# UNEMPLOYED WITH JOBS AND WITHOUT JOBS BOB HALL AND MARIANNA KUDLYAK

The opinions expressed are the authors' and do not reflect those of the Federal Reserve Bank of San Francisco or the Federal Reserve System. Hall's research was supported by the Hoover Institution. We thank Benjamin Schoefer for helpful discussions. The paper, data and calculations, and an online appendix providing additional results are available at Kudlyak's website.

Some of the unemployed are on temporary layoff from jobs that they expect to be recalled to; the rest of the unemployed do not have jobs

Some of the unemployed are on temporary layoff from jobs that they expect to be recalled to; the rest of the unemployed do not have jobs

We study the distinction between recall-unemployment and jobless-unemployment

Some of the unemployed are on temporary layoff from jobs that they expect to be recalled to; the rest of the unemployed do not have jobs

We study the distinction between *recall-unemployment* and *jobless-unemployment* 

Both types are associated with lower aggregate work hours and corresponding loss of earnings

Some of the unemployed are on temporary layoff from jobs that they expect to be recalled to; the rest of the unemployed do not have jobs

We study the distinction between *recall-unemployment* and *jobless-unemployment* 

Both types are associated with lower aggregate work hours and corresponding loss of earnings

Jobless-unemployment follows the principles of modern search-and-matching models, while workers suffering recall unemployment are waiting for recall.

• Prior to the pandemic, recall-unemployment was unimportant.

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.
- In the pandemic, recall-unemployment returned rapidly toward normal while jobless-unemployment rose somewhat

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.
- In the pandemic, recall-unemployment returned rapidly toward normal while jobless-unemployment rose somewhat
- $\bullet$  Most of the recall-unemployed began their spells in April 2020

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.
- In the pandemic, recall-unemployment returned rapidly toward normal while jobless-unemployment rose somewhat
- $\bullet$  Most of the recall-unemployed began their spells in April 2020
- At 40 percent per month, the recall-unemployment rate of finding work is about double the rate for the jobless-unemployed.

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.
- In the pandemic, recall-unemployment returned rapidly toward normal while jobless-unemployment rose somewhat
- $\bullet$  Most of the recall-unemployed began their spells in April 2020
- At 40 percent per month, the recall-unemployment rate of finding work is about double the rate for the jobless-unemployed.
- At 20 percent per month, job-finding rates for jobless-unemployed workers are only somewhat lower than in the best years of the previous expansion.

- Prior to the pandemic, recall-unemployment was unimportant.
- The pandemic caused an explosion of recall unemployment.
- In the pandemic, recall-unemployment returned rapidly toward normal while jobless-unemployment rose somewhat
- $\bullet$  Most of the recall-unemployed began their spells in April 2020
- At 40 percent per month, the recall-unemployment rate of finding work is about double the rate for the jobless-unemployed.
- At 20 percent per month, job-finding rates for jobless-unemployed workers are only somewhat lower than in the best years of the previous expansion.
- The vacancy/jobless-unemployed ratio, a measure of labor-market tightness, fell from 1.4 just before the pandemic to 0.8 in October 2020, which is same as in 2016 and well above the value of 0.2 at the worst of the recession in 2009.

#### Related Research

- Inefficiency of unemployment arising from temporary layoffs: Feldstein (1976), Topel (1983), Card and Levine (1994), Brown and Ferrall (2003), and Ratner (2014)
- Recent role of recalls: Fujita and Moscarini (2017)
- Theory of rest unemployment: Alvarez and Shimer (2011)

• Models of the pandemic labor market with recalls: Gregory-Menzio-Wiczer (2020), Gallant and co-authors (2020) and Buera and co-authors (12020)

# How the Current Population Survey Measures unemployment

An individual is unemployed if they did not work during the week containing the 12th of the month, were available for work, and either actively searched for work or expected to be recalled to their previous job.

# How the Current Population Survey Measures unemployment

An individual is unemployed if they did not work during the week containing the 12th of the month, were available for work, and either actively searched for work or expected to be recalled to their previous job.

Unemployed people are asked further questions to determine if their unemployment is a result of temporary layoff, permanent layoff, completing a temporary job, recently entering the labor force, reentering the labor force, or quitting a job.

# How the Current Population Survey Measures unemployment

An individual is unemployed if they did not work during the week containing the 12th of the month, were available for work, and either actively searched for work or expected to be recalled to their previous job.

Unemployed people are asked further questions to determine if their unemployment is a result of temporary layoff, permanent layoff, completing a temporary job, recently entering the labor force, reentering the labor force, or quitting a job.

Unemployment on temporary layoff corresponds to recall-unemployment and the other reasons comprise jobless-unemployment.

# Reasons a respondent became unemployed

Unemployed individuals are classified by six reasons for entering unemployment:

- (1) lost a permanent job,
- (2) completed a temporary job,
- (3) was laid off with expectation of recall (temporary layoff),
- (4) re-entered the labor force,
- (5) entered the labor force for the first time, and
- (6) quit a previous job.

# Reasons a respondent became unemployed

Unemployed individuals are classified by six reasons for entering unemployment:

- (1) lost a permanent job,
- (2) completed a temporary job,
- (3) was laid off with expectation of recall (temporary layoff),
- (4) re-entered the labor force,
- (5) entered the labor force for the first time, and
- (6) quit a previous job.

Reason 3 corresponds to recall-unemployment and the other reasons comprise jobless-unemployment.

# RECALL- AND JOBLESS-UNEMPLOYMENT, FULL SAMPLE



# Recall- and jobless-unemployment, 2019 and 2020



#### PREPONDERANCE OF RECALL-UNEMPLOYMENT

Recall-unemployment accounted for more than the entire increase in unemployment at the beginning of the 2020 pandemic.

Recall-unemployment accounted for more than the entire increase in unemployment at the beginning of the 2020 pandemic.

From March to April 2020, the aggregate unemployment rate increased by 9.9 percentage points.

Recall-unemployment accounted for more than the entire increase in unemployment at the beginning of the 2020 pandemic.

From March to April 2020, the aggregate unemployment rate increased by 9.9 percentage points.

The recall-unemployment rate increased by 10.1 percentage points. The jobless-unemployment rate declined slightly.

# RECALL-UNEMPLOYMENT BY DURATION, AS PERCENT OF LABOR FORCE



#### Most layoffs occurred in April 2020

In the lowest duration category, less than 5 weeks, serves as a measure of new layoffs into recall-unemployment.

#### Most layoffs occurred in April 2020

In the lowest duration category, less than 5 weeks, serves as a measure of new layoffs into recall-unemployment.

There was a huge pulse of layoffs in April, amounting to almost 8 percent of the labor force. Layoffs in later months were nowhere near as high. In May, most of the workers on layoff had been laid off in April; new layoffs were small. That category also includes workers laid off in March and a few in February.

#### Most layoffs occurred in April 2020

In the lowest duration category, less than 5 weeks, serves as a measure of new layoffs into recall-unemployment.

There was a huge pulse of layoffs in April, amounting to almost 8 percent of the labor force. Layoffs in later months were nowhere near as high. In May, most of the workers on layoff had been laid off in April; new layoffs were small. That category also includes workers laid off in March and a few in February.

The big lump from April also showed up in June and July in the 5 to 14 week category. By August the lump had moved into the 15 to 26 week category. It was still visible in November in the 27+ weeks category, but by then, most of the lump had been recalled, had found jobs, or moved to jobless-unemployment.

# WORK-FINDING RATES FOR RECALL- AND JOBLESS-UNEMPLOYED, FULL SAMPLE



# Work-Finding Rates for Recall- and Jobless-Unemployed, 2019 and 2020



# Work-Finding Rates for Recall- and Jobless-Unemployed, by Duration, 2019 AND 2020

.

#### Short and all durations



#### Long and all durations



# VACANCY-JOBLESS-UNEMPLOYMENT RATIO, FULL SAMPLE



# VACANCY-JOBLESS-UNEMPLOYMENT RATIO, 2019 AND 2020



The standard Beveridge curve, with total unemployment on the horizontal axis, shifted dramatically to the right at the beginning of the pandemic

The standard Beveridge curve, with total unemployment on the horizontal axis, shifted dramatically to the right at the beginning of the pandemic

A modified Beveridge curve, with jobless-unemployment on the horizontal axis, was fairly stable

The standard Beveridge curve, with total unemployment on the horizontal axis, shifted dramatically to the right at the beginning of the pandemic

A modified Beveridge curve, with jobless-unemployment on the horizontal axis, was fairly stable

There is no additional information in the Beveridge curve beyond what we have presented already

The standard Beveridge curve, with total unemployment on the horizontal axis, shifted dramatically to the right at the beginning of the pandemic

A modified Beveridge curve, with jobless-unemployment on the horizontal axis, was fairly stable

There is no additional information in the Beveridge curve beyond what we have presented already

The Beveridge curve is not a stable object in DMP modeling, because unemployment is a state variable and the vacancy rate is a jump variable

We are thinking of social cost in terms of a world without the pandemic, but we do not take a stand on the how the pandemic could have been averted

We are thinking of social cost in terms of a world without the pandemic, but we do not take a stand on the how the pandemic could have been averted

The gross losses of output are similar for each month of non-work

We are thinking of social cost in terms of a world without the pandemic, but we do not take a stand on the how the pandemic could have been averted

The gross losses of output are similar for each month of non-work

The gross cost per layoff is much smaller for recall-unemployment because spells are much shorter

We are thinking of social cost in terms of a world without the pandemic, but we do not take a stand on the how the pandemic could have been averted

The gross losses of output are similar for each month of non-work

The gross cost per layoff is much smaller for recall-unemployment because spells are much shorter

Net costs of are probably greater for recall-unemployment because a worker in recall-unemployment has a good chance of returning to a position up the job ladder, while the worker in jobless-unemployment drops to the bottom of the ladder.

### Concluding Remarks

The pandemic resulted in a huge pulse of layoffs in April 2020. Most of the decline in employment occurred in that one month.

#### Concluding Remarks

The pandemic resulted in a huge pulse of layoffs in April 2020. Most of the decline in employment occurred in that one month.

Recovery from a bulge in recall-unemployment is much faster than recovery from a bulge in jobless-unemployment

#### Concluding Remarks

The pandemic resulted in a huge pulse of layoffs in April 2020. Most of the decline in employment occurred in that one month.

Recovery from a bulge in recall-unemployment is much faster than recovery from a bulge in jobless-unemployment

The pandemic has been costly even so because the initial decline in employment was so large