Vulnerable Workers During the Pandemic, Recovery, and Tight Labor Market

William M. Rodgers III
Institute for Economic Equity
Federal Reserve Bank of St. Louis

And
Alice Kassens
Roanoke College
And
Federal Reserve Bank of St. Louis

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Introduction: Pandemic, Recovery & Tight Labor Market Periods

- Pre-Pandemic (Jan. 2017 to Mar. 2020)
  - Strong job growth
  - Unemployment rate fell below 4.0%

- The pandemic (Apr. 2020 to July 2020) - Hypothesis: Vulnerable hurt more
  - Payroll Contraction
  - Unemployment rates increased
  - Employment-Population Ratios fell
  - UI Claims Increased

  - Strong job growth
  - Wide-spread job openings and increase in compensation
  - Calls for social justice
  - Great Resignation

- Concern that the economy is slowing down – Hypothesis: Vulnerable workers hurt more
  - Broad-based Inflation
  - Shift from pandemic to endemic
  - Job openings fallen by over 2.6 million since March 2022.
Introduction: Pre-Pandemic, Pandemic, Recovery & Tight Labor Market

• Research Questions:

  • Who are economically vulnerable workers?
  
  • What are the employment experiences of “vulnerable” groups during the four periods?
  
  • Does the employment deterioration and recovery reflect changes in the economy that impacted the job matching process?
  
  • Is the labor market weakening?
  
  • What are keys to sustaining the “tight” labor market? Can unemployment rates stay low even as job openings contract?
Economically Vulnerable: The Criteria

- Lower Employment-Population Ratios
  - Elevated Unemployment Rates
  - Lower Labor Force Participation Rates
- Below Average Hourly Wages and Hours Worked
- Full-time Employment
- Greater Sensitivity to Changes in Area Job Openings and Unemployment
Economically Vulnerable Groups

• Young Non-enrolled with no more than a HS Diploma (age 16 to 24)

• Adults with no more than a HS diploma (age 25 and older)

• Women, all races

• Black men and women

• Latino men and women

• People with a disability (age 16 and older)

• American Indians and Alaska Natives
Data and Methods

• The Data
  • Micro data from the monthly CPS household Surveys: February 2020 to August 2023
  • State-level unemployment rates (BLS-LAUS) and Job Opening Rates (BLS-JOLTS)
  • Merge state-level data to CPS micro data

• Pre-Pandemic, Pandemic, Recovery & Tight Labor Market
  • Pre-Pandemic Period – Jan. 2017 to Mar. 2020
  • Early Pandemic Period – Apr. 2020 to July 2020
  • Labor Market Recovery Period – Aug. 2020 to Feb. 2022
  • Tight Labor Market Period – Mar. 2022 to Sep. 2023

• Tool for Illustrating Structural Shifts and Differences
  • Beveridge curve (unemployment and vacancy relationship)
  • Regress Unemployment status dummy variable on state vacancy rate
Average Women’s Employment-to-Population Ratios (By Macro Period, Race, and Ethnicity)

Source: Authors' calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Men’s Employment-to-Population Ratios
(By Macro Period, Race, and Ethnicity)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Employment-to-Population Ratios of Out of School Young Adults (By Macro Period, Race, and Ethnicity)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Beveridge Curve Framework

Why might h1 and h2 differ?
- Pre Pandemic, Pandemic, Recovery, Tight
- Across Demographic groups
The U.S. Beveridge Curve has returned to its Pre-Pandemic Position.

Notes: Unadjusted Beveridge curves are constructed from coefficients that come from a regression of a dummy variable indicating whether the individual is unemployed on the natural logarithm of their state’s job openings rate, plus dummy variables for period, and their interactions with a state’s job openings. Pre-Pandemic Period- Jan. 2017 and March 2020, Early Pandemic Period - April 2020 to July 2020, Labor Market Recovery Period – August 2020 to February 2022. Tight Labor Market Period – March 2022 to August 2023.
Even During Today’s “Tight” Labor Market, the Beveridge Curves of Women, Black and Latino Men Differ from the Economy-Wide Beveridge Curve.

Notes: Unadjusted Beveridge curves are constructed from coefficients that come from a regression of a dummy variable indicating whether the individual is unemployed on the natural logarithm of their state’s job openings rate, plus dummy variables for period, and their interactions with a state’s job openings. Estimates are for the “Tight” period – March 2022 to August 2023.
Even During Today’s “Tight” Labor Market, the Beveridge Curve of Black Out-of-School Young Adults Differs from their Peers.

Notes: Unadjusted Beveridge curves are constructed from coefficients that come from a regression of a dummy variable indicating whether the individual is unemployed on the natural logarithm of their state's job openings rate, plus dummy variables for period, and their interactions with a state’s job openings. Estimates are for the “Tight” period – March 2022 to August 2023.
## Preliminary Results from 8th District Roundtable Discussions

<table>
<thead>
<tr>
<th>Not working</th>
<th>Potential Reasons</th>
</tr>
</thead>
</table>
| **Young Adults, usually defined as those between the age of 16 and 24.** | • More inclined to doing gig work.  
• Lack of soft skills in combination with mental health issues make it harder to remain in the workforce. More young adults reported experiencing anxiety during the pandemic than others.  
• Misperception of what work looks like. For example, expecting remote working opportunities even for entry level work. |
| **Parents (especially mothers of young children)** | • Access to safe and affordable childcare  
• Pandemic forced closures of many childcare businesses that haven't come back.  
• Lack of flexible schedules to accommodate with available childcare. |
| **People with a disability** | • A lack of understanding of different types of disabilities  
• A lack of understanding about people’s abilities and how they are a source of untapped talent.  
• Face major barriers such as transportation. |
| **Justice Involved** | • Limitations of where people can work.  
• Perceptions about people who are justice involved.  
• Reputational risk for employers especially in customer facing roles. |

Source: Community Development Department at the St. Louis Federal Reserve Bank.
What’s Happened to Unemployment as Job Openings have Fallen?
Job openings have trended downward since March 2022

The overall unemployment rate has not risen as job openings have fallen. (January 2017 to August 2023)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The jobless rates of adult women and men have not risen.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rate of Young Non-College Educated Out of School Adults has risen.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Summary and Conclusions to Date

• Even during one of the “tightest” labor markets on record, structural differences in labor market outcomes persist.

• Important to invest in tools that reduce “structural” barriers (Diffs between Beveridge curves) to the job matching process.

• Some candidates to lessen labor and skills shortages:
  • Education and Training
  • Childcare
  • Transportation
  • Job Information and Networks
  • Discrimination
  • Employer and Job Candidate Expectations
Summary and Conclusions to Date, cont.

• Can unemployment rates remain low even as job openings fall?

  • One View: Current job openings are at such a high level, they can fall and remain consistent with strong labor market

  • Another View: Can’t have falling job openings without increase in unemployment

  • Current Evidence:
    • Overall: Consistent with first view, but this could change

    • Jobless rates of young out-of-school non-college educated adults have ticked upward
Next Steps

• Data
  • Compute standard errors on estimated curves
  • Robustness checks on four periods
  • Metro Area Analysis
    • BLS metro unemployment rates
    • LinkUp data to create state and metro level job openings rates?

• Topics
  • Are the BC estimates biased?
    • Composition of job openings could change as openings increase?
    • BLS JOLTS openings over-estimate job openings
  • Use LinkUp job listing data to identify how fast and where job openings are falling
  • How to interpret a positive Beveridge Curve?
APPENDIX
Economic Vulnerability Evidence
# Average Employment-Population Ratios (January 2017 to September 2023)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>59.7%</td>
</tr>
<tr>
<td>Men</td>
<td>54.4%</td>
</tr>
<tr>
<td>Women</td>
<td>65.3%</td>
</tr>
<tr>
<td>White Men</td>
<td>62.3%</td>
</tr>
<tr>
<td>Black Men</td>
<td>65.8%</td>
</tr>
<tr>
<td>Latinx Men</td>
<td>59.3%</td>
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<tr>
<td>Native American</td>
<td>71.6%</td>
</tr>
<tr>
<td>Asian Men</td>
<td>63.1%</td>
</tr>
<tr>
<td>Asian Women</td>
<td>69.0%</td>
</tr>
<tr>
<td>No More than HS Degree</td>
<td>61.0%</td>
</tr>
<tr>
<td>Some College</td>
<td>71.5%</td>
</tr>
<tr>
<td>BA Degree Plus</td>
<td>58.3%</td>
</tr>
<tr>
<td>Young Urban Core Adults</td>
<td>62.9%</td>
</tr>
<tr>
<td>Young Suburban Adults</td>
<td>61.5%</td>
</tr>
<tr>
<td>Young Rural Adults</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Labor Force Participation Rates
(January 2017 to September 2023)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Unemployment Rates (January 2017 to September 2023)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Nominal Hourly Wages (January 2017 to September 2023)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Percent Working Full-Time  
(January 2017 to September 2023)

<table>
<thead>
<tr>
<th>Percent Working Full-Time</th>
<th>January 2017</th>
<th>September 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>90.3%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Men</td>
<td>88.0%</td>
<td>90.4%</td>
</tr>
<tr>
<td>Black Women</td>
<td>92.9%</td>
<td>92.5%</td>
</tr>
<tr>
<td>Black Men</td>
<td>84.6%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Latino Women</td>
<td>87.6%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Latino Men</td>
<td>85.5%</td>
<td>90.7%</td>
</tr>
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<td>85.9%</td>
</tr>
<tr>
<td>BA Degree Plus</td>
<td>85.1%</td>
<td></td>
</tr>
<tr>
<td>Urban core young adults</td>
<td>82.2%</td>
<td></td>
</tr>
<tr>
<td>Suburban young adults</td>
<td>85.9%</td>
<td></td>
</tr>
<tr>
<td>Rural young adults</td>
<td>85.9%</td>
<td></td>
</tr>
<tr>
<td>Disabled</td>
<td>82.2%</td>
<td></td>
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</tbody>
</table>

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Hours Worked Per Week (January 2017 to September 2023)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The impact of a 1 percentage point increase in the job openings rate on the probability of unemployment.

Notes: Estimates come from a regression of a dummy variable indicating whether the individual is unemployed on the natural logarithm of their state’s job openings rate. All estimates are measured at a 1 percent level of significance. The unemployment micro data come from the monthly Current Population Surveys from January 2017 to September 2023. The job openings rates come from the Bureau of Labor Statistics JOLTS survey.
Comparisons Across Periods
Average Employment-to-Population Ratios (by Macro Period, Educational Attainment, and Disability)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Average Employment-to-Population Ratios of Single Women (by Macro Period and Number of Children)

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Analysis of Actual Beveridge Curves
The unemployment rate of Black men has remained unchanged, while it has increased for Black women.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The jobless rates of Latino adults have not risen as job openings fell.

### Latino Women (start here)

<table>
<thead>
<tr>
<th>Month</th>
<th>Unemployment Rate</th>
<th>Job Openings Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2020</td>
<td>0.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>July 2023</td>
<td>0.0%</td>
<td>5.0%</td>
</tr>
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</table>

### Latino Men

<table>
<thead>
<tr>
<th>Month</th>
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<th>Job Openings Rate</th>
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<tbody>
<tr>
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<td>5.0%</td>
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</table>

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rates of Asians have not increased as job openings fell.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rates of the least educated have not risen as job openings fell.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rate of BA Degree plus individuals has ticked up.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rate of out of school young Latinos has edged up.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Out of school urban core and suburban young adults may be experiencing a tick up in unemployment as job openings fell.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
Out of school rural young adults may be experiencing a tick up in unemployment, while people with a disability has not.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rate of single women with three or more children has begun to increase with the fall in job openings.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.
The unemployment rate of single women with three or more children has begun to increase with the fall in job openings, cont.

Source: Authors’ calculations from the micro data files of the Current Population Survey. Estimates are weighted.