

**RESEARCH REPORT** 

# Unemployment Insurance Benefits

Performance since the Great Recession

Wayne Vroman February 2018





### **ABOUT THE URBAN INSTITUTE**

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

Copyright © February 2018. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Tim Meko.

## Contents

Acknowledgments	iv
Unemployment Insurance Benefits: Performance since the Great Recession	1
The Problem	1
Monetary Eligibility	3
Changes in UI Potential Benefit Duration	4
Nonmonetary Determinations	6
Appeals	10
Recent Changes in Unemployment Duration	10
Estimating the Effects of the Changes on the UI Recipiency Rate	13
Changes in Potential Benefit Duration	13
Changes in Nonseparation Denials and Reemployment and Eligibility Assessment	15
Longer Duration of Unemployment Spells	17
Summary	18
Notes	20
About the Author	21
Statement of Independence	22

## Acknowledgments

This report was funded by the Urban Institute.

The views expressed are those of the author and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at www.urban.org/aboutus/our-funding/funding-principles.

The author thanks Steve Woodbury, Greg Acs, and Daniel Kuehn for their helpful comments on an earlier draft.

## Unemployment Insurance Benefits: Performance since the Great Recession

As the US economy experiences a prolonged recovery from the Great Recession, state unemployment insurance (UI) programs have been rebuilding their trust funds from the low levels reached in 2010 and 2011. At the end of September 2017, total trust fund balances net of borrowing exceeded \$50 billion and represented 0.9 percent of total covered payroll. Relative to UI covered payroll, the aggregate trust fund now roughly matches its prerecession level. Although fund balances in many states, particularly larger states, still fall short of actuarily adequate levels, a major improvement in fund balances has been achieved.

Contrasting with the widespread and continued trust fund rebuilding, UI benefit recipiency rates (the ratio of weekly beneficiaries to weekly unemployment) in many states have failed to recover to prerecession levels. The national recipiency rate has hovered between 0.22 and 0.24 since 2012, about 25 percent lower than its prerecession level of 0.31 from 2004 to 2007. This paper explores the possible reasons for this decline.

### The Problem

Figure 1 shows two common measures of annual UI recipiency rates for the regular (26-week) UI program from 1989 to 2016: the IUTU ratio and the WKTU ratio. Both measures use as their denominators total unemployment of people ages 16 and older (TU), as measured in the monthly labor force survey conducted for the Bureau of Labor Statistics. The numerator of the IUTU ratio is the average weekly number of active claimants for UI benefits (IU). The numerator of the WKTU ratio is the actual weekly number of beneficiaries in the regular UI program (WK). Usually, 85–90 percent of claimants receive benefits in a given week. The increases in both recipiency ratios during the previous three recessions (1990–91, 2001–02, and 2007–09) are obvious. When the economy enters a recession, the unemployment population includes a higher share of job losers, the group most likely to receive UI benefits. The increase in recipiency rate during recessions is only temporary, however, as

increased benefit exhaustions occur with a short lag in these state-administered programs that historically have paid benefits for only 26 weeks.

Note in figure 1 that the recipiency rate after 2011 is low, with a 2012–16 average WKTU ratio of just 0.227. Recipiency is low after recessions because claimant earnings reflect earlier spells of unemployment. Historically, the recipiency rate then increases as recovery progresses and the effects of high lagged unemployment decrease. In figure 1, however, the WKTU ratio in 2016 (0.233) is little changed from 2012 (0.224). Because the unemployment rate was much lower in 2016 than in 2012 (4.9 percent versus 8.1 percent), the lack of an increase in the recipiency rate in recent years presents a puzzle addressed in this paper.

### FIGURE 1

2



Unemployment Insurance Recipiency Rates, 1989-2016

**Source:** Ratios constructed at the Urban Institute with unemployment insurance program data from the Office of Unemployment Insurance and survey data from the Bureau of Labor Statistics.

**Notes:** IU = insured unemployment. WK = weekly unemployment insurance beneficiaries. TU = total unemployment. All data are weekly averages for the indicated years.

The decline of both recipiency measures in figure 1 is large and noteworthy. From 2004 to 2007, the IUTU ratio averaged 0.353 but averaged only 0.263 from 2012 to 2016, a decrease of 26 percent. The average WKTU ratios for the same two periods were 0.309 and 0.227, also a 26 percent decrease. The persistence of low recipiency rates may pose a problem for UI programs during the next recession, as low recipiency will weaken the performance of UI as an automatic stabilizer of the economy.

At least three factors may help explain the persistent low recipiency rates following the Great Recession. The first is statutory restrictions on eligibility. This could encompass requirements related to monetary eligibility, nonmonetary determinations linked to job separations, changes affecting continuing eligibility, and procedures that affect appeals of eligibility determinations. Each of these requirements will be explored in subsequent paragraphs. The second factor is recent changes in federal requirements that affect eligibility. One possible example is the Reemployment and Eligibility Assessment (REA) program, which explicitly requires all states to actively monitor the continuing eligibility of beneficiaries. REA is intended to help claimants find new jobs and ensure that they fulfill program requirements for continuing eligibility. REA was introduced on a pilot basis in a few states in 2006 and 2007, but now all states have active REA programs that assess continuing eligibility for substantial numbers of UI claimants each year. The third potential factor is changes in the US labor market. One obvious change since the Great Recession is an increase in average unemployment duration. Unusually long unemployment duration has persisted during the recovery from the Great Recession. Because regular UI programs pay, at most, 26 weeks of benefits, longer unemployment duration would be expected to adversely affect the UI recipiency rate.

### **Monetary Eligibility**

Ul programs require evidence of work in an earlier 12-month "base period" as an important condition for benefit eligibility. Typically, this requires a minimum level of earnings in the full base period as well as a minimum in the base period quarter (or two quarters) with highest earnings. High quarter earnings determine the claimant's weekly benefit, and base period earnings determine the total potential entitlement (the weekly benefit times the maximum number of weeks eligible). These monetary requirements change periodically, and individual states may raise one or both requirements to improve program solvency following a recession.

One way to summarize a state's monetary eligibility requirement is to calculate the ratio of the base period earnings requirement to the state's average weekly wage in UI-covered employment. Although this measure omits other important elements of monetary eligibility determination, it does summarize a key requirement that must be met by all claimants. This ratio has been computed for every state from 1966 to 2016. The simple average of these state-level ratios showed practically no change between 2009 and 2016, years when increases in base period monetary eligibility requirements might have been expected from states wanting to curb benefits to help restore their trust funds following the Great Recession. During the recent recovery period, some states, such as Arizona, Indiana, Kentucky,

3

Pennsylvania, and Rhode Island, increased their monetary requirements substantially. But most states made small changes or no change, causing the national average of the base period-to-weekly wage ratio to be quite stable. The simple average across 51 state programs was 2.80 weeks during 2005–06 and 2.87 weeks during 2015–16, a 10-year increase of only 2.5 percent.

A second summary measure of monetary requirements is available from quarterly state reports: the ratio of claimants with sufficient wage credits to all claimant monetary determinations. A multiple regression with annual data from 1967 to 2016 explained 73 percent of the variation in this monetary eligibility proportion. Principal explanatory power came from the negative effect of the unemployment rate lagged one year, but there was also a small but significant upward trend and a small but significant negative effect from a dummy variable that entered for the eight years from 2009 to 2016.<sup>1</sup> The coefficient on the latter dummy variable was -0.021, indicating that monetary eligible was somewhat lower during the recovery years. Because the average monetary eligibility proportion during these eight years was 0.837, however, the dummy coefficient indicates that monetary eligibility was only 2.5 percent lower after controlling for the effects of unemployment and the long-term trend.

Other changes that either substantially increased base period earnings requirements or altered the method for calculating weekly benefits have been instituted in a few states, such as Arizona, Indiana, North Carolina, and Rhode Island.<sup>2</sup> For the vast majority of states, however, monetary eligibility requirements and the weekly benefit calculation formulas were unchanged or changed very little between 2006 and 2016.

These findings suggest that changes in monetary eligibility requirements have, on average, been quite modest in recent years. Although they may have been important in a few states, they have not played a major role in the 2009–16 decrease in the UI recipiency rate.

### **Changes in UI Potential Benefit Duration**

From the late 1960s to 2011, maximum potential benefit duration in regular UI programs was at least 26 weeks in all states. By 2017, however, maximum potential duration in nine state programs was fewer than 26 weeks. The states with shorter maximum durations can be arranged into three groups. Four states now have a maximum duration of 20 weeks (Arkansas, Michigan, Missouri, and South Carolina, with Arkansas down from 25 weeks in 2015). Two states (Idaho and Kansas) have variable maximum durations that can reach 26 weeks in periods of high state unemployment but are otherwise lower (23 and 16 weeks, respectively, in January 2017). Three states (Florida, Georgia, and North Carolina) have

variable maximum durations linked to the state unemployment rate, with the highest maximum duration now 20 weeks and the lowest 12 or 13 weeks. Other states, including Ohio, are also considering shorter maximum durations.

Figure 2 displays average UI benefit durations for three groups of states from 1998 to 2016 that help illustrate the consequences of reducing maximum potential benefit duration. Florida, Georgia, and North Carolina are the states with the most radical reductions, each with a maximum of 12 or 14 weeks in 2017. Michigan, Missouri, and South Carolina operated with a maximum duration of 20 weeks from 2012 to 2016. The third group of 43 states maintained a maximum of at least 26 weeks in all years.

### FIGURE 2



Unemployment Insurance Benefit Duration, Three Sets of States, 1998-2016

**Source:** Average duration calculated as a simple average across the indicated groups of states. Underlying state data from the UI Financial Handbook (ETA Report 394).

Note in figure 2 how average benefit duration rose during the recessions of 2001–02 and 2008–09. The most interesting patterns are observed in 2014, 2015, and 2016, where the average for the 43 states remained close to 16 weeks, while Michigan, Missouri, and South Carolina and Florida, Georgia, and North Carolina had sharp falloffs. By 2016, average durations in the two three-state groupings were 23 and 41 percent below the 43-state average, respectively.

5

Reducing maximum potential benefit duration in the regular UI program will have an obvious effect in reducing actual duration. For example, the three states that made the largest reductions in potential duration saw the simple average of their actual benefit durations decrease from 13.0 weeks in 2006 to 9.2 weeks in 2016, a reduction of 3.8 weeks or nearly 30 percent. These changes have contributed to the decrease in the recipiency rate. A quantitative estimate of the size of the effect is presented later in this paper.

### Nonmonetary Determinations

Each year, UI agencies adjudicate millions of UI applications where there are disputes about eligibility for benefits. Some disputes arise over separation issues, where the circumstances of the job termination are at issue. A common dispute involves the employer contending the worker quit and the employee arguing the separation was initiated by the employer. Other disputes involve nonseparation issues, where initial eligibility has been established. Here, the agency typically investigates whether the beneficiary meets program requirements for continuing eligibility (e.g., evidence of work, sufficient search, and availability for work). Denials or disqualifications can last for the entire spell of unemployment or for shorter periods until the disqualifying condition is removed. In 2016, UI agencies adjudicated 3.37 million disputes over separation issues and 3.43 million disputes over nonseparation issues.

Table 1 shows four regressions that describe national nonmonetary activities for quits and misconduct, the two issues that account for nearly every disputed separation. For both, there is a regression for the determination rate (determinations per new spell of unemployment, columns 1 and 2) and the denial rate (denials per determination, columns 3 and 4).

For both separation issues, there is a strong link between the rate of disputes and the business cycle, decreasing when the unemployment rate increases but then rebounding during the following year. Both determination rate regressions also have upward linear trends, but the trend is much larger for misconduct. The misconduct determination rate was 0.076 per new unemployment spell in 1980, but it more than doubled to 0.177 in 2016. The determination rates for quits in 1980 and 2016 were 0.076 and 0.089, respectively. Because of the strong upward trend in misconduct determinations, more than one in every four new spells had a separation determination in 2016.

Determination rates for both separation issues were unusually high in the 1970s. The present analysis does not offer an explanation for the high determination rates of this period. The variable

"Dummy 1971–79" is included in the table 1 specifications to control for the high volume of determinations in these early years.

The primary reason for fitting the regressions is to test for changes in nonmonetary activities during the most recent years. Each regression in table 1 includes a dummy variable active during the recent recovery period, from 2009 to 2016. For both determination rate regressions, this dummy enters with a small negative coefficient, with a value of about -0.01 indicating a decrease of about 1 percent during these recovery years. For separation determinations, the regressions do not suggest a large change in determination rates from 2009 to 2016.

### TABLE 1

	(1) Voluntary quit determination rate	(2) Misconduct determination rate	(3) Voluntary quit denial rate	(4) Misconduct denial rate
Constant	0.0846	0.0300	0.7187	0.4036
	(9.4)	(2.3)	(30.8)	(17.3)
TUR	-0.0064	-0.0055	0.0010	0.0011
	(6.1)	(3.7)	(0.4)	(0.4)
TURLag	0.0037	0.0059	-0.0007	-0.0019
	(3.7)	(4.1)	(0.3)	(0.7)
Trend 1971	0.0007	0.0032	0.0006	-0.0004
	(3.7)	(12.8)	(1.2)	(1.0)
Dummy	0.0374	0.0268	-0.0465	-0.0395
1971-79	(9.3)	(4.7)	(4.5)	(3.8)
Dummy	-0.0098	-0.0110	0.0140	-0.0122
2009-16	(2.0)	(1.6)	(1.1)	(1.0)
Adjusted R <sup>2</sup>	0.835	0.937	0.721	0.369
Standard error	0.0063	0.0090	0.0165	0.0165
Mean	0.089	0.112	0.728	0.378

Nonmonetary Determinations, Separation Issues, 1971–2016

**Source:** Data from ETA 207 reports of nonmonetary determinations and the Bureau of Labor Statistics Local Area Unemployment Statistics program.

**Notes:** Determination rates measured as determinations per new spell of unemployment. Denial rates measured as denials per determination. Beneath each coefficient is the absolute value of its t-ratio. All regressions have 46 data points.

Unlike the determination rate regressions, the denial rate regressions in table 1 do not show a linkage with the business cycle. All four unemployment rate coefficients in columns 3 and 4 are small, and none achieve statistical significance. Note also that both denial rates are essentially trendless. As with the determination rates, the denial rates also behaved differently from 1971 to 1979 than in later years. For both separation issues, the denial rates were significantly lower in these years compared with later years.

7

Finally, note in table 1 that the denial rates for both separation issues from 2009 to 2016 did not differ significantly from their respective denial rates in earlier years. For both separation issues, determination rates and denial rates from 2009 to 2016 did not exhibit unusual patterns. Thus, the national aggregate data do not support the hypothesis that separation determinations played a major role in reducing benefit recipiency after the Great Recession.

UI programs made 3.43 million nonseparation determinations in 2016. The traditional measure of nonseparation determination frequency is the number of determinations per 10 claimant contacts, where the latter is the number of weeks in active claim status. Unlike separation determinations that occur at the start of a spell before any payments, nonseparation determinations can be made during any week of an active claim. In 2016, the nonseparation determination rate was 0.267 per 10 claimant contacts, or 2.67 percent of claimant contacts.

Table 2 shows four regressions that examine determination rates and denial rates for nonseparation issues adjudicated between 1971 and 2016. The regression specifications use the same explanatory variables used for separation issues in table 1: the unemployment rate (TUR, current and lagged one year), a long run linear trend ("Trend 1971"), a dummy variable to capture the high determination rates from 1971 to 1979, and a dummy variable for 2009–16. There are two regressions each for both the determination rate and the denial rate. The second of each pair helps to highlight the contribution of the dummy variable for the 2009–16 period.

#### TABLE 2

	(1) Determination rate	(2) Determination rate	(3) Denial rate	(4) Denial rate
Constant	0.3608	0.4629	0.3489	0.4144
	(10.4)	(8.7)	(11.2)	(8.4)
TUR	-0.0307	-0.0363	0.0003	-0.0033
	(5.0)	(5.8)	(0.1)	(0.6)
TURLag	0.0207	0.0171	0.0002	-0.0020
	(3.4)	(2.9)	(0.0)	(0.4)
Trend 1971	-0.0021	-0.0043	0.0102	0.0088
	(3.4)	(4.1)	(18.4)	(9.0)
Dummy 1971-79	0.1143	0.0800	-0.0336	-0.0557
	(5.6)	(3.3)	(1.8)	(2.5)
Dummy 2009-16		0.0710		0.0455
		(2.4)		(1.7)
Adjusted R <sup>2</sup>	0.770	0.794	0.944	0.946
Standard error	0.0399	0.0377	0.0357	0.0350
Mean	0.267	0.267	0.585	0.585

#### Nonmonetary Determinations, Nonseparation Issues, 1971-2016

**Source:** Data from ETA 207 reports of nonmonetary determinations and the Bureau of Labor Statistics Local Area Unemployment Statistics program.

**Notes:** Determination rates measured as determinations per 10 claimant contacts. Denial rates measured as denials per determination. Beneath each coefficient is the absolute value of its t-ratio. All regressions have 46 data points.

Both determination rate regressions in table 2 show cyclical sensitivity similar to table 1; namely, the determination rate decreases when the unemployment rate increases then increases in the following year. The TUR and TURLag coefficients are both significant in columns 1 and 2. Also entering significantly are a negative long-term trend ("Trend 1971") and a positive coefficient for the 1971–79 dummy variable.

Note that the dummy variable for 2009-16 enters the regression in column 2 with a positive coefficient of 0.071. In the past eight years, the mean determination rate per 10 claimant contacts was 0.209. Removing the effect of the 2009-16 dummy variable yields a projected average determination rate for these years of 0.138. Column 2 in table 2 indicates the determination rate increased by more than half from what it otherwise would have been (0.071  $\div$  0.138, or 0.514) absent the higher rate of nonmonetary determinations.

Columns 3 and 4 in table 2 show that nonseparation denial rates trended sharply upward after 1971–79. The actual denial rate in 1980 was 0.414, but it had more than doubled to 0.842 by 2016. Column 4 displays a positive coefficient of 0.0455 for the 2009–16 dummy variable. In the past five years, 2012–16, the nonseparation denial rate has consistently exceeded 0.80. Denial rates between

9

0.70 and 0.79 were present in every year from 2006 to 2011 but only once previously, in 2003. These very high denial rates of 0.70 or higher are all concentrated between 2003 and 2016.

The regressions of table 2 point to increased nonmonetary nonseparation determinations and denials as an important factor contributing to the decrease in the UI recipiency rate since the Great Recession. The 2009–16 dummy variable coefficients in the regressions in columns 2 and 4 are both positive and significant. Column 2 suggests that state agency administrative actions have increased nonseparation determination rates by more than half in the past eight years. During the same time, nonseparation denial rates reached their highest levels in the past 46 years. The vast majority of these nonseparation determinations, more than 8 of every 10, have been denials.

### Appeals

Nonmonetary determinations may be viewed as incorrect by the losing party, leading to appeals of UI agency decisions. There were 1.07 million appeals of UI lower-authority decisions in 2016, and the annual number has exceeded 1.0 million in all years since 2001.<sup>3</sup>

Appeals for voluntary quits, misconduct, and nonseparation issues were examined individually in regressions spanning the years 1971–2016. The regressions found that appeals of all three issues responded positively to the unemployment rate, both for the current year and lagged one year, with the lag year response the larger of the two. The analysis also found upward trends in all three rates of appeals per determination. However, dummy variables for the recovery years 2009–16 consistently had negative coefficients, indicating that the rate of lower-authority appeals was somewhat lower than expected. Unusual patterns in appeals did not contribute to the low UI recipiency rates observed since the end of the Great Recession.

### **Recent Changes in Unemployment Duration**

In 2017, regular state UI programs can potentially pay at least 26 weeks of UI benefits to eligible claimants in all but nine states. One consequence of the Great Recession has been a substantial increase in the average duration of unemployment. Between 1967 and 2008, annual mean unemployment duration as measured by the Bureau of Labor Statistics monthly labor force survey ranged from 7.8 weeks in 1969 to 20.0 weeks in 1983. Following the Great Recession, mean duration exceeded 39.0

weeks in 2011 and 2012 and 33.0 weeks in 2013 and 2014. During 2016, mean duration was 27.5 weeks even though the national TUR averaged 4.9 percent.

Historically, mean unemployment duration nationwide has evolved in response to three known factors. Mean duration increases when aggregate unemployment increases, and it also responds positively to higher levels of lagged unemployment. In fact, the lagged TUR has a larger effect on duration than the current year's TUR. Mean duration has been trending upward for the past several decades. These developments are summarized by equation (1), a regression that spans the 39 years from 1970 to 2008.

$$Dur = 0.066 + 0.656 \times TUR + 1.001 \times TURLag + 0.232 \times T70$$
(1)
(0.1)
(2.7)
(4.6)
(12.1)
  
Adj. R<sup>2</sup> = 0.83
  
Std. Error = 1.22

where Dur is the mean unemployment duration (in weeks), TUR is the current year unemployment rate (as a percentage of the labor force), TURLag is the unemployment rate lagged one year, and T70 is a linear trend starting in 1970 (1970 = 1, 1971 = 2, etc.).

The numbers in parentheses below the coefficients are t-ratios, and all three slopes are significant by the usual statistical criteria. The regression explains 83 percent of the variation in mean duration over the period. It indicates that an increase in the unemployment rate (TUR) of 1 percentage point increases mean duration by 0.656 weeks in the same year and an additional 1.001 weeks in the following year. Note that duration increased by 0.23 weeks per year, or 2.3 weeks per decade, during these 39 years.

The regression fits the data closely, as indicated by the standard error of the estimate of 1.22 weeks. When actual and projected durations are compared for the 39 individual years, the largest error (deviation between actual and projected duration) occurred in 1994, when actual duration was 18.8 weeks despite a projected duration of 16.8 weeks, a difference of 2.0 weeks. In short, the regression accurately represents mean duration between 1970 and 2008.

Figure 3 summarizes developments in mean unemployment duration for a 47-year period from 1970 to 2016. The figure has three series: (1) actual mean duration for all 47 years, (2) projected duration from regression 1 for the years 1970–2008, and (3) projected duration from regression 1 for the years are out-of-sample projections.

#### **FIGURE 3**



#### Average Unemployment Duration, 1970–2016

Source: Data on unemployment duration from the Bureau of Labor Statistics.

Three features of figure 3 are noteworthy. First, the close fit of the regression throughout 1970–2008. Second, the large increase in actual duration after 2008; the mean increases to nearly 40 weeks in 2011 and 2012 before starting to decline. Third, the consistently large projection errors throughout 2009–16, especially in 2011 and 2012 (14.0 and 15.2 weeks, respectively). Although the errors decline after 2012, the error for 2016 was 8.1 weeks, four times the largest error from the 1970–2008 estimation period.

Figure 3 vividly illustrates how unemployment duration during the recovery from the Great Recession has entered a new era relative to the pre-2009 years. Associated with the longer average unemployment duration have been increased exhaustion rates in the regular UI programs. In 2016, for example, the exhaustion rate was 37.8 percent, much higher than in earlier years with comparable unemployment rates.<sup>4</sup>

Between 2009 and 2013, large-scale, federally financed extended UI benefit programs targeted to exhaustees paid substantial UI benefits to the long-term unemployed.<sup>5</sup> These federal programs ended on December 31, 2013. Starting in January 2014, the only UI benefits available to the unemployed were regular UI benefits.

Two duration-related factors could have contributed to the decline in UI recipiency rate since 2009. The first is the unusually long average durations of unemployment spells since 2008. The second is the previously noted reductions in potential benefit duration in regular UI programs beginning in 2011 and operative in eight states by 2016.

# Estimating the Effects of the Changes on the UI Recipiency Rate

The preceding analysis identified three factors that likely contributed to the decrease in the UI benefit recipiency rate from 2009 to 2016: (1) nonmonetary, nonseparation determination rates and associated denial rates increased; (2) several states shortened the maximum potential duration of regular UI benefits; (3) the average duration of unemployment spells throughout the labor market increased to much higher levels. The first two factors stem from changes in the operations of state UI programs, and the third was external to the UI programs.

### **Changes in Potential Benefit Duration**

The easiest of this trio to evaluate is probably the change in potential benefit duration. First, regressions were fitted for mean benefit duration in years when the maximum potential duration was 26 weeks. Between 2011 and 2016, eight UI programs operated with maximum durations of fewer than 26 weeks for multiple years. For each state, a regression was fitted for the period 1967–2008. The parameters from the regressions were then used to project mean duration for the years 2009–16. For these eight years, the deviations between the regression-based projections and actual duration were interpreted as the effect of reducing maximum potential duration to fewer than 26 weeks.

Each regression in table 3 has three explanatory variables: the current-year unemployment rate (TUR), the TUR lagged one year, and a linear trend. The overall fits of the regressions vary widely, with four adjusted R<sup>2</sup> values exceeding 0.70 and two falling below 0.25. Two findings are quite consistent across the eight equations: higher current TURs cause longer benefit durations, and average duration trended significantly upward in all eight states.

#### TABLE 3

State	Constant	TUR	TUR Lag	Trend 1967	Adjusted R <sup>2</sup>	Standard error	Mean
Florida	8.23	0.427	0.078	0.105	0 700	0.040	40.07
	(14.3)	(3.6)	(0.7)	(9.9)	0.732	0.810	13.37
Georgia	8.39	0.626	-0.471	0.039			
	(9.4)	(3.0)	(2.3)	(2.5)	0.228	1.196	10.08
North Carolina	6.19	0.502	0.020	0.067			
	(6.4)	(2.5)	(0.1)	(3.6)	0.343	1.459	10.29
Michigan	7.53	0.840	-0.267	0.059			
	(11.5)	(7.4)	(2.4)	(4.0)	0.709	1.130	13.17
Missouri	8.65	0.726	-0.302	0.095			
	(15.2)	(4.6)	(1.9)	(8.0)	0.702	0.931	13.01
South Carolina	8.96	0.239	0.013	0.049			
	(10.0)	(1.4)	(0.1)	(3.1)	0.209	1.230	11.53
Arkansas	8.86	0.467	-0.168	0.072			
	(13.1)	(3.3)	(1.2)	(6.9)	0.547	0.793	12.36
Kansas	7.51	1.247	-0.037	0.037			
	(12.9)	(6.5)	(0.2)	(3.1)	0.762	0.805	13.46

#### Average Unemployment Insurance Benefit Duration Regressions

**Source:** Regressions for the years 1967–2008 explaining mean unemployment insurance benefit duration in weeks. **Notes:** Regressions used to project mean duration for the period 2009–2016. Absolute value of t-ratios in parentheses beneath coefficients.

The regression equations were then used to project mean duration from 2009 to 2016. The periods with maximum durations of fewer than 26 weeks vary from five full years (Arkansas, Florida, Michigan, Missouri, and South Carolina) to three years (Kansas and North Carolina). Thus, the effects of shorter durations on total weeks compensated in the eight states are larger toward the end of the projection period.

These eight states represent about one-fifth of the state UI system. Their combined weeks compensated in 2009 (54.2 million) was 20.6 percent of the 263.3 million weeks across programs in all 50 states and the District of Columbia. When projection errors from 2009 to 2016 were examined, durations in several states did not immediately decrease the year after the first full year of shorter maximum benefit duration. The combined effects across the eight states were first fully apparent in 2015.

To estimate the effects of shortened benefit durations on recipiency, the deviation between projected average duration and actual average duration was calculated for each of the eight states for each year from 2009 to 2016 and multiplied by first payments in the same year. These overprojections totaled 1.91 million weeks in 2015 and 2.48 million weeks in 2016, or 1.9 and 2.5 percent, respectively, of national weeks compensated during these two years.<sup>6</sup> These estimates may seem small, but they are substantial when compared with estimated weeks with no reductions in the eight states. Actual weeks compensated across all eight states totaled 11.4 million and 9.8 million in 2015 and 2016, respectively.

When the estimated reductions are added to actual weeks compensated and measured as a share of the resulting total, they represent 14.3 percent of weeks in 2015 and 20.2 percent of weeks in 2016. Thus, the small size of the reductions relative to national weeks compensated (1.9 percent and 2.5 percent, respectively) mainly reflects the modest share of weeks compensated from the eight states in the national picture (about one-fifth of the national total).

### Changes in Nonseparation Denials and Reemployment and Eligibility Assessment

States report details of nonmonetary determination activities each month under two broad categories. One category, separation determinations, examines the circumstances surrounding the termination of employment relationships where there is a dispute or issue. UI agencies decide if the job termination disqualifies a claimant from benefits, frequently having to judge if the termination was employee initiated (a quit) or employer initiated (a discharge). This is important because quits are much less likely to be compensated than discharges. After payments begin, the second broad category, nonseparation determinations, may address an eligibility issue needing resolution. In 2016, there were 3.37 million determinations on separation issues, with 1.66 million disqualifications, and 3.43 million nonseparation determinations, with 2.89 million disqualifications.

For about a decade, the national Office of Unemployment Insurance has overseen the implementation of a Reemployment and Eligibility Assessments (REA) program. The purpose of REA is to help unemployed workers secure new jobs and ensure that claimants are fulfilling the requirements to maintain benefit eligibility. REA participants provide evidence of active work search, develop reemployment plans with employment agency staff, and meet periodically with agency staff to assess their progress in finding employment. Between 2006 and 2016, 6.3 million REAs were completed, and about 1 million were completed each year in 2015 and 2016.

Table 4 summarizes details of nonmonetary determinations and denials and selected REA activities. The nonmonetary determination detail extends from 1989 to 2016, and benefit denials linked to REA are shown from 2006 to 2016. For separation determinations in the topmost panel, all cases involving quits and misconduct are combined. Observe that the number of determinations reflects the business cycle, with the largest number occurring in the high unemployment year 2009.

No trends stand out in the first panel, with about 3.35 million separation determinations in both 1999 and 2016. Note that the overall denial rate was close to 0.50 in all five years included in the table.

Also observe that REA denials on separation issues are infrequent when compared to separation issue denials (0.2 or 0.3 percent of separation denials).

### TABLE 4

	(1) Nonmonetary		(3) Denial rate		(5) REA share		
Year	determinations	(2) Denials	(2 ÷ 1)	(4) REA denials	(4 ÷ 2)		
Separation issues							
1989	2,965	1,613	0.544	N/A	N/A		
1999	3,350	1,802	0.538	N/A	N/A		
2006	3,973	1,987	0.500	4.613	0.002		
2009	5,095	2,542	0.499	0.851	0.003		
2016	3,372	1,664	0.493	3.456	0.002		
		Able and a	vailable for work				
1989	1,294	835	0.645	N/A	N/A		
1999	1,133	716	0.632	N/A	N/A		
2006	975	699	0.717	3.802	0.005		
2009	1,511	1,009	0.668	3.429	0.003		
2016	1,238	1,033	0.834	10.540	0.010		
		Disqualifying a	nd deductible inco	me			
1989	660	354	0.536	N/A	N/A		
1999	866	486	0.561	N/A	N/A		
2006	438	347	0.791	1.758	0.005		
2009	980	791	0.807	3.900	0.005		
2016	399	330	0.827	9.197	0.028		
Other nonseparation issues (including reporting requirements)							
1989	1,223	706	0.577	N/A	N/A		
1999	1,750	1,008	0.576	N/A	N/A		
2006	1,468	1,037	0.706	14.946	0.014		
2009	2,238	1,609	0.719	2.588	0.002		
2016	1,796	1,529	0.851	36.646	0.024		

Nonmonetary Determinations and Denials and Reemployment and Eligibility Assessment Denials

**Sources:** Columns 1 and 2 from ETA 207 reports of nonmonetary determinations. Column 4 from ETA 9128 reports. **Notes:** REA = Reemployment and Eligibility Assessment. N/A = REA program not active. Some ETA 9128 reports were not submitted: Illinois in 2016, New Jersey in 2009, and North Dakota in 2016. Data in columns 1, 2, and 4 in thousands.

The bottom three panels of table 4 display details for three types of nonseparation determinations. None show a strong upward trend in the number of determinations. For all three groups, the number of determinations in 2016 is similar to or less than the number in 1999. However, note that the denial rates in column 3 are uniformly highest in 2016. All three denial rates in 2016 exceed 0.80. In recent years, nonseparation determinations have become much more likely to result in a denial than in 1989 or 1999.

The REA program can deny benefits when beneficiaries do not meet requirements for continuing eligibility. But note in column 4 that REA denials are comparatively infrequent. REA denials as a proportion of all nonseparation denials generally fall below 0.01, or 1 percent (column 5). Only in 2016 did they rise to more than 1 percent of nonseparation denials.

Estimating the effects of nonmonetary determination and REA activities on the overall benefit recipiency rate poses several challenges. It is clear that denial rates for nonmonetary nonseparation determinations are higher now than in the 1980s and 1990s, and we can use denial rates to estimate the increased number of denials. Multiplying the number of nonseparation determinations in 2016 (3.43 million) by the change in the overall denial rate from 1999 to 2016 (0.589 to 0.842, a change of 0.253) yields an estimated 0.87 million increase in denials.

What is not known, however, is the weeks of benefits not paid as a result of these denials. Some nonseparation denials are for the remaining duration of the spell, some are for part of the remaining duration, and some are for a single week. Suppose the average for the 0.87 million denials is two weeks. That suggests weeks compensated were reduced by 1.74 million weeks. Weeks compensated in 2016 totaled 93.67 million, suggesting that total weeks would have been 95.40 million weeks (1.8 percent higher with a denial rate of 0.589 instead of 0.842). Different estimates of average duration per denial would obviously change the estimated reduction in weeks compensated.

Estimating the effects of the REA program on weeks compensated presents another big challenge. From table 4, it is clear that the direct reduction in weeks compensated from REA denials is not very large. The 66,383 denials across the three nonseparation categories in table 4 would total only 132,746 weeks using the estimate of 2 weeks per denial. This represents only 0.14 percent of actual weeks compensated in 2016.

However, a separate factor to consider is that higher denial rates for nonseparation determinations and denials from REA activities could both affect the number of applications for UI benefits or claimant attitudes toward their duration in benefit status. To the extent these effects exist, they would confer a larger total effect of activities that monitor continuing eligibility (nonseparation determinations and REAs) than suggested by the preceding analysis.

### Longer Duration of Unemployment Spells

As noted previously in figure 3, average unemployment duration during the recovery from the Great Recession has been the longest in more than 50 years. One clear manifestation of increased unemployment duration has been an increase in exhaustion rates in regular UI programs. For the 43 programs with 26-week maximum durations, the average exhaustion rate in 2016 was 32.3 percent, or 2.4 percentage points higher than the 29.9 percent rate in 1997, a year with an identical national TUR of 4.9 percent.<sup>7</sup> Higher exhaustion rates associated with longer unemployment duration operate to reduce the UI benefit recipiency rate. At a given unemployment rate, total weeks of unemployment are spread across smaller numbers of the unemployed and of UI beneficiaries. An increased number of exhaustions reduces weeks compensated relative to total weeks of unemployment, as measured by the Bureau of Labor Services labor force survey.

First payments in 2016 for these 43 states totaled 5.127 million, and exhaustions totaled 1.936 million. Had the 1997 exhaustion rate applied in 2016, exhaustions would have totaled 1.785 million (0.151 million fewer). Translating the lower exhaustion total into increased weeks compensated is not obvious because the longer average duration would also affect the average benefit duration of recipients who did not exhaust benefits. On the other hand, a 4.9 percent unemployment rate with an average duration equal to that observed in 1997 would imply a larger number of new unemployment spells and a larger number of UI first payments. Thus, estimating the effect of longer average unemployment duration on total weeks compensated is not a simple calculation. It is clear that more recipients exhaust benefits when unemployment duration is longer, but the calculation of the effect on total weeks of UI benefits is not obvious. Although the size of this effect is not obvious, it may contribute at least as much to the recent lowering of the recipiency rate as the average of the other two factors just discussed (i.e., shorter potential duration in eight states [nine states in 2017] and increased nonseparation denials).

### Summary

In the years following the Great Recession, the recipiency rate in the regular state UI program has remained significantly below historic averages. Although the ratio of weekly UI beneficiaries to weekly unemployment averaged 0.31 in the two decades before the Great Recession, the eight-year average from 2009 to 2016 was 0.23. This paper explored several potential explanations for the roughly 25 percent decline in recipiency.

Three potential explanations have been ruled out. First, the requirements for monetary eligibility have not changed in most states. With a few notable exceptions, monetary requirements in 2016 were similar to those of 2006–07, just before the Great Recession. Second, nonmonetary determinations and denials on separation issues have not changed much in either the determination rate (determinations per new spell of unemployment) or the denial rate (denials per determination). Third, there were no unusual developments in UI appeals.

Three partial explanations have been identified. First, reductions in potential benefit duration, applicable in eight states in 2016, have contributed to reduced weeks compensated in those states. Second, determination rates and denial rates on nonmonetary nonseparation issues have increased measurably since 2006–07. The introduction and growth of the REA program may have also contributed to the decline. These first two factors were estimated to have contributed about 2.5 and 1.8 percentage points, respectively, to a reduced recipiency rate nationwide. These two factors explain about half of the total reduction in the recipiency rate of about 8.2 percentage points.<sup>8</sup>

The third contributing factor has been the continuing increase in average unemployment duration in the US labor market. The average exhaustion rate in the 43 states that have not reduced potential benefit duration was 3 percentage points higher in 2016 than in 1997, increasing exhaustions by 0.151 million. However, the analysis did not estimate how much the increased exhaustions contributed to the decrease in the recipiency rate.

It does seem that the combined sum of these three factors falls short of explaining the total reduction in the regular UI recipiency rate. Developing a fuller understanding of the reduction remains an important topic for further research. Hopefully, this analysis makes a constructive contribution toward understanding the reason(s) for the reduced UI recipiency rate.

## Notes

- 1. These eight years will be referred to as the recovery years throughout the report.
- 2. Four states (Arizona, Kentucky, Pennsylvania, and Rhode Island) required base period earnings to be substantially higher in 2017 than in 2006. Arizona and Indiana changed their weekly benefit calculations from high quarter earnings to total base period earnings. North Carolina changed its weekly benefit calculation from earnings in the base period high quarter to earnings in the last two quarters of the base period.
- 3. All states but Nebraska have lower and higher UI appeals tribunals. There were 124,203 higher-authority appeals in 2016. Higher-authority appeals are not examined in this paper.
- 4. The unemployment rates in 1970 and 1997 also averaged 4.9 percent. The respective exhaustion rates were 20.0 percent and 33.7 percent. Exhaustion rates increased noticeably between 1970 and 2016.
- 5. The programs were Emergency Unemployment Compensation and Federal-State Extended Benefits. In states with the highest unemployment rates during 2009–13, these programs combined could pay up to 75 added weeks of UI benefits, or a total of 101 weeks when added to regular UI benefits.
- 6. The percentages were calculated on national totals that included these additional weeks that would have been compensated if maximum durations had not been shortened.
- 7. This is the simple average of 43 state-level exhaustion rates, the ratio of annual exhaustions to annual first payments expressed as a percentage. This calculation is from column 26 of the Unemployment Insurance Financial Data Handbook, accessible at "ET Financial Data Handbook 394," US Department of Labor Employment & Training Administration, last modified June 17, 2016, https://workforcesecurity.doleta.gov/unemploy/hb394.asp.
- 8. The average recipiency rate (weekly beneficiaries to weekly unemployment) was 0.309 from 2004 to 2007 and 0.227 from 2012 to 2016, a decrease of 8.2 percentage points.

## About the Author



Wayne Vroman is an Urban Institute associate in the Center on Labor, Human Services, and Population, having joined in 1977. Vroman is a labor economist whose work focuses on unemployment insurance (UI) and other social protection programs. He has directed several past projects on UI financing, benefit payments, and program administration. He has developed simulation models to project the financing of UI in individual states, most recently in Kentucky and Ohio. He has also worked on UI program issues in several foreign economies. Vroman has a BA, MA, and PhD in economics from the University of Michigan.

### **STATEMENT OF INDEPENDENCE**

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

2100 M Street NW Washington, DC 20037

• E L E V A T E • T H E

www.urban.org

U

NST

- 22

1.

1.0

. \*

1

. .

12

1

1.0

- 12

1

.

۰.

.

.

12

20

.

10

.

.

.

.

· DEBATE