Based on joint works with Jason Faberman, Bart Hobijn, Richard Crump, Stefano Eusepi, Marc Giannoni and Andreas Mueller. The views expressed in this presentation are those of the authors and do not necessarily reflect the positions of any of the institutions that they are affiliated with, including the Federal Reserve Banks of Chicago, Dallas, New York, San Francisco and the Federal Reserve System.
Labor market is tight

Almost all measures point to a tight labor market especially job-filling rates and wage growth except for the LFPR—which is 1.1 ppts below its pre-pandemic level.

However:

- The participation cycle lags the unemployment cycle—consistent with the joint evolution of the LFPR and the unemployment rate in 2021
- The participation cycle is not driven by labor force entry and exit but rather by employment stability
- Declines in unemployment naturally result in upward pressures on participation for all groups including the marginalized ones

Reference: Hobijn and Şahin, 2021
Natural rate of unemployment

A useful construct: *The natural rate of unemployment* $u^*$, which is defined as the unemployment rate such that, controlling for supply shocks, inflation remains stable.

Estimate a Phillips Curve using three key inputs:

1. Unemployment flows by demographics
   → Help pin down the *secular trend* of unemployment, $\bar{u}$

2. Wage and price inflation
   → Informative about *unemployment-inflation* trade-off

3. Inflation expectations
   → Informative about *current and future* unemployment gaps

Reference: Crump, Eusepi, Giannoni and Şahin (2019, 2022)
Secular trend of unemployment continues to decline and is at 4.2%

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Secular trend of unemployment continues to decline and at 4.2%

- Dual aging has been reducing trend unemployment

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Natural rate of unemployment $u^*$ increased to 5.9%

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Natural rate of unemployment $u^*$ increased to 5.9%
Sharp reversal of the unemployment gap in 2021

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Sharp reversal of the unemployment gap in 2021

Unemployment gap: baseline

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Underlying inflation above long-run trend of inflation due to wages

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Forecast suggests underlying inflation likely to decline only slowly.

Source: Crump, Eusepi, Giannoni and Şahin, 2022
Underlying wage growth highly correlated with job-filling rate

Source: JOLTS and Crump, Eusepi, Giannoni and Şahin, 2022
Firms are posting higher wages for the same jobs

Source: Burning Glass Technologies and Crump, Eusepi, Giannoni and Şahin, 2022
Even in teleworkable jobs

Source: Burning Glass Technologies and Crump, Eusepi, Giannoni and Şahin, 2022
Consistent with the stark increase in reservation wages

Source: SCE and Crump, Eusepi, Giannoni and Şahin, 2022
Consistent with the stark increase in reservation wages

Source: SCE and Crump, Eusepi, Giannoni and Şahin, 2022
And with the declining willingness to work

## Desired Hours by Labor Force Status

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Employed</strong></td>
<td></td>
<td>41.5</td>
<td>41.7</td>
<td>41.1</td>
<td>-0.59 (0.47)</td>
</tr>
<tr>
<td><strong>Full-time</strong></td>
<td></td>
<td>44.9</td>
<td>45.1</td>
<td>45.1</td>
<td>-0.00 (0.45)</td>
</tr>
<tr>
<td><strong>Part-time</strong></td>
<td></td>
<td>28.7</td>
<td>27.1</td>
<td>24.0</td>
<td>-3.13 (0.93)</td>
</tr>
<tr>
<td><strong>Unemployed</strong></td>
<td></td>
<td>35.6</td>
<td>36.1</td>
<td>35.8</td>
<td>-0.27 (2.30)</td>
</tr>
<tr>
<td><strong>Out of the Labor Force</strong></td>
<td></td>
<td>13.1</td>
<td>12.0</td>
<td>11.1</td>
<td>-0.94 (0.70)</td>
</tr>
<tr>
<td><strong>Want work</strong></td>
<td></td>
<td>29.9</td>
<td>30.0</td>
<td>27.5</td>
<td>-2.53 (3.14)</td>
</tr>
<tr>
<td><strong>Retired</strong></td>
<td></td>
<td>11.0</td>
<td>10.3</td>
<td>9.7</td>
<td>-0.57 (0.71)</td>
</tr>
<tr>
<td><strong>Others out of the labor force</strong></td>
<td></td>
<td>15.5</td>
<td>14.5</td>
<td>11.2</td>
<td>-3.29 (1.02)</td>
</tr>
</tbody>
</table>

*Survey Question in the SCE: Assuming you could find suitable/additional work, how many hours PER WEEK would you prefer to work on this new job?*
Especially among the part-time employed and nonparticipants

Desired Work Hours, Part-time Employed

Desired Work Hours, Out of the Labor Force

Source: SCE and Faberman, Mueller, and Şahin, 2022
Especially among the part-time employed and nonparticipants

Source: SCE and Faberman, Mueller, and Şahin, 2022
Which is pervasive across most groups

## Desired Hours by Demographics

<table>
<thead>
<tr>
<th>Mean Desired Hours: October of...</th>
<th>2013-17</th>
<th>2018-19</th>
<th>2020-21</th>
<th>Difference, '20-21 – '18-19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>34.4</td>
<td>34.2</td>
<td>33.4</td>
<td><strong>-0.74</strong> (0.79)</td>
</tr>
<tr>
<td>Women</td>
<td>31.0</td>
<td>30.9</td>
<td>29.9</td>
<td><strong>-1.00</strong> (0.81)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prime Age (25-54)</td>
<td>39.7</td>
<td>41.0</td>
<td>40.1</td>
<td><strong>-0.91</strong> (0.67)</td>
</tr>
<tr>
<td>Older (55+)</td>
<td>23.4</td>
<td>22.2</td>
<td>21.5</td>
<td><strong>-0.76</strong> (0.74)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college or less</td>
<td>30.9</td>
<td>31.0</td>
<td>29.4</td>
<td><strong>-1.63</strong> (0.70)</td>
</tr>
<tr>
<td>College degree or more</td>
<td>36.5</td>
<td>35.8</td>
<td>35.5</td>
<td><strong>-0.22</strong> (0.94)</td>
</tr>
</tbody>
</table>

Notes: Estimates from SCE Job Search Supplement. Std. errors in parentheses

Source: SCE and Faberman, Mueller, and Şahin, 2022
Concluding thoughts

- Natural rate of unemployment at 5.9% in 2021Q4 mostly reflecting strong underlying wage growth.

- Growth in posted wages suggest strong wage growth and firm inflation readings likely to persist even without a rise in long-term inflation expectations.

- Likely a sluggish decline in underlying inflation which remains about a half of a percentage point above long-run inflation even at the end of 2023.

- Labor force participation rate tied to labor market conditions, employment stability and willingness to work. Not likely to see a spike in labor force entry that would alleviate labor supply constraints.

- A rise in long-term inflation expectations would likely lead to higher underlying inflation.

