# FRBSF ECONOMIC LETTER

2010-12

April 19, 2010

## **Extended Unemployment and UI Benefits**

BY ROB VALLETTA AND KATHERINE KUANG

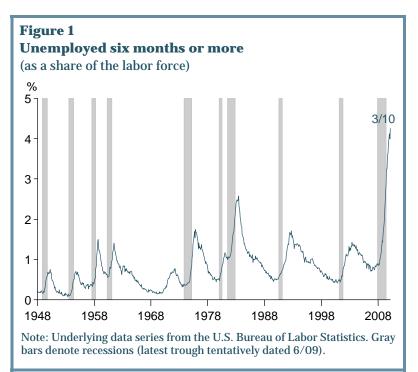
During the current labor market downturn, unemployment duration has reached levels well above its previous highs. Analysis of unemployment data suggests that extended unemployment insurance benefits have not been important factors in the increase in the duration of unemployment or in the elevated unemployment rate.

Unemployment duration, or the amount of time that an individual remains unemployed, reached new historical highs in 2009. The spike in unemployment duration is among the most compelling indicators of the severe economic dislocation caused by the recent recession. At the same time, however, following congressional legislation that temporarily extended eligibility for unemployment insurance (UI) benefits, the maximum period for UI claims also reached new historical highs. As of late 2009, individuals in most states were eligible for up to 99 weeks, or nearly two years, of UI benefits, well above the normal limit of six months. The question arises whether this extended availability of UI benefits has contributed to a lengthening of unemployment spells because jobless workers are staying in the labor force longer in order to continue collecting benefits. Such a dynamic could raise the unemployment rate. However, analysis of data on unemployed individuals decomposed by their reason for unemployment, which affects their eligibility for UI, suggests that extended UI benefits have had a relatively modest effect. We calculate that, in the absence of extended benefits, the unemployment rate would have been about 0.4

percentage point lower at the end of 2009, or about 9.6% rather than 10.0%.

#### **Duration spikes**

Unemployment duration always rises in recessions. Job losers flood the unemployment pool at the same time that employers curtail hiring. The resulting sharp increase in the number of job seekers relative to the number of available jobs substantially slows the rate of job finding. However, the increase in unemployment duration during the current protracted labor market downturn has been unprecedented. Figure 1 shows the proportion of the total labor force that has been unemployed for at least six



months. The number unemployed for at least six months is often displayed as a share of total unemployment. That share has risen well above its previous high posted in 1983, reaching 44.1% in March. When displayed as a share of the total labor force, as in Figure 1, the recent spike is even more striking. The share of individuals unemployed for at least 6 months reached 4.3% in March, well above the previous high of 2.6% registered in 1983. (The 1994 redesign of the household survey raised the values of this series. Adjusting for this redesign increases the 1983 peak value to 3.0%.) This is all the more noteworthy because the unemployment rate peaked at 10.8% in late 1982, a higher level than in late 2009 when it reached 10.1%.

#### **Influence of extended UI benefits**

One factor that may have contributed to the recent spike in unemployment duration is the extension of UI benefits to a maximum of 99 weeks. Normally, UI benefits are available for 26 weeks, but the maximum benefit period typically is extended during economic downturns. In the recent downturn, the maximum period has been increased five times, reaching 99 weeks in qualifying states, which substantially exceeds the previous maximum of 52 weeks for selected groups of workers, such as airline employees after 9/11. Eligibility for the complete series of extensions is determined by state-level triggers that are based on the level and change in a state's overall unemployment rate. Because most states, especially larger ones, have exceeded these extension trigger points, most regular UI recipients were eligible for a complete or near-complete set of extensions as of late 2009. The primary extension program, accounting for 53 weeks of the total extensions of 73 weeks, recently was authorized to remain effective through June 2, 2010.

What is the relationship between the extension of UI eligibility and the rise in unemployment duration? It is important to note first that receiving UI is not a requirement in order for an individual to be counted as unemployed in official government statistics. The Bureau of Labor Statistics (BLS) official unemployment rate is based on responses to the Current Population Survey (CPS), a monthly survey of about 60,000 households conducted by the U.S. Census Bureau. Receipt of UI benefits plays no role in the identification of unemployment status in the survey. A person without a job is considered to be unemployed if he or she has actively looked for work in the previous four weeks, whether or not they are collecting UI benefits. In that respect, expansions of maximum UI receipt periods do not automatically increase measured unemployment, nor does exhaustion of benefits cause a person to cease being identified as unemployed.

On the other hand, increased availability of UI benefits theoretically can increase unemployment duration through two primary behavioral channels. First, the extension of UI benefits, which represents an increase in their value, may reduce the intensity with which UI-eligible unemployed individuals search for work. This could occur because the additional UI benefits reduce the net gains from finding a job and also serve as an income cushion that helps households maintain acceptable consumption levels in the face of unemployment shocks (Chetty 2008). Alternatively, the measured unemployment rate may be artificially inflated because some individuals who are not actively searching for work or who are unwilling to take available jobs are identifying themselves as active searchers in order to receive UI benefits.

Economists have long recognized that the availability and value of UI benefits can lengthen unemployment spells. Empirical estimates using data from the United States and other countries confirm this general relationship. However, because UI extensions in the United States typically occur concurrently with deterioration in labor market conditions, quantifying the magnitude of the UI effect is challenging. For example, based on existing empirical research using U.S. data, Chetty (2008) noted that a 10% increase in the value of UI benefits increases unemployment durations by 4-8%. Other estimates, particularly those that focus on extension periods rather than the dollar value of benefits, lie below this range (see for example, Card and Levine 2000). As such, there is a wide range of uncertainty around the implied estimates of the impact of the recent UI extensions on unemployment duration.

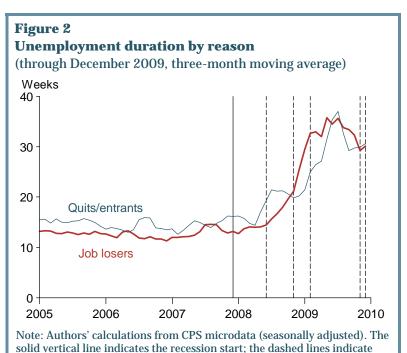
### **Empirical test**

As an alternative to simulations based on past estimates of the relationship between UI benefits and unemployment duration, we propose a direct empirical assessment using recent data on reasons for unemployment. We note that not all unemployed individuals are eligible to receive benefits, whether regular or extended. In particular, UI receipt generally is restricted to individuals who are unemployed through "no fault of their own," to quote U.S. Labor Department eligibility guidelines, and have recent employment history that allows them to meet a base earnings test. The unemployed are categorized into four main groups in the CPS data: involuntary job losers; voluntary job leavers; new labor market entrants; and re-entrants, meaning people who have worked before and are now actively searching for a job following a spell of labor market withdrawal. Individuals eligible for UI are concentrated in the job losers group, with few eligible individuals likely to identify themselves as job leavers or entrants. Under these conditions, unemployed job leavers and labor force entrants can be used as a control group for assessing the impact of extended UI benefits on eligible individuals. Within the control group, reentrants are most likely to be eligible for UI receipt, with some of them perhaps identifying themselves as active searchers to receive UI. Their inclusion in the control group could undermine its quality and misleadingly reduce the estimated UI effect. However, the results described below indicate an even smaller effect of the UI extensions when re-entrants are excluded from the control group.

For our specific test, we look at the increase in unemployment duration observed as the UI extensions were introduced and renewed in 2008 and 2009. We use the "expected unemployment duration" concept from Valletta (2005), which yields a monthly measure of the typical completed duration of

unemployment for an individual who becomes unemployed in a particular month, based on the distribution of individual unemployment spells for the current and prior months. This measure more accurately reflects the overall duration of unemployment spells and changes in duration over time than do the average and median duration series published by the BLS, which are tallied from incomplete spells measured at the time each survey is conducted.

Figure 2 displays the resulting unemployment duration series for job losers and leavers/entrants from 2005 through the end of 2009. The vertical lines identify the start of the recession and the dates for the initiation and



solid vertical line indicates the recession start; the dashed effective dates for UI extensions (through 12/09).

renewal of the extended UI benefits programs. Unemployment duration rose slightly in the early phase of the recession and then increased sharply after extended UI benefits became available, reaching a high of about 35 weeks in mid-2009 before declining back to about 30 weeks by the end of the year. Notably, the increase in expected duration was similar for job losers, the group that is eligible for UI benefits, and leavers and entrants, who are ineligible.

The similar increase in duration for the UI eligible and ineligible groups suggests that extended UI had only a limited impact on unemployment duration. As of the fourth quarter of 2009, the expected duration of unemployment had risen about 18.7 weeks for job losers and about 17.1 weeks for leavers and entrants, using the years 2006–2007 as a baseline. The differential increase of 1.6 weeks for job losers is the presumed impact of extended UI benefits on unemployment duration. It is straightforward to translate this increase in unemployment duration into an effect on the unemployment rate, based on their proportional relationship and adjusted for the share of job losers in overall unemployment, which was about 67% in December 2009. The implied increase in the unemployment rate is quite small, slightly less than 0.4 percentage point, indicating that without UI extensions, the measured unemployment rate would have been 9.6% in December 2009 rather than the observed 10.0%.

#### Conclusion

Although economists have shown that extended availability of UI benefits will increase unemployment duration, the effect in the latest downturn appears quite small compared with other determinants of the unemployment rate. Our analyses suggest that extended UI benefits account for about 0.4 percentage point of the nearly 6 percentage point increase in the national unemployment rate over the past few years. It is not surprising that the disincentive effects of UI would loom small in the midst of the most severe labor market downturn since the Great Depression.

Despite the relatively minor influence of extended UI, it is important to note that the 0.4 percentage point increase in the unemployment rate represents about 600,000 potential workers who could become virtually unemployable if their reliance on UI benefits were to continue indefinitely. This in turn would raise the minimum attainable unemployment rate by a similar amount, a problem that has been noted as an outcome of the generous UI systems in some advanced European countries. Given the experience with the elimination of extended UI benefits during previous U.S. economic recoveries, a permanent increase in the U.S. unemployment rate is unlikely.

*Rob Valletta* is a research advisor at the Federal Reserve Bank of San Francisco. Katherine Kuang is a research associate at the Federal Reserve Bank of San Francisco.

#### References

- Card, David, and Phillip B. Levine. 2000. "Extended Benefits and the Duration of UI Spells: Evidence from the New Jersey Extended Benefit Program." *Journal of Public Economics* 78, pp. 107–138.
- Chetty, Raj. 2008. "Moral Hazard versus Liquidity and Optimal Unemployment Insurance." *Journal of Political Economy* 116(2, April), pp. 173–234.
- Valletta, Robert G. 2005. "Rising Unemployment Duration in the United States: Causes and Consequences." Manuscript, FRB San Francisco, May. http://www.frbsf.org/economics/economists/rvalletta/RV\_duration\_5-05\_new.pdf

#### Recent issues of FRBSF Economic Letter are available at

#### http://www.frbsf.org/publications/economics/letter/

2010-11	The Housing Drag on Core Inflation http://www.frbsf.org/publications/economics/letter/2010/el2010-11.html	Hobijn / Eusepi / Tambalotti
2010-10	The Outlook for the Economy and Inflation, and the Case for Federal Reserve Independence <u>http://www.frbsf.org/publications/economics/letter/2010/el2010-10.html</u>	Yellen
2010-09	What Is China's Capital Seeking in a Global Environment? http://www.frbsf.org/publications/economics/letter/2010/el2010-09.html	Alon / Hale / Santos
2010-08	Asia and the Global Financial Crisis: Conference Summary http://www.frbsf.org/publications/economics/letter/2010/el2010-08.html	Glick / Spiegel
2010-07	Okun's Law and the Unemployment Surprise of 2009 http://www.frbsf.org/publications/economics/letter/2010/el2010-07.html	Daly / Hobijn
2010-06	Can Structural Models of Default Explain the Credit Spread Puzzle? http://www.frbsf.org/publications/economics/letter/2010/el2010-06.html	Goldstein
2010-05	Diagnosing Recessions http://www.frbsf.org/publications/economics/letter/2010/el2010-05.html	Jorda
2010-04	Hong Kong and China and the Global Recession http://www.frbsf.org/publications/economics/letter/2010/el2010-04.html	Yellen
2010-03	Mortgage Choice and the Pricing of Fixed-Rate and Adjustable-Rate Mortgages <u>http://www.frbsf.org/publications/economics/letter/2010/el2010-03.html</u>	Krainer
2010-02	Inflation: Mind the Gap http://www.frbsf.org/publications/economics/letter/2010/el2010-02.html	Liu / Rudebusch
2010-01	Global Household Leverage, House Prices, and Consumption http://www.frbsf.org/publications/economics/letter/2010/el2010-01.html	Glick / Lansing
2009-38	Bank Relationships and the Depth of the Current Economic Crisis http://www.frbsf.org/publications/economics/letter/2009/el2009-38.html	Caballero/Candelaria / Hale
2009-37	Capital Structure in Banking http://www.frbsf.org/publications/economics/letter/2009/el2009-37.html	Kwan
2009-36	Linkages between Monetary and Regulatory Policy: Lessons from the Crisis <u>http://www.frbsf.org/publications/economics/letter/2009/el2009-36.html</u>	Yellen
2009-35	Talking about Tomorrow's Monetary Policy Today http://www.frbsf.org/publications/economics/letter/2009/el2009-35.html	Chehal / Trehan
2009-34	Inflation Expectations and the Risk of Deflation http://www.frbsf.org/publications/economics/letter/2009/el2009-34.html	Christensen
2009-33	Recent Developments in Mortgage Finance http://www.frbsf.org/publications/economics/letter/2009/el2009-33.html	Krainer

Opinions expressed in *FRBSF Economic Letter* do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System. This publication is edited by Sam Zuckerman and Anita Todd. Permission to reprint portions of articles or whole articles must be obtained in writing. Please send editorial comments and requests for reprint permission to Research.Library.sf@sf.frb.org.