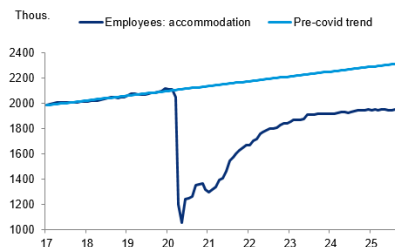
Figure 8: Hospital employment disconnecting from pre-Covid trend on a secular trend



Source: BLS, Haver Analytics, Deutsche Bank Research

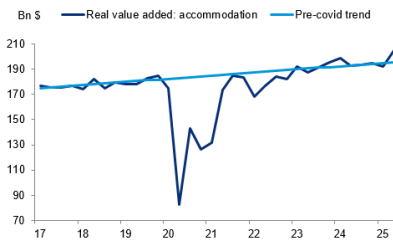
For a separate set of sectors, productivity enhancements have been the key story. These are sectors where employment is at or below the pre-covid trend and value add is above – this shows up as relatively elevated productivity on the right chart. These sectors include accommodation, transportation and warehousing, information, finance, and management of companies and enterprises (within professional business).

Figure 9: Accommodation employment remains well below pre-Covid trend



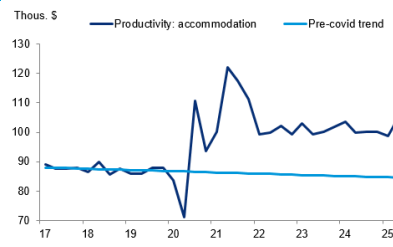
Source: BLS, Haver Analytics, Deutsche Bank Research

Figure 10: But real value add is on the trend line for accommodation



Source: BEA Haver Analytics, Deutsche Bank Research

Figure 11: As productivity has shifted upward



Source: BEA, BLS, Haver Analytics, Deutsche Bank Research

But this classification is not perfect. For example, this approach could classify the hospital sector as a potential labor hoarder because it has well above-trend employment and below-trend productivity. However, more likely the pre-covid trend is no longer accurate as an aging population would imply a larger share of employment and output comes from this sector.

A full detailed breakdown of these data by sector is included in a table in the appendix.

Where does the tech sector fit in?

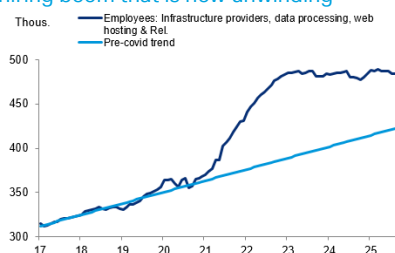
Recent layoff announcements have put the tech center increasingly in focus for how these changes might relate to labor hoarding incentives as well as the implementation of AI.



Tech sector jobs are likely to show up primarily within the information category. Within that sector, the subcategory for computing infrastructure providers, data processing, web hosting, and related services is likely to reflect key trends in tech most closely.

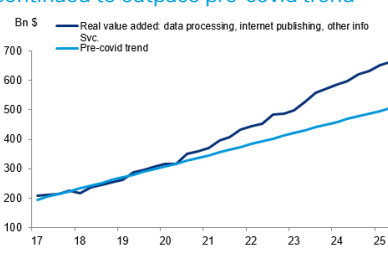
The below charts show how, for this sector, an initial hiring boom has been followed by net unchanged payrolls (which are converging slowly back to trend). However, real value add continues to extend its gains above trend, helped by recent strength in productivity. As such, secular strength in output of the tech sector is transitioning from one driven by employment gains to one led by productivity strength.

Figure 12: The tech sector underwent a hiring boom that is now unwinding



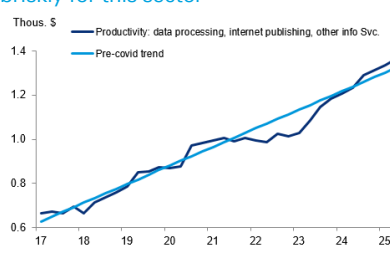
Source: BLS, Haver Analytics, Deutsche Bank Research

Figure 13: Even as real value add has continued to outpace pre-covid trend



Source: BEA, Haver Analytics, Deutsche Bank Research

Figure 14: As productivity has started to rise briskly for this sector



Source: BEA, BLS, Haver Analytics, Deutsche Bank Research

Conclusion

Key macro trends are inconsistent with labor hoarding being the dominate story for the US labor market in recent quarters. Relative to pre-covid trends, real final sales to private domestic purchasers and productivity are above while payrolls are below – the opposite of what would be expected from labor hoarding.

We show a significant distribution of experiences across sectors. Some sectors, such as wholesale and retail trade, do appear to be working through excess labor and subject to concerns around labor hoarding. Other sectors, such as accommodation, transportation and warehousing and finance, appear to be using productivity gains to make up for labor shortfalls relative to pre-covid trends. The tech sector, which has garnered significant attention of late, appears to be shifting phases from employment- to productivity-led growth.

From a forward-looking perspective, our analysis suggests assessing the labor market is not as simple as focusing on a shift from labor hoarding to layoffs. The fundamentals underlying these considerations vary substantially on a sector-by-sector basis.



Appendix A

Figure 15: A sector-by-sector look at employment, value add and productivity versus trend

Sector	Employment vs. pre-covid trend (%)	Employment vs. pre-covid trend (1,000)	Real value add vs. pre-covid trend (%)	Productivity vs. pre-covid trend (%)
Utilities	12	66	7	-4
Retail trade	5	710	-3	-6
Hospitals	3	191	2	-2
Wholesale trade	1	71	-9	-10
Private education services	1	29	-5	-6
Health care and social assistance – ambulatory health care services	1	56	6	4
Social assistance	0	15	5	5
Professional and business services – professional, scientific, and technical services	-1	-67	4	2
Nursing and residential care facilities	-1	-33	12	13
Arts, entertainment and recreation	-2	-55	-4	-2
Information	-3	-78	10	11
Manufacturing – nondurable goods	-3	-165	-3	-1
Other services	-3	-209	-20	-18
Finance	-4	-397	7	11
Transport & Warehousing (T & W)	-5	-348	2	12
Food services and drinking places	-6	-744	-13	-8
Mining	-6	-12	-17	-14
P & B services – administrative and waste management services	-8	-801	-6	1
Construction	-8	-741	-11	-1
P & B services – management of companies and enterprises	-8	-240	-1	4
Manufacturing – durable goods	-11	-938	-10	-1
Accommodation	-15	-354	5	24

Source: BEA, BLA, Haver Analytics, Deutsche Bank

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Appendix 1

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