



All Layoffs Are Not Created Equal

U.S. firms use temporary versus permanent layoffs more often than it might appear — a finding that may suggest a different focus for labor market policy.

BY SHIGERU FUJITA

Finding any new job takes time and resources. Finding the right job is especially difficult. For workers and employers alike, it is costly to determine whether they will strike a good match regarding pay, location, schedule, skills, work environment, and so on. These costs hamper not only individual workers and businesses but also the wider economy. The greater the amount of *search friction*, the greater the extent of *mismatch* across the job market and the less efficiently labor is used throughout the economy, raising unemployment and lowering labor productivity.

An exception to this problem occurs when a worker is rehired by the same firm for which he or she worked before. For example, when a manufacturing plant is closed for retooling, as automakers typically do for a couple weeks in July, workers are let go temporarily and are rehired when the retooling is completed. In such cases, workers and firms know in advance what to expect from each other, and thus the usual problem of mismatch, which represents the difficulty of forming a *new* employment relationship, becomes moot.

The prevailing view is that temporary layoffs are largely a thing of the past and that their use is limited to a small number of industries such as durable goods manufacturing and construction. Research has indeed suggested that their use has diminished along with manufacturing jobs since the mid-1980s.¹

In this article, however, I will show that temporary layoffs and recalls actually remain surprisingly common, even outside manufacturing and construction. Their prevalence matters because, as we will see, failing to account for them masks the true extent of mismatch in the labor market. In particular, their continued pervasive use raises questions

about how much of the lingering unemployment after the Great Recession has actually been due not to that severe *cyclical* downturn but to a deeper *structural* increase in labor market mismatch. This distinction is important, because structural and cyclical unemployment call for quite different policy actions.

PERMANENT VERSUS TEMPORARY LAYOFFS

When layoffs spike during and after a recession, the natural focus is on the total number of jobs lost.² However, for both individuals and the economy at large, the ramifications are quite different depending on whether layoffs are temporary or permanent.

As the term implies, a permanent layoff is one in which the worker has no prospect of returning to that job. A permanent layoff is generally much more costly to the worker. It takes much more time to find a new job compared with the length of a typical temporary layoff. Landing a new job may also require a change in occupation. Given that workers' human capital is often tied to their occupational tenure, switching to a different occupation tends to be accompanied by a large drop in wages.³ In my *Business Review* article with Vilas Rao, we studied the experience of workers who lost their jobs during the 2001 recession and found that those who switched to a different occupation suffered much larger declines in their wages than those who managed to stay in the same occupation.

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Workers on temporary layoffs are defined — in the Census Bureau’s Current Population Survey (CPS) of households, from which the Bureau of Labor Statistics derives the official unemployment rate — as those who expect to be re-hired by the same employer within six months or have been given an expected recall date. Note that normally, there are two qualifiers that define unemployment: joblessness and an active job search. However, workers on temporary layoffs are exceptions to this definition. Although these workers may not be actively searching for jobs, given that they expect to return to their previous employer, they are still counted as officially unemployed.

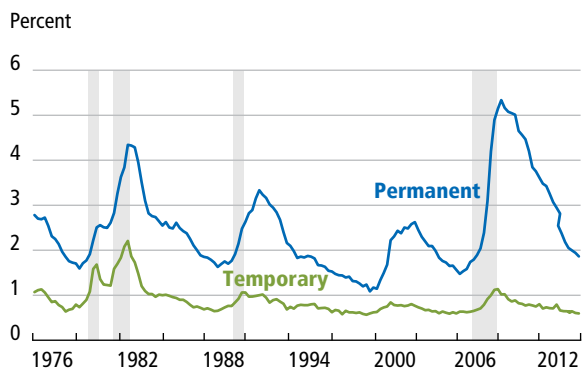
In my study with Giuseppe Moscarini, we find that those who are recalled earn about the same income as before, whereas those hired elsewhere typically accept a significantly lower wage than they had earned before they were laid off. This finding is consistent with the point made above that occupation switchers experience significant wage losses. The idea is that wages drop when jobless workers cannot find jobs where their skills and experience are as valued as they had been at their previous jobs and so they reluctantly accept jobs where their skills and experience are not valued as much. Moreover, a drop in pay is especially likely when a worker is hired at a new job after a long spell of unemployment.

Workers on temporary layoffs constitute a significantly smaller share of the labor force than those on permanent layoffs (Figure 1). Likewise, among the unemployed, temporarily laid-off workers make up a small slice: In 2015,

37 percent of the unemployed had been let go permanently — what the Labor Department calls permanent job losers — whereas 11 percent had been temporarily laid off. (The remaining 52 percent were counted as unemployed because they were looking for work either after quitting their jobs or after being out of the labor force altogether.)⁴ Thus, within the group of job losers — the sum of permanent job losers and those on temporary layoffs — roughly 20 percent had been temporarily laid off. While one-fifth is a nontrivial share of total layoffs, it is relatively small. Moreover, this share had been higher, at around 30 percent, in the 1970s and 1980s. This declining share of temporary layoffs gives an impression that the role of temporary layoffs in the labor market has decreased over time.

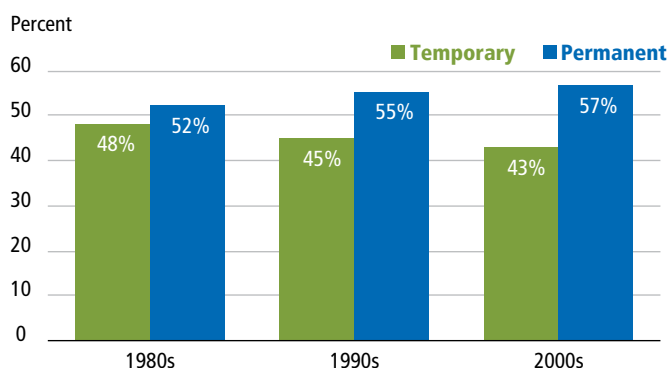
However, note that this small share of temporary layoffs is calculated among the pool, or *stock*, of unemployed workers at a given point in time. It underestimates how frequently firms use temporary layoffs to adjust the size of their workforces. When we compute the share of temporary layoffs among the *flow* of workers moving from employment to unemployment over the course of a month, we discover that the share is much larger. The share in the flow, instead of the stock, is a more appropriate measure to gauge how frequently firms actually use temporary layoffs relative to permanent layoffs. In the 1980s, almost half of total layoffs were actually temporary layoffs (Figure 2). Moreover, while the use of temporary layoffs indeed declined over time, they still made up more than 40 percent of total layoffs in the 2000s and thus are by no means unimportant.

FIGURE 1
Temporary Layoffs Seemingly Diminished
Stock of those on layoff as shares of labor force.



Source: Bureau of Labor Statistics via Haver Analytics.

FIGURE 2
Temporary Layoffs Still Frequently Used
Composition of layoff flows.

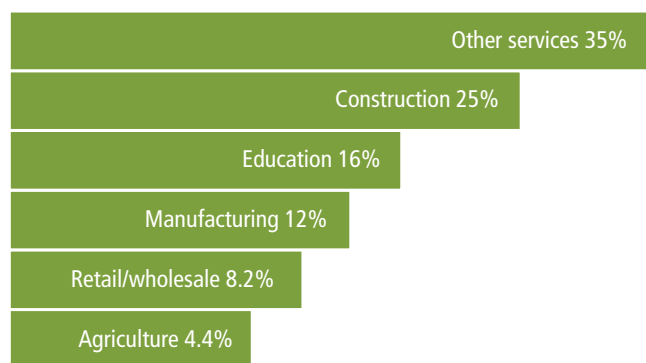


Sources: Bureau of Labor Statistics Current Population Survey microdata and author’s calculations.

Note: Permanent job losers include those who completed temporary jobs.

The use of temporary layoffs is not only frequent but also fairly widespread among types of workplaces. When we look at the flow by industry, we see that the use of temporary layoffs is hardly limited to manufacturing and construction (Figure 3). In fact, those two sectors together make up only 37 percent of the overall flow of temporary layoffs. Sixty percent of temporary layoffs stem from various service industries.⁵

FIGURE 3
Use of Temporary Layoffs Is Widespread
 Temporary layoffs as shares of total layoff flows.

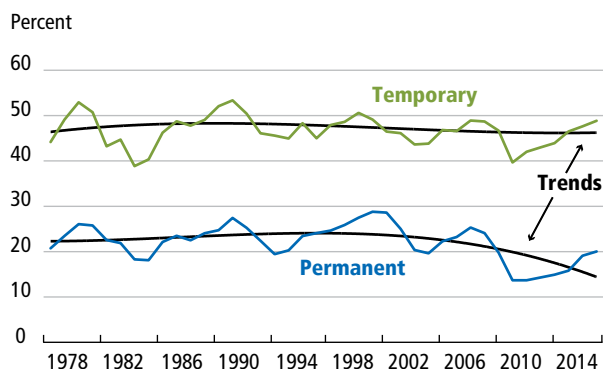


Sources: Bureau of Labor Statistics Current Population Survey microdata and author's calculations.

This widespread use raises a question: Why is the share of temporarily laid-off workers in the stock of unemployed workers smaller than their share of the separation flow would suggest? The reason is that those on temporary layoffs are rehired quickly and thus remain in the unemployment pool only a short time, while those who are laid off with no prospect of being recalled tend to spend much more time looking for new jobs. (See *A Tale of Two Types of Layoffs* on page 4.) So, if one looks at the composition of the stock of unemployed workers at any moment in time, the share of temporary layoffs will be smaller than what one would expect from the relatively high incidence of furloughs.

This point is verified by the big difference in the job-finding rates for the two groups of workers (Figure 4). The job-finding rate for permanent job losers is computed by dividing the flow of permanent job losers who find a job in each month by the stock of permanent job losers in the previous month. The job-finding rate for those on temporary layoffs is calculated similarly. The latter is clearly much higher than the former. The job-finding rate for those on temporary layoffs is roughly 50 percent per month. That means that, on average, half of those who lose their jobs this

FIGURE 4
Longer Search Getting Even Longer
 Job-finding rates following temporary vs. permanent layoffs.



Sources: Bureau of Labor Statistics Current Population Survey and author's calculations. Notes: Expressed as annual averages of monthly rates. Black lines represent third-order polynomial time trends. Permanent job losers include those who completed temporary jobs.

month will be reemployed next month. In contrast, permanently laid-off workers find jobs at a much slower pace. This difference in the rate of finding employment is the reason behind the small share of temporary layoffs in the stock of unemployment. Given this large difference in the job-finding rates between the two groups of unemployed workers, the stock measures do not capture the actual incidence of temporary layoffs.

EVEN MANY 'PERMANENT' LAYOFFS END IN RECALLS

Note that job-finding rates can tell us only how fast workers are transitioning from unemployment to employment. They do not address two presumptions — one, that the job-finding rate for those on temporary layoffs measures the rate at which those workers return to the *same* employer, and two, that the job-finding rate for permanent job losers captures the rate at which they find *new* jobs. However, these presumptions are not necessarily correct. The CPS does not tell us whether the worker is returning to the same job or finding a new job.⁶ So in order to know just how prevalent recalls are, we need to ask: Are those on temporary layoffs indeed rehired by the same firm? And how often do those who are *not* on temporary layoffs end up being rehired by the same firm?

Moscarini and I looked at this issue using an alternative to the CPS data and found that more than 85 percent of those on temporary layoffs are indeed rehired. Of course, it is not surprising that not all workers on temporary layoffs

A Tale of Two Types of Layoffs

Imagine a mammoth skyscraper that houses every employer and every worker. In one big room hangs a sign marked Unemployment. For simplicity, imagine that the only way into the room is through a door marked Layoffs and the only way out is through a door marked Hiring.

As people enter the room, a monitor counts them on a clipboard marked Layoff Flows. He also hands them T-shirts — green if their company told them it expects to call them back to work by such-and-such a date, which the entrance monitor records as a Temporary Layoff, and blue if they have no prospect of returning to their old job, which the monitor records as a Permanent Layoff.

As people leave (the sooner the better, everyone agrees), an exit monitor counts them on a clipboard marked Hiring Flows. He notes how many weeks they've spent in the room, which he records under Duration of Unemployment, and whether they're wearing green or blue shirts.

On a set day every month, the building doorman counts the number of people inside the whole building, including those in the Unemployment room, and calls that the Labor Force (he ignores flows into and out of the Labor Force). At some point that same day, everyone who happens to be in the Unemployment room poses for a group photo. The photographer counts the number of people in the picture and calls that the Stock of Unemployment. She then compares the Stock of Unemployment with the Labor Force and calls the result the Unemployment Rate.

Also that day, the room monitors compare notes. First, the entrance monitor compares that month's Layoff Flow with the Stock of Employment and calls that number the Separation Rate. Then the exit monitor compares that month's Hiring Flow with the prior month's Stock of Unemployment and calls the result the Job-Finding Rate.

are recalled. For example, a furloughed worker in the meantime might land a job with a different employer. What was more interesting was our finding that even those who did not expect to be recalled sometimes returned to the same employer. Specifically, we found that about 15 to 20 percent of those who did not expect to be recalled were actually rehired by the same employer. Overall, about 40 percent of all laid-off workers are recalled.

The pervasiveness of recalls highlights the importance of *relationship capital*, or *attachment*, in the workplace. Even when a firm finds it necessary to let some of its workers go, it has a strong incentive to rehire those same people when

Sometimes the room gets crowded. Occasionally it stays that way for months. The entrance monitor is usually the first to predict a logjam. If the Layoff Flow increases sharply, he knows to give the exit monitor a heads-up that the Hiring Flow may soon slow down. And whenever the entrance monitor starts seeing the Layoff Flow slow, he alerts the exit monitor that the Hiring Flow might be about to rise.

Over the years, the monitors notice something else: People are generally spending more time in the room than they used to. Their records confirm that the average Duration of Unemployment is longer whether the room is packed or nearly empty.

Curious, they dig deeper. Looking through past photos of the Stock of Unemployment, the monitors see more blue than green shirts with each passing year. Temporary Layoffs must be falling as a share of overall Layoff Flows. But when the entrance monitor checks his records, he discovers he's giving out the same proportions of green and blue shirts these days as always. So Temporary Layoffs are just as common now as in the past. How could this be?

The answer comes in the Job-Finding Rate breakdown. Workers wearing green shirts always leave sooner than those wearing blue shirts, especially when the overall Hiring Flow slows down. But in recent years the share of people leaving wearing blue shirts has been shrinking. As a result, the proportion of blue shirts in the room on any given day has risen over time and the overall Duration of Unemployment has lengthened.

Now it's clear: The Stock of Unemployment snapshot has been giving an incomplete picture of Temporary Layoffs. Because they're as common as ever but the average time in Unemployment is longer, then anyone on a Permanent Layoff faces a greater chance than before of a prolonged spell in Unemployment.

business picks up, given that hiring and training new workers would be much more costly.

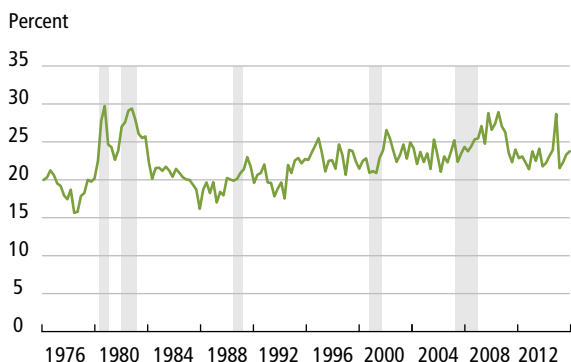
CYCLICALITY OF TEMPORARY LAYOFFS AND REHIRING

We saw that temporary layoffs account for a significant share of the flow of workers into and out of unemployment. Does their share change much as the economy cycles in and out of recessions and expansions? We can follow what happens to the hiring flows from the pool of temporarily laid-off workers as a share of total hiring from the overall unemployment pool (Figure 5).⁷ One can see that the share

FIGURE 5

Recalls a Larger Share of Recession Hires

Temporarily laid-off share among all unemployed hired.



Source: Bureau of Labor Statistics Current Population Survey microdata.

tends to increase during economic downturns, indicated by the shaded areas, and thus is *countercyclical*: In a recession, recalls make up a larger share of the limited hiring that does occur. So, while the pace of hiring, whether recalls or new hires, slows down in economic downturns, new hires decline more and are slower to recover. This pattern was particularly strong during the Great Recession.

This pattern makes sense because creating a new position is more costly, and firms do so only when they are confident about the strength of the economy. By contrast, firms use temporary layoffs and recalls because of temporary, often seasonal, changes in demand for their products and services, so their use of recalls is less influenced by whether the economy is in a recession.

IMPLICATIONS FOR STRUCTURAL UNEMPLOYMENT

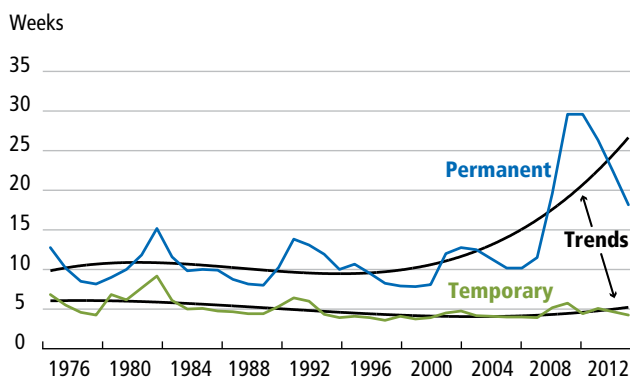
As we saw in Figure 1, the share of temporary layoffs in the unemployment pool has been falling over time. The flip side of this trend is that the share of permanent job losers in the unemployment pool has been rising. In contrast, temporary layoffs as a share of total layoff flows have remained surprisingly high, despite some declines in recent years (Figure 2). What do these conflicting trends for the stock and flow imply? They imply that finding a new job following a permanent layoff has become more and more difficult over time. In fact, the job-finding rate for temporary layoffs has always been very high and its trend is flat, whereas the job-finding rate for permanently laid-off workers has been on a downward trend for the past 15 years after peaking around

2000 (Figure 4). The opposite side of the same phenomenon is that the median duration of unemployment for permanent job losers has been on an upward trend over the same period, whereas that of temporarily laid-off workers has remained very low, including during the Great Recession (Figure 6). Recall that a permanent layoff is much more costly for a worker than a temporary layoff, but the divergent trends in job-finding rates imply that the relative cost of a permanent layoff has become even bigger in the past 15 years. In other words, maintaining an attachment to a job and avoiding a permanent layoff have become even more important.

FIGURE 6

Permanent Layoffs Taking Bigger Toll

Median duration of unemployment following layoff.



Sources: Bureau of Labor Statistics Current Population Survey and author's calculations. Notes: Expressed as annual averages of monthly data. Black lines represent third-order polynomial time trends. Permanent job losers include those who completed temporary jobs.

Remember also that the post-Great Recession labor market has been characterized by a higher share of people caught in long-term unemployment.⁸ The share of those who are unemployed more than six months reached 45 percent in 2010 and remained stubbornly high for an extended period. Although there is no doubt that the Great Recession played a prominent role in this phenomenon, the above analysis also suggests that the underlying trend had actually started much earlier, about 15 years ago. And it has been driven mostly by the longer duration of unemployment experienced by permanent job losers.

A more formal statistical analysis of the overall job-finding rate over time reached a similar conclusion. By extracting the structural (or trend) component from fluctuations in the job-finding rate without distinguishing between temporary and permanent layoffs, Murat Tasci found that

the trend component of the job-finding rate has been declining for the past 15 years or so.⁹

GAUGING MISMATCH IN THE LABOR MARKET

Why is it taking longer for permanently laid-off workers to find new jobs? One possible explanation is greater labor market mismatch. For instance, skill mismatch arises when firms cannot find workers with certain skills, even when jobseekers are plentiful. Geographic mismatch arises when there is a lack of suitable workers in a firm's location, even though qualified workers are located elsewhere.¹⁰ Identifying which forms of mismatch are affecting today's labor market is beyond the scope of this article, but a simple way of measuring the extent of overall mismatch is to estimate the matching function. The *matching function* captures the statistical relationship between the job-finding rate and labor market tightness, which is defined as the ratio between the number of job openings and the number of unemployed jobseekers; the fewer jobseekers per opening, the tighter the market. We expect that when this ratio is high, the labor market is tight, resulting in a higher job-finding rate. The drawback of the matching function is that it provides no clarity on whether the underlying reason that jobseekers and job openings are not matching up is largely because of geographic, skill, or some other form of mismatch. Still, it is a timely way to gauge current labor market frictions. Although the job-finding rate and market tightness are strongly positively correlated, a significant portion of the variation in the job-finding rate cannot be accounted for by labor market tightness alone. This "residual" variation can be considered a measure of mismatch.

To understand the underlying idea behind this residual measure, consider a situation in which the job-finding rate remains low, even though there are many job openings relative to the number of jobseekers in the economy. This means that workers are not finding jobs as quickly as the availability of job opportunities would suggest, thus implying the presence of mismatch.

In estimating mismatch from the matching function, it is important to recall the main theme of this article, that "all layoffs are not created equal." The idea behind the matching function is that searching for a *new* job takes time. Thus, in estimating the matching function, one needs to properly account for the prevalence of recalls. Specifically, those on temporary layoffs may not be looking for a job, expecting to return to the same job, and thus need to be excluded from the estimation of the

matching function. The hiring flow associated with recalls also needs to be excluded. In past studies, this issue has been largely ignored. In my work with Moscarini, we show that the failure to take temporary layoffs and recalls into account results in a significant bias in the estimate of mismatch in the labor market.

MATCHING EFFICIENCY AND THE GREAT RECESSION

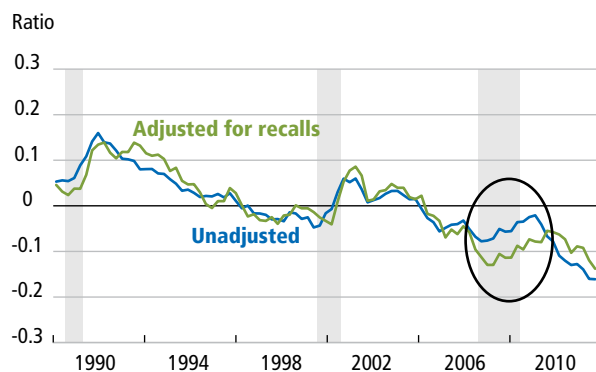
The conventional measure of mismatch and our adjusted measure that accounts for temporary layoffs and recalls tell two different stories (Figure 7).¹¹

We can see that the two measures behaved similarly overall until around the middle of 2007, although there were some periods (for example, the mid-1990s) when the two series moved differently. However, the two series started diverging right before the Great Recession: The adjusted matching efficiency series fell sharply immediately before the Great Recession and then stayed low during the recession relative to the unadjusted measure.¹² In contrast, the decline in the conventional measure over the same period was much more modest, and the large drop was concentrated in the postrecession period.

Their divergence between 2007 and 2009 implies that the conventional measure underestimated the extent of mismatch during the Great Recession. The reason for the underestimate is that, during the Great Recession, new hires fell much more drastically relative to recalls, as indicated by the sharp increase in the series in Figure 5. Thus, including recalls in the hiring totals mistakenly implies that there was

FIGURE 7

Accounting for Recalls Reveals New Story Matching efficiency with and without recalled workers.



Source: Fujita and Moscarini (2013).

Notes: Four-quarter moving average. See the paper for estimation details.

less mismatch in the labor market. This episode shows that to accurately assess mismatch, it is essential to take a proper account of recalls and temporary layoffs.

SOME CONCLUDING THOUGHTS

An accurate assessment of mismatch in the labor market is important for sound policy decisions as well. One may argue that structural unemployment and cyclical unemployment call for different types of policy responses. For example, monetary and fiscal policies that seek to increase the demand for goods and services are a more effective tool for combating cyclical unemployment, while structural unemployment responds more effectively to policies such as training programs that promote the

reallocation of jobless workers to industries or locations where they are in higher demand.

The different experiences facing permanent job losers and those on temporary layoffs suggest that structural forces have been playing an important role in shaping unemployment for the past 15 years or so. What exactly are those structural forces? Research on job polarization provides a hint on this issue.¹³ It points out that many middle-class jobs have evaporated due to global competition and technological advances. If these forces are indeed the underlying causes of the longer duration of unemployment being experienced by permanent job losers, traditional countercyclical policies such as monetary and fiscal stimulus measures are unlikely to be the most effective tools. ■

NOTES

¹ See Erica Groshen and Simon Potter's 2003 article.

² Regarding the overall behavior of the jobless rate over the business cycle, see, for example, the 2009 article that Garey Ramey and I wrote.

³ See, for example, the 2009 paper by Gueorgui Kambourov and Iouri Manovskii.

⁴ Note that there are other types of unemployed workers, for example, those who quit their jobs and those who entered the labor force after graduating from school. Officially, the CPS gives six types: (1) job losers on temporary layoffs, (2) permanent job losers, (3) persons who completed temporary jobs, (4) job leavers, (5) reentrants to the labor force, and (6) new entrants. In this article, I lump the second and third groups together and call them permanent layoffs or permanent job losers.

⁵ Note that the data shown in Figure 3 do not convey how frequently temporary layoffs are used *within* each industry. The relatively small share shown for manufacturing is partly due to that sector's small share of jobs among total employment. Similarly, service industries' large shares are partly due to their large share of employment. However, the point remains: Temporary layoffs are not limited to a few industries.

⁶ The denominator of the job-finding rate is simply the number of workers who moved from unemployment to employment and does not specify whether the worker returned to the same employer or found a job at a different employer.

⁷ The denominator of this series is all hiring flows from the unemployment pool, not just the hiring flows of those laid off. That is, it includes hiring flows of job leavers and entrants. Note also that as mentioned above, the hiring flow of those on temporary layoff does not exactly correspond to recalls and new hires, respectively. However, this series gives a good approximation that is simple to construct.

⁸ Note that the job-finding rate and the duration of unemployment are inversely related. The larger share of people caught in long-term unemployment is reflected in the sharp decline in the job-finding rate in and after the Great Recession.

⁹ How do we square this evidence of workers remaining unemployed longer after permanent layoffs with the fact that the unemployment rate has fallen fairly quickly in the past three years? It does not necessarily imply that the underlying structural forces have diminished. Note that the unemployment rate is affected by the pace of the flow into unemployment (layoffs are one of the flows) as well as the speed at which these workers find jobs. Our discussion above concerns the latter. A significant portion of the decline in the unemployment rate in the past three years is accounted for by a decline in the former. Although the job-finding rate also recovered over the same period, it remains low. The above discussion shows that slow job finding is concentrated among permanent job losers.

¹⁰ It is natural to always have some labor market mismatch in the economy. But here we are interested in changes in the extent of mismatch over time.

¹¹ Our paper details the procedure we used to construct these series.

¹² Note that the adjusted matching efficiency series fell somewhat less than 10 log points between 2007 and 2009, whereas during the same period, the job-finding rate for permanently laid-off workers fell 50 log points, suggesting that roughly 20 percent of the decline in the job-finding rate during that period is accounted for by the mismatch in the labor market.

¹³ See David Autor's 2010 research for a comprehensive review of job polarization, written for a broad audience.

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