Worksharing and Long-Term Unemployment

By Kevin A. Hassett and Michael R. Strain

The Great Recession was especially deep and especially long. The sustained departure of output from its trend path was accompanied by a large drop in employment, which stayed low relative to trend for an extended period as well. As this occurred, the percentage of workers who were long-term unemployed increased sharply. Even as the U.S. economy recovers, the painful legacy of the Great Recession lives on as these long-term unemployed workers continue to struggle to reconnect to society.

In light of this, policymakers and economists must ask whether smart policy could have mitigated large employment losses and the high incidence of long-term unemployment. We believe the answer is yes, and that worksharing is such a policy. Under worksharing, a firm can reduce the hours of its workforce in lieu of a layoff, and workers whose hours have been reduced are eligible for a prorated unemployment insurance (UI) benefit. In this way, a firm can weather a temporary lull in demand by reducing its payroll costs without laying off large number of workers.

In this paper we make three points. First, the impact of long-term unemployment on the lives of those affected is so significantly negative that addressing the issue should be a top priority for policymakers. Second, extended unemployment insurance benefits are an insufficient way to deal with unemployment, and additional policies are needed. Finally, an alternative reform of unemployment insurance could reduce the risk that the next recession might lead to another surge in long-term unemployment, help keep some of the millions of workers who are laid off every year in their jobs, and in so doing help avoid the problem of “hysteresis” associated with long-term unemployment.

The Impact of Long-Term Unemployment on American Workers

A large and growing literature has explored the impact of unemployment for extended periods — generally defined as six months or longer — on the workers affected. A key finding is that there appears to be a nonlinear impact of unemployment spells on employability, with the harm from unemployment skyrocketing after some amount of time. Given the heightened impact, one can only imagine the stress that individuals who have been out of work for more than six months begin to experience.

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http://media.wix.com/ugd/576e9a_f6cf3b6661e44621ad26547112f66691.pdf
Higher levels of stress have long been known to have negative health consequences, and these consequences have been documented among the unemployed. Sullivan and von Wachter\(^3\) find a 50 to 100 percent increase in death rates for older male workers in the years immediately following a job loss if the worker had previously been consistently employed. This higher mortality rate implies that a male worker displaced in midcareer can expect to live about 1.5 years less than a worker who keeps his job.

A number of factors contribute to findings such as this. A key one is suicide. Classen and Dunn\(^4\) found that each proportional increase in the unemployment rate of 10 percent increases the suicide rate for males by about 1.5 percent. This is not a small effect. Assuming a link of that scale, the increase in unemployment experienced following the Great Recession would lead to hundreds of extra suicides per month in the United States. The picture for the long-term unemployed is especially disturbing. The duration of unemployment is the dominant force in the relationship between joblessness and the risk of suicide.

Joblessness is also associated with serious illnesses, although the causal links are poorly understood. Lynge\(^5\) found strong links between unemployment and cancer, with unemployed men facing a 25 percent higher risk of dying of the disease. Similarly higher risks have been found for heart attacks\(^6\) and psychiatric problems.\(^7\)

The physical and psychological consequences of unemployment are significant enough to affect family members. Charles and Stephens\(^8\) found a large increase in the probability of divorce following either a husband or a wife’s job loss. Unemployment of parents also has a negative impact on the achievement of their children. Children whose fathers lose a job have almost 10 percent lower earnings as adults.\(^9\)

Clearly, there are few events in economic life that can rival the negative impact of long-term unemployment, and a primary focus of economic policy should be to ensure that as few workers as possible have to face it.

**Unemployment Insurance Benefits and Long-Term Unemployment**

During the Great Recession, UI benefits were extended to 99 weeks in some states. While the collapse of the economy was without a doubt the key factor increasing long-term unemployment, it is likely that extended benefits were also a cause of at least some of the increase, as unemployment benefits lower

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workers’ incentives to search for jobs or to take jobs that may not be a perfect fit. Meyer and Katz,\(^{10}\) for example, used data from a large number of U.S. households to show that a potential increase of one week in unemployment benefits lengthened a spell of unemployment by about a fifth of a week. Extrapolating from their results, a back-of-the-envelope calculation suggests that increasing unemployment benefits from 26 weeks to 99 weeks — the increase in UI benefits since 2007 in some states — would on average lengthen a person’s time in unemployment by several months.

More recent evidence from Rothstein\(^{11}\) suggests that lengthened unemployment benefits in the Great Recession slightly lowered the probability that unemployed workers, especially the long-term unemployed, would exit unemployment. He estimates that UI benefits increased the overall unemployment rate between 0.1 and 0.5 percentage points — a very small amount relative to the overall increase in unemployment. Given Rothstein’s finding and the severity of the decline in aggregate demand following the financial crisis, perhaps 99 weeks was an essential and equitable response to the absence of job offers and did little to extend stays on the unemployment rolls.

As the economics profession continues to assess this, an interesting theoretical consideration for future research is the nonlinearity in the negative impact of unemployment spells beyond six months. If workers are aware of the nonlinearity, then as they approach the six-month mark they will become less choosy and take jobs, suggesting that extended benefits are not welfare decreasing, and that workers who remain unemployed beyond the six-month mark are unemployed not because of the incentive effects of extended benefits but because they couldn’t find a job due to the demand shortfall in the economy. If workers are behaving irrationally, on the other hand, and are not taking the threat of long-term unemployment into account, then extended benefits may be harmful by incentivizing myopic workers to hold out for too long.

The academic literature may resolve this question eventually, but policymakers should not wait for the answer before deciding whether to supplement extended unemployment benefits with other policies. For now, a suggestive data point can be found in a simple international comparison. Figure 1 explores the relationship between weeks of unemployment insurance (UI) benefits and the change in the share of unemployed workers who were unemployed for a year or longer between 2007 and 2012. The sample covers countries in the Organization for Economic Cooperation and Development (OECD).\(^{12}\) There is a clear, positive, statistically significant correlation: countries with longer-lasting unemployment benefits (on the right side of the figure) saw a significantly larger increase than other countries in the share of long-term unemployment.

Of course, this evidence is suggestive at best, and a body of thorough empirical research must be marshalled to make any definitive statements about the effect of extended benefits on long-term unemployment during the Great Recession. But policymakers should be aware that there is a risk that extended benefits might induce individuals to stay unemployed longer, thus inadvertently separating them from the workforce in a manner that is difficult to reverse. Accordingly, it is appropriate to consider additional structures that provide benefits to workers without exacerbating the risks of entering long-term unemployment. In the next section we turn to one such structure that has much to recommend it.

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12 Australia and New Zealand are omitted from the chart for lack of data. Belgium is not included because its UI benefits are unlimited in duration. Greece and Ireland are not in the sample because their employment situations were extreme outliers.
Worksharing in Theory

Between January 2008 and December 2009, the United States lost about 8.7 million total non-farm jobs. Six years later, the labor market is still recovering, with an unemployment rate in February 2014 of 6.7 percent and the total number of jobs in the economy about 670,000 lower than at the high mark in January 2008. The number of workers unemployed for longer than 27 weeks currently stands at 3.8 million — much more than the 1.1 million in January 2007. In the midst of this slow and tepid job market recovery, policies that can help the economy avoid such high levels of unemployment remain elusive.

One tool that can help keep a lid on unemployment is worksharing. Worksharing can be thought of as redistributing labor hours among workers with the goal of reducing involuntary unemployment. The basic structure is reasonably simple, and easiest to understand through an example. Imagine a firm with 100 identically paid workers. The economy goes south, and the firm must cut 20 percent off its wage bill in order to stay open. Today, most firms would lay off 20 workers. Those 20 workers would then receive a weekly unemployment insurance benefit, financed by taxpayers.

Under worksharing, the firm would not lay off any workers. Instead, the firm would tell every worker to stay home, without pay, on Friday. Each worker would then be eligible for 20 percent of a weekly UI benefit — proportional to the number of hours the worker is laid off, and financed by taxpayers. This UI benefit is often called short-time compensation. It can be thought of as a prorated UI benefit.

A simple comparison of the two situations described above reveals the appeal of worksharing at the macroeconomic level. In both situations, the taxpayer is on the hook for the same amount of money. In both, the firm cuts its wage bill by the same amount and can afford to stay in business. But in today’s system 20 people lose their jobs, whereas under worksharing no one loses a job.

There is reason to believe that this situation would be appealing to some U.S. companies, as some have tried to cut hours across their workforces in order to avoid layoffs in the past. In 2001, for example, Charles Schwab faced a severe revenue shortage relative to the year prior. In response, it encouraged its employees to take unpaid leave, even designating certain Fridays as voluntary days off. The same year, Accenture needed to trim its wage bill. Instead of using only layoffs, it offered some workers a partially paid sabbatical, wherein the company paid 20 percent of employees’ salaries and all their benefits, and let them keep a laptop, phone number, and email address as a way to stay connected to the firm. Other firms have tried similar strategies to avoid layoffs, though many such corporate policies didn’t survive the Great Recession. In the 51 years it operated before 2009, Enterprise Rent-A-Car didn’t lay off a single U.S. employee. The Great Recession broke the company’s streak.

These anecdotes suggest that there are times when firms experience a temporary lull in revenue or demand and do not want to resort to layoffs. The workers whom the company must lay off in order to stay afloat represent what economists call “inefficient separations” — the firm would be better off over the long term by keeping the workers in its employ.

To get an intuitive sense of this, think about a small firm that buys certain types of used and broken medical equipment, fixes the equipment, and sells it back to hospitals. This firm has five or six employees: the owner of the firm, who handles client relations and sales and manages the shop; an administrative assistant; a warehouse manager, who keeps track of inventory and keeps the warehouse organized; and three repair techs, each of whom specializes in a certain class of medical equipment.

A recession hits, orders fall significantly, and the manager won’t be able to meet payroll. But laying someone off means losing a lot of firm-specific expertise. No one else in the firm except the warehouse manager knows how to track inventory. No one except the tech who specializes in infusion pumps knows how to repair infusion pumps — and repairing them constitutes one-third of the firm’s annual revenue.

More than that, everyone gets along. There’s good chemistry in the office, and morale is good because everyone enjoys each other’s company. That type of environment is worth something, and the owner is wary of killing morale through layoffs.

These are specialized jobs, and laying someone off will eventually mean spending a lot of time (and thus money) interviewing candidates to find someone who is a good fit when things turn around. And even if the manager finds someone, the new hire will take six months to train — he or she will be a net loss for half a year. And what if the chemistry isn’t right? What if people start spending 70 minutes on lunch instead of 30 because the new guy hurts the group’s social dynamic?

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This firm would clearly be better off under worksharing than under traditional layoffs. It would avoid inefficient separations, hiring costs, and training costs if it could cut its wage bill through worksharing — and keep its existing workforce — rather than cut its wage bill through layoffs.

There are three other reasons why worksharing might be preferable to traditional layoffs.

The first is equity. Under layoffs, the pain of a recession is largely concentrated on the workers who lose their jobs. In our earlier example, the 20 workers who are laid off bear the entire brunt of the recession, while the 80 workers who keep their jobs carry on as before. Under worksharing, the negative effects of the demand slump are distributed across all 100 workers.

The second is that worksharing may support aggregate demand by keeping more workers in the position of earning a decent paycheck. In our example, the amount of salary and UI benefits paid out are the same under both worksharing and traditional layoffs. But keeping all workers at 90 percent of their pre-recession earnings may do more to support aggregate demand than keeping 20 percent of workers at 50 percent of their pre-recession earnings (under UI) and keeping 80 percent of workers at 100 percent of their pre-recession earnings. This is because the stability introduced into the connection between the employee and the employer reduces the need for the worker to engage in “buffer stock” saving, something that has been shown to have a large negative impact on consumption during recessions.17

The third reason is the most persuasive of the three: worksharing will help mitigate the problem of “hysteresis,” the name given to a situation in which cyclical economic downturns today affect the economy’s ability to produce output tomorrow. Many economists believe that hysteresis is a problem to one degree or another, and in the Great Recession the most likely causes of hysteresis can be found in the labor market: specifically, the reduced attachment to the labor market by workers who are or have been unemployed for six months or longer (the long-term unemployed).

As discussed earlier, there is solid evidence that once workers have been unemployed for longer than six months firms will not interview them. The length of workers’ unemployment spells — and not other factors, even those relating to job-specific experience and skills — have been identified in careful studies as the cause of this inability to get a job interview. Furthermore, when you’ve been unemployed for that length of time your skills atrophy, making it even harder to get a job and to get your career going again once the economy picks up. Your professional network decays, adding to the challenge of finding a job. Non-market costs are borne, too: as discussed above, physical and mental health deteriorate, the probability of divorce increases. The children of the long-term unemployed bear scars as well, market and non-market.

To the extent that worksharing can keep some workers in jobs and out of long-term unemployment, it can increase potential output even after the recession passes (to say nothing of helping American workers avoid terrible non-market outcomes). In this way, worksharing can add to gross domestic product (GDP), increasing labor demand and household incomes in addition to simply spreading the recession-caused pain around.

In 1977 Canada experimented with worksharing by allowing workers whose firms had reduced their hours to receive a prorated UI benefit for the day or so each week that they weren’t working for pay. A study of 24 firms that participated in the experiment found that employees generally favored the arrangement — they got an extra day off every week while losing only about 5 percent of their after-tax income. The study

found that most employers also liked the arrangement, because they were able to avoid the costs associated with layoffs and hiring and training new workers.\textsuperscript{18}

Despite the intuitive appeal of these findings, worksharing is not widely practiced in the United States. This might imply the existence of revealed preferences against worksharing, at least to some degree, as worksharing is legal in about half the states. Or it might simply reflect the fact that firms are unaware of worksharing, or that business culture is inhospitable to it. It is important to explore why some firms may not want to engage in worksharing, and more generally why worksharing may be an unattractive policy.

One reason is simple. In the example of our 100-worker firm, under traditional layoffs the 80 workers who survive the layoff earn 100 percent of their pre-recession income. Under worksharing, they earn less. (Probably about 90 percent of their pre-recession income, though that will vary.)

A firm may be very concerned about imposing a 10 percent reduction in income across its workforce, because the firm’s best workers are likely the ones who will have the easiest time getting a job at another firm. And a 10 percent reduction in income may be enough to entice some of those workers to look for a job where they are partially laid off. In other words, a firm may not want to use worksharing out of fear that it will lose its best employees.

Firms might also be concerned about productivity losses associated with having their workforce sitting at home three or four days a week. Assuming that there are fixed start-up and ramp-down costs in a given work week, spreading those costs over three or four days results in significantly less productivity than spreading them over five. Firms may rather incur the costs of inefficient separations, hiring, and retraining rather than incurring the productivity loss associated with worksharing.

From a macroeconomic perspective, worksharing may be undesirable if it makes it harder for firms to lay off workers. Depending on how prevalent it becomes, worksharing may push the labor market a bit toward a “dual labor market,” wherein some workers have jobs that are protected from the damage of cyclical downturns while other workers have temp jobs and bear all the brunt of recessions. France, for example, has two types of labor contracts that mirror these characterizations, with the first tier of workers relatively hard to lay off and the second tier relatively easy. If worksharing is the norm, then the negative signaling effect of being laid off might be much higher, imposing a cost on workers who do get laid off. In general, the amount of churn in the labor market may slow, with the U.S. labor market taking on some of the features of the more stiff labor markets of Europe, including higher baseline levels of unemployment. Of course, worksharing would have to be significantly more common than it is likely to be for this to be a major concern, but it is something at least to consider when thinking about the relative merits of worksharing.

Finally, recessions provide a long-run economic benefit by allowing firms the opportunity to “reoptimize” — to better organize the way they produce goods and services in light of changes in the economy’s tastes and technologies. Layoffs are an important part of this process; the economy cannot reallocate its human resources to their most productive ends without taking some workers who are employed by company A and moving them to company B. In this way, layoffs induce short-term pain for long-term benefit. Worksharing, by reducing layoffs, may reduce the economy’s ability to engage in this crucial process.

\textbf{Worksharing in Practice}

While worksharing may help to stem employment losses during a downturn, policies that cap working hours in order to stimulate an increase in hiring may not be effective at shifting employment to new hires. Starting in the mid-1980s, unions in West Germany began instituting reductions in standard work hours for members in an effort to increase employment in their industries. Hunt investigated this phenomenon, and found that lowering standard hours did not actually stimulate more hiring but may have reduced employment among men. In a similar effort, the Canadian province of Quebec lowered its standard work week to 40 hours from 44 between 1997 and 2000, but it experienced a similar lack of improvement in employment. Skuterud examined labor market data from the province after the reduction in work hours went into effect, and found no increase in employment at either a provincial or industry level.

Worksharing programs put into place to stem employment losses in recessions differ in form and goal from these hour-capping programs, and there is reason to believe they may be effective in practice. While some worksharing programs were in place in the United States during the Great Recession, they were utilized little and not widely known. In Germany, however, worksharing has been a prominent program for several years, and we may be able to gain some insight into the program’s potential from Germany’s experience.

A form of the German worksharing program, called *Kurzarbeit*, or “short-work,” has been used for almost a century, and the policy was strengthened in the latter half of the 20th century. Worksharing was heavily used during the years following German reunification in the 1990s to try to stem job losses amidst the restructuring of the German economy. After the mid-1990s the worksharing program was little used, but beginning around August 2008, in the midst of the financial crisis and the recession, participation rose sharply.

Germany’s worksharing program is administered between establishments or the local works council on the one side and an employment agency on the other. Either an establishment or a works council can request that worksharing for economic reasons be initiated. In order to qualify, a company must show that other measures have already been tried (such as limiting overtime) and were not sufficient. Then companies submit estimates for the extent of worksharing to the local employment agency. In Germany, the proportion of unemployment insurance benefits that workers qualify for under worksharing is given directly to the company, which pays them out to workers based on the actual reduction in their working hours. Before 2009, worksharing was limited to a six-month duration, but in 2009 it was extended first to 18 months in January and then to 24 months in June.

Take-up of the German worksharing program after December 2008 was high. By the middle of 2009, more than 1.4 million workers from 63,000 establishments were participating in the program, in a


23 Crimmann, Wiessner, and Bellmann.


25 Felter.
country with a labor force of about 42 million. If a worksharing program in the United States represented the same proportion of the workforce, more than 5.2 million workers would have been involved in the program in 2009.

The success of short-work in Germany in the Great Recession is evident in the following two charts. Figure 2A shows the decline in GDP in the European Union, Germany, and the United States between 2008 and 2009. Figure 2B shows the employment levels in the three entities between 2007 and 2012. What is remarkable is the extent to which Germany managed to maintain its share of employed workers during a large turndown. Though its economy performed similarly to that of other countries during the same period, it experienced much smaller employment losses.

There are some other differences between the German and U.S. labor markets that certainly contributed to the small effect on employment in Germany during the recession and financial crisis that began in 2007 — one of which is the greater difficulty of firing workers in Germany — but the heavily utilized worksharing program played a role in maintaining workers’ connections to their jobs and sustaining a lower level of unemployment in Germany. An OECD study of the employment effects of worksharing on workers with permanent employment contracts between 2008 and 2009 showed that the short-time work program in Germany had one of the largest impacts on employment of any of the 16 countries in the sample with programs.

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26 World Bank Group, World Development Indicators, Indicator Code SL.TLF.TOTL.IN.

As mentioned previously, worksharing programs exist in the United States, but they are little publicized and are under-utilized. Programs are available only in certain states (27 including the District of Columbia as of November 2013), and only 314,000 workers utilized the program during its peak in 2010 — less than a quarter of the participants of Germany though the U.S. labor force is almost four times larger. Program participation varied widely among states during the Great Recession: 15.9 percent of initial unemployment insurance claims in Rhode Island in 2009 were for worksharing program participants, compared to only 0.8 percent of initial claims in Florida.

Worksharing programs have existed in the United States for several decades, and have been authorized on a federal level as well, first in a temporary bill passed in 1982, and then in a permanent authorization passed in 1992. Though the federal government has authorized the use of unemployment insurance funds for worksharing programs, the states have historically determined the structure of their own programs and administered them on a state level. The federal government became more involved in worksharing with the Middle Class Tax Relief and Job Creation Act of 2012, which created a more precise definition of worksharing; provides for complete reimbursement of worksharing benefit costs paid by the states until August 2015; establishes an optional temporary federal worksharing program, which lasts until May 2014, that would be financed in part by the government and in part by participating employers; and provides for $100 million in grants to states whose permanent worksharing programs meet the new federal definitions and whose grant applications are submitted by December 2014.

During the recession, Rhode Island’s program showed some promise. The 15.9 percent of new unemployment insurance claims that were for worksharing participants was well above the average for states with programs, and Rhode Island’s labor department estimated that the program kept the state

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unemployment rate down and saved about 9,500 jobs between 2009 and 2010. Other states could look to Rhode Island’s success with publicizing the program and achieving high participation during the recession to improve their own programs.

Policy Recommendation and Conclusion

To advance worksharing as a viable policy option, it must be made easier for firms to use, business culture must become more open to it, and states must be further incentivized.

Currently, in states that have worksharing programs an employer must file a plan with the state government to reduce hours in lieu of laying off workers. The plan must be approved, and firms are held to it; firms must submit new plans whenever they want to deviate from their existing plans. Workers who have their hours reduced then file a claim for short-time compensation. This procedure obviously imposes constraints on firms, and worksharing should be reformed to give firms more flexibility over which workers are covered and the extent to which workers’ hours are reduced.

In addition to making worksharing less bureaucratically cumbersome, business culture must be changed so that worksharing seems less foreign. This would involve a public relations campaign involving governors and labor market officials, as well as chief executive officers who have used worksharing in the past. Government officials must use the bully pulpit so that firms know worksharing exists and feel comfortable using it as an alternative to layoffs.

Finally, states must be incentivized to set up worksharing programs. The Middle Class Tax Relief and Job Creation Act of 2012 has such incentives, but many are expiring and should be renewed. And the federal government should also go further than the 2012 act. A lesson in how to proceed can be gleaned from President Reagan:

In 1984, Congress passed the 1984 National Minimum Drinking Age Act, which reduced a state’s federal highway funds by 5 percent if it did not adopt a legal drinking age of 21. The act was upheld by the Supreme Court in *South Dakota v. Dole,* and suggests one way in which the federal government may be able to more strongly encourage states to adopt worksharing laws.

The damage caused by long-term unemployment is severe, inflicting high economic and human costs. Our current suite of policies is not up to the challenge of keeping a lid on the prevalence of long spells of unemployment. Other policies must be implemented, and worksharing should be at the top of the list.

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