Presentation on Labor Market Slack
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Policymakers face a tradeoff between inflation and slack in the labor market: the Phillips curve.

To determine optimal policy, we need to measure labor market slack / tightness.

The traditional measure is the unemployment rate, U (or U relative to a natural rate, U*).

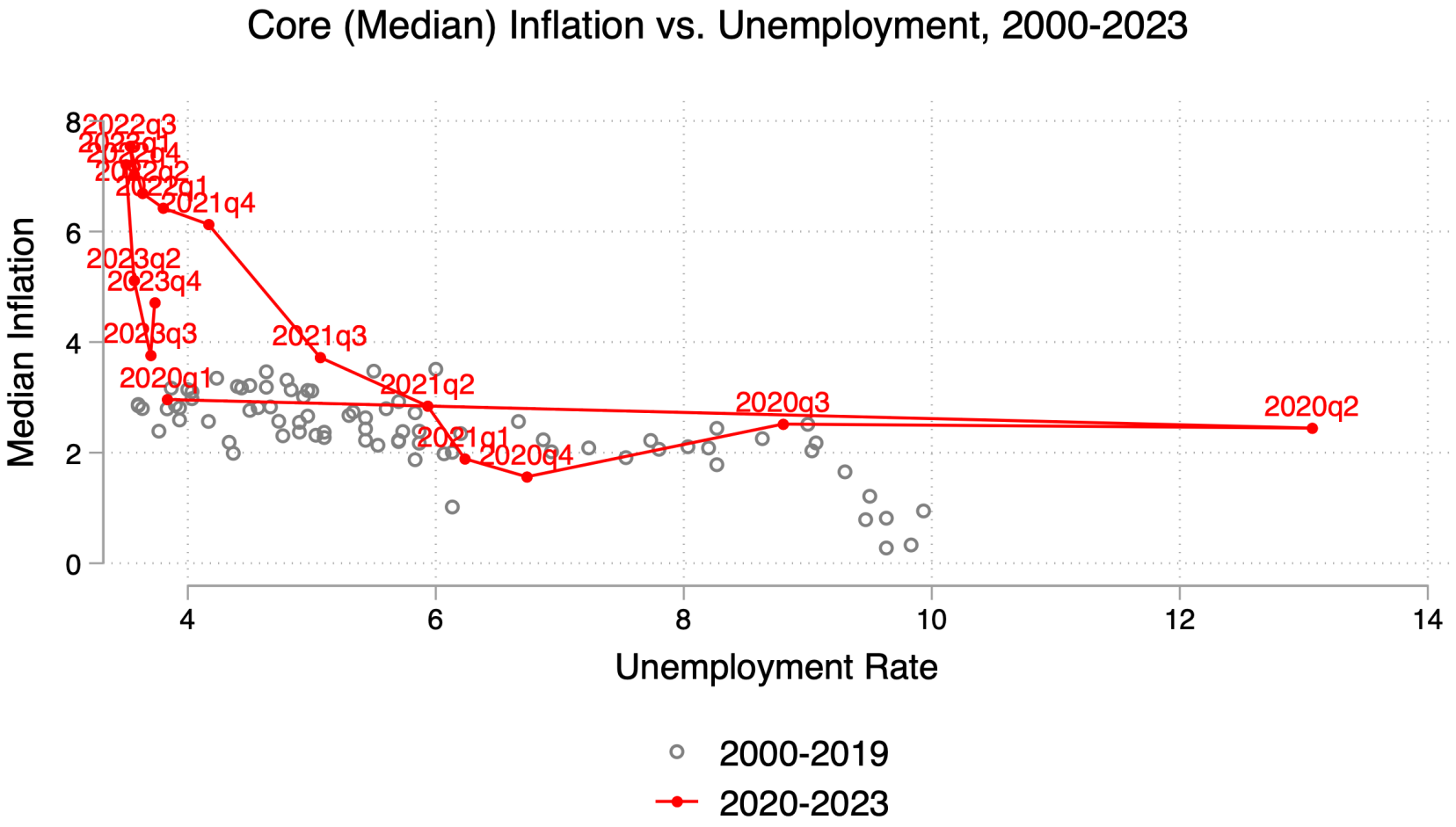
A big change since 2020: many economists measure labor market tightness with (job vacancies)/(unemployment), V/U.

Furman and Powell, Domash and Summers, Ball-Leigh-Mishra, Bernanke and Blanchard, Benigno and Eggertsson, and others….

Theoretical foundation: In search models of the labor market (Mortensen and Pissarides), V/U determines the threat points of firms and workers that bargain over wages.

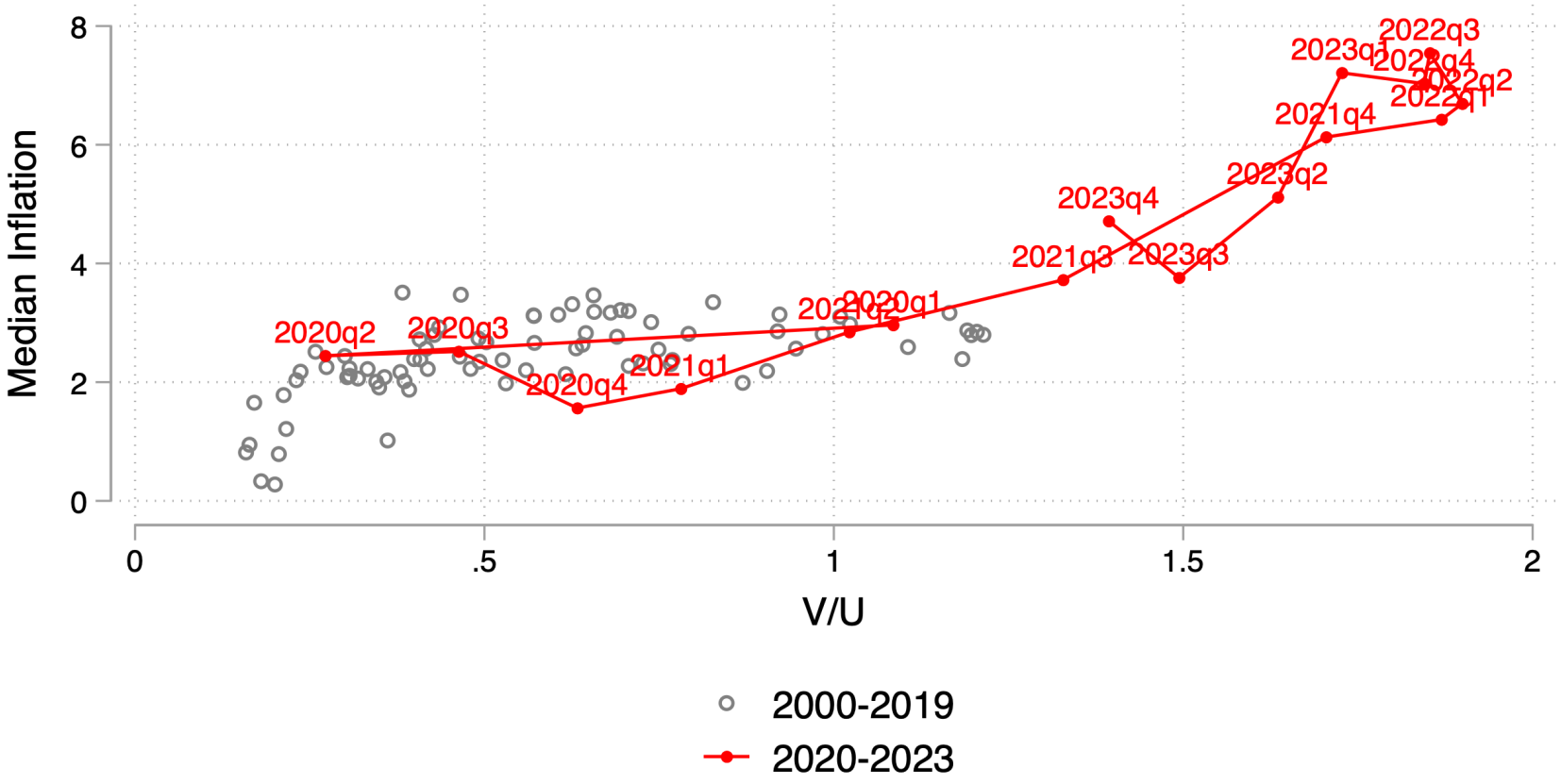
But the main reason for the shift from U to V/U is empirical: It allows us to explain the inflation experience since 2020 with changes in labor market tightness.

The Phillips Curve Breaks Down! (Again)



The Phillips Curve Rescued! (Again)

Core (Median) Inflation vs. Vacancies/Unemployment, 2000-2023



(V/U has evolved differently from U because of shifts in the Beveridge curve. Next session.)

In my view, V/U is a good rough-and-ready measure of labor market tightness.

But there is much scope for refinement. For example, Abraham and Haltiwanger (2019) develop a tightness measure that accounts for the search intensity of job seekers and firms.

Is there a time-varying natural rate of V/U?

Should we really change how we measure slack based on one weird four-year period?

Measuring and Evaluating Labor Market Slack

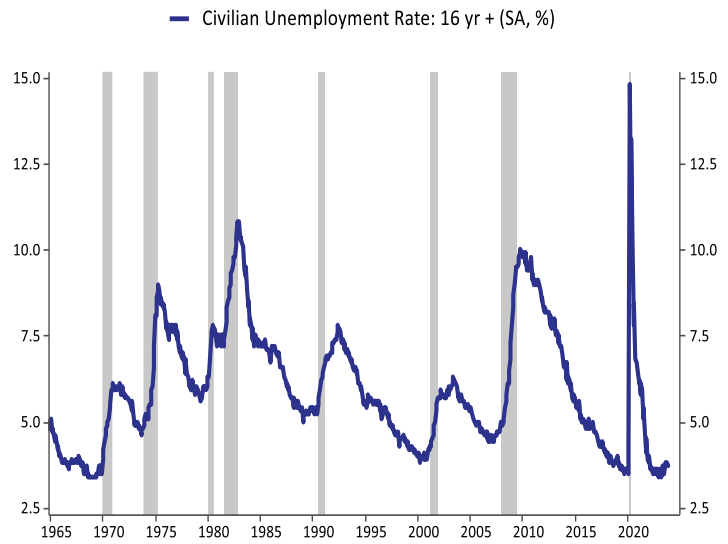
January 17-18 2024
The Recent Evolution of Labor Markets
A Hutchins Center Conference

Julia Coronado
President, MacroPolicy Perspectives

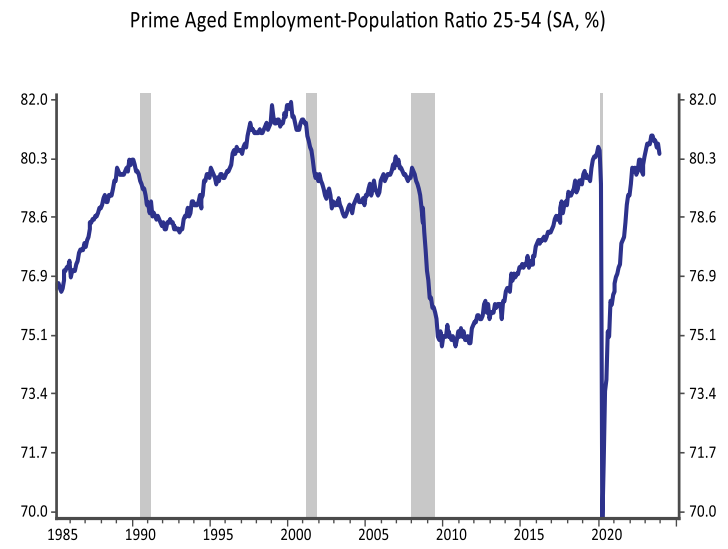
MACROPOLICY PERSPECTIVES

Measuring labor market slack

- The Fed has a mandate to achieve maximum employment; When there is labor market slack the Fed isn't doing its job
- "The maximum level of employment is a broad based and inclusive goal that is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market"
- Maximum (sustainable) employment is when everyone who wants a job can find a job. The challenge is that some element of labor supply is endogenous to labor demand conditions. The Fed adopted a vaguely more expansive view of maximum employment after decades where the concept of slack as a gauge of inflation pressures proved dangerously misleading. It still is proving misleading as inflation moderates without a material weakening in the labor market
- Best practices:
  - Levels can be problematic in interpreting slack, changes are more reliable cyclical indicators
  - Falling response rates, structural disruption mean triangulating across independent data sources
  - There are tradeoffs between timeliness, length & consistency of time series, signal quality in mapping into macro outcomes
  - Challenges in determining cyclical vs structural, gauging quality of newer sources & anecdotes



Source: BLS/Haver/MacroPolicy Perspectives LLC



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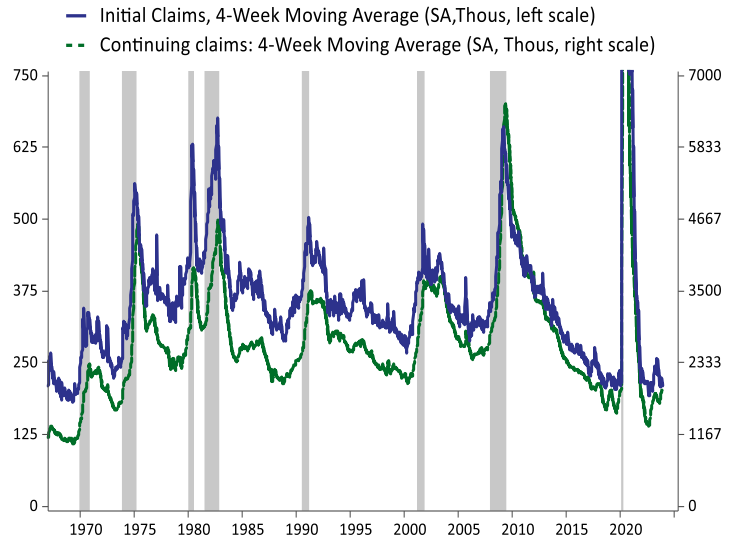
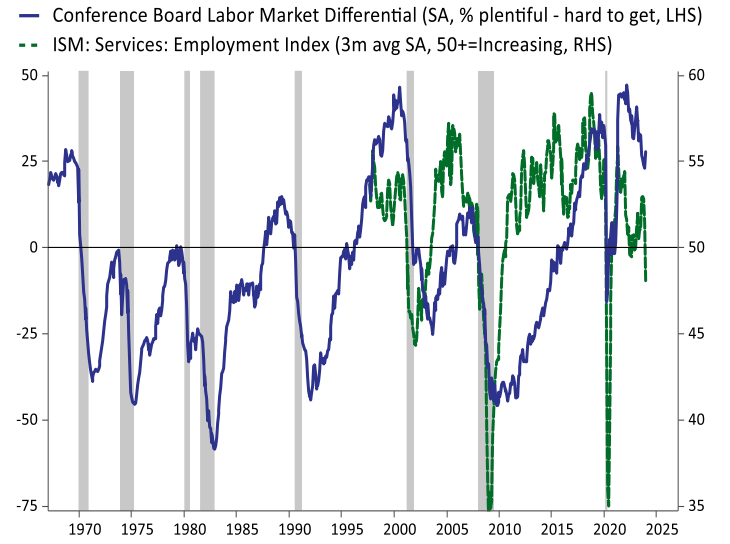




Sources: CB, ISM/Haver/MacroPolicy Perspectives LLC

Top Tier Slack Indicators: unemployment rate, prime-aged EPOP, unemployment claims, some surveys

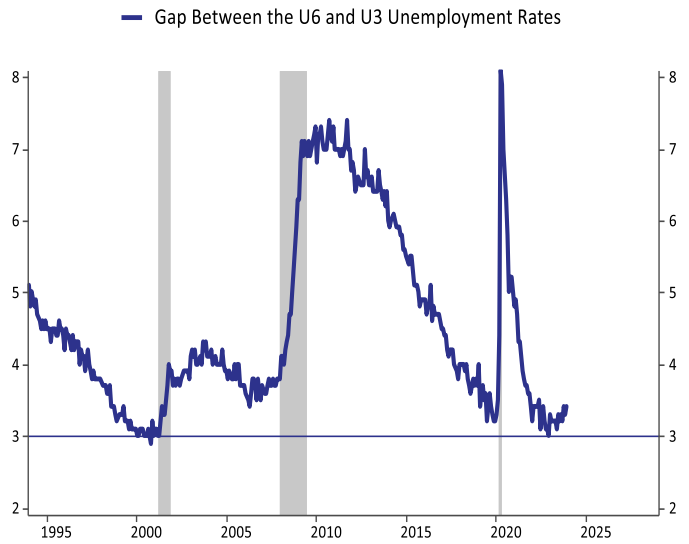
The UR is off the lows but in a stable range for the past 2yrs, prime-aged EPOP off the highs, initial claims low but continuing up a bit (longer spells), surveys declining

Conclusion: The labor market still appears healthy and close to qualifying as full employment but clear signs of softening/loosening, Declining labor demand + low layoffs consistent with labor hoarding

Second Tier Slack Indicators: shadow labor force and gaps, churn, wages

Involuntary part-time, marginally attached, racial/ethnic gaps are still low but marginally higher, hiring and quits have fallen dramatically, wage growth is slowing

Conclusion: The labor market still appears healthy and close to qualifying as full employment but clear signs of softening/loosening



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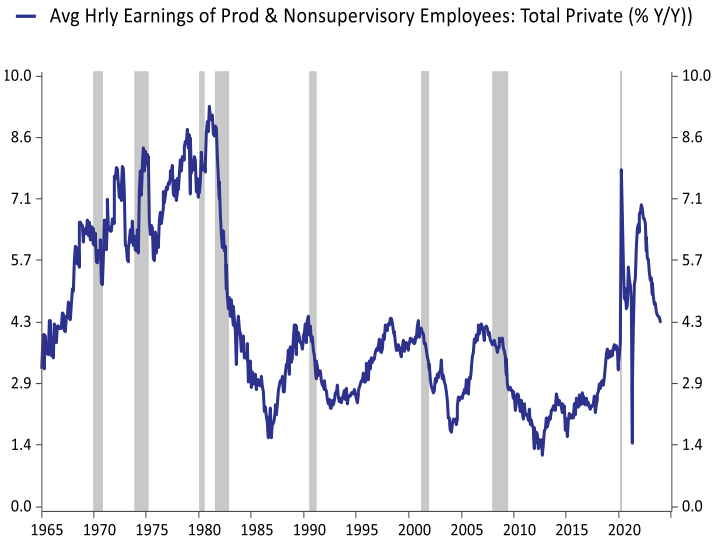

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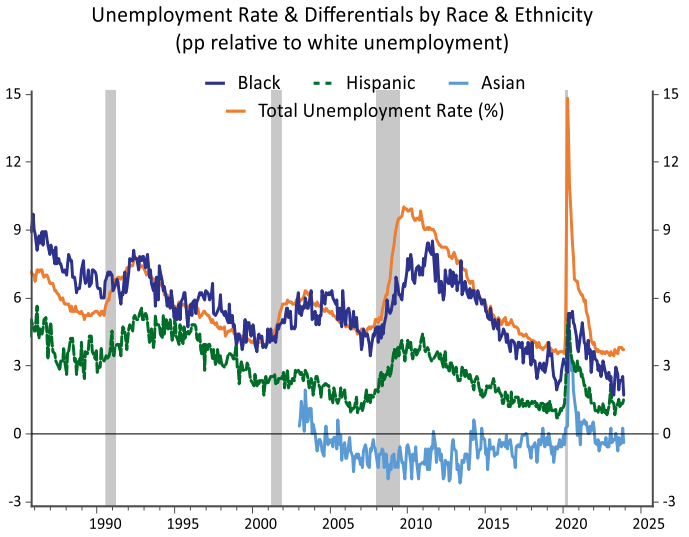

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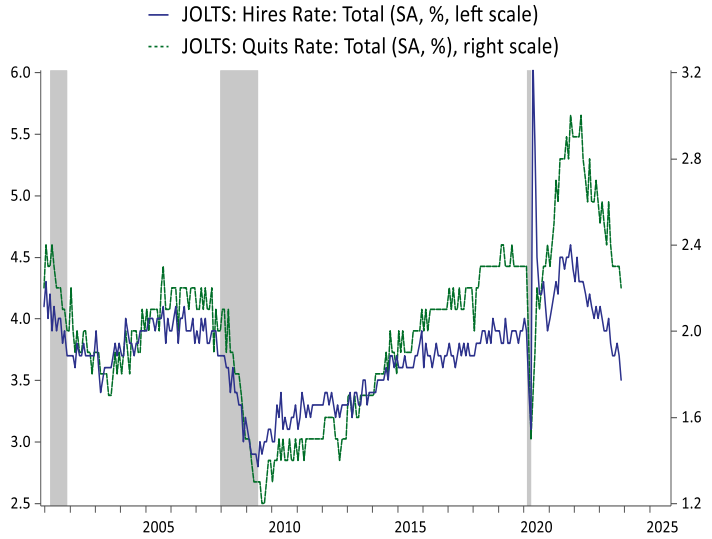


Source: BLS/Haver/MacroPolicy Perspectives LLC

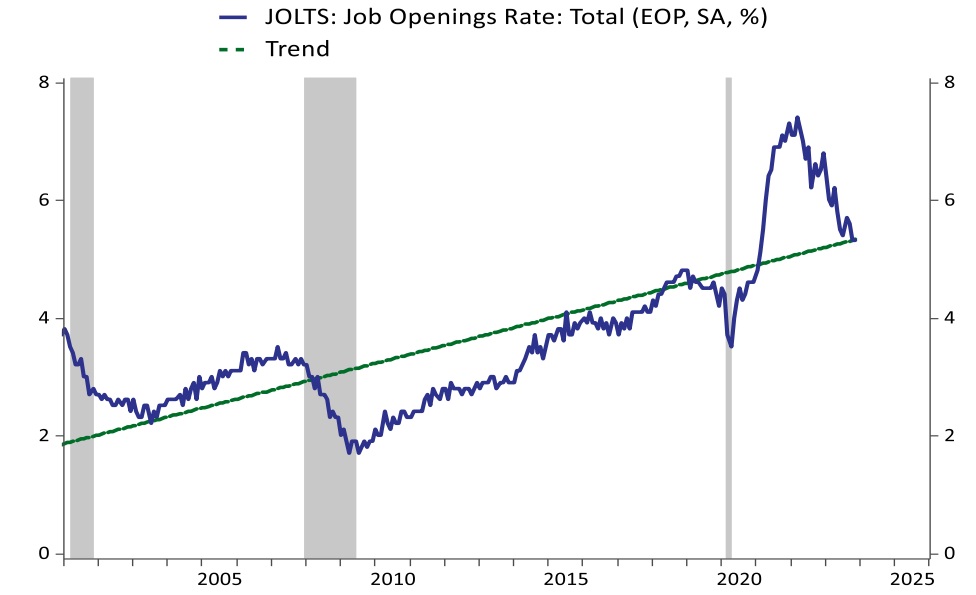
NOT OK: Job openings & vacancies per unemployed

There is an upward trend in job openings (not in quits or hiring rates) Digital transformation lowered the cost of keeping a job listing open and AI has led firms to harvest resumes to train algorithms.

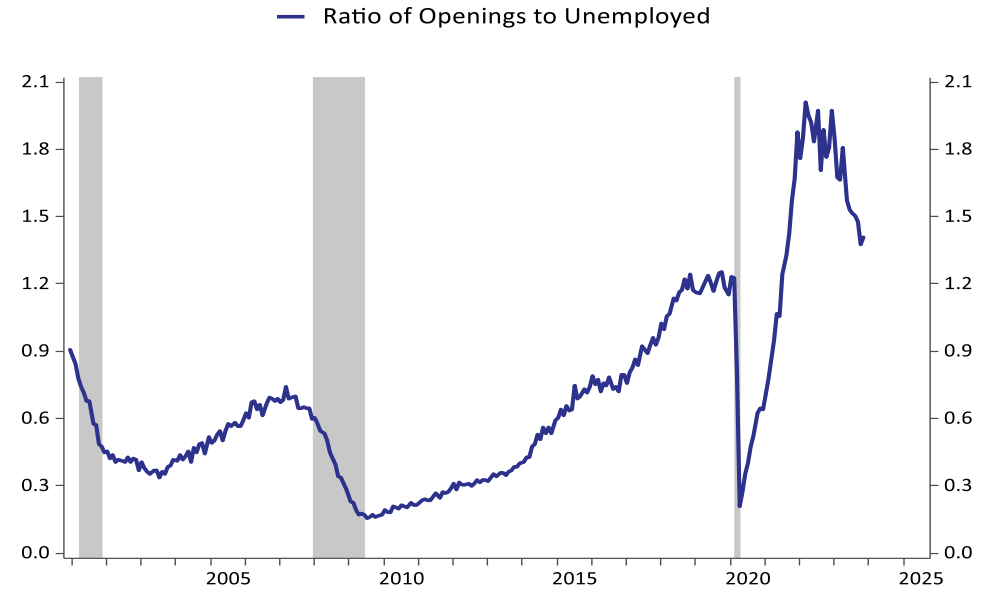
Statistically this implies multiple breaks and time series analysis is not valid.

In no other indicator is the job market judged to be tighter/stronger than the late 1990s.

Conclusion: Job openings are not a reliable measure of slack though the direction of trav el may have signal



Source: BLS/Haver/MacroPolicy Perspectives LLC



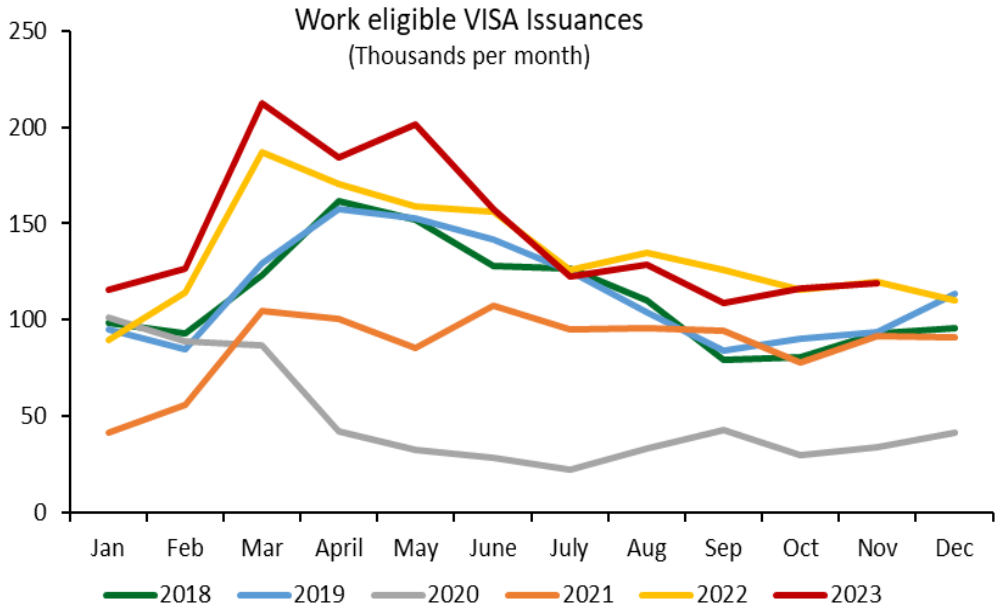
Source: Haver/MacroPolicy Perspectives LLC

Labor supply needs attention

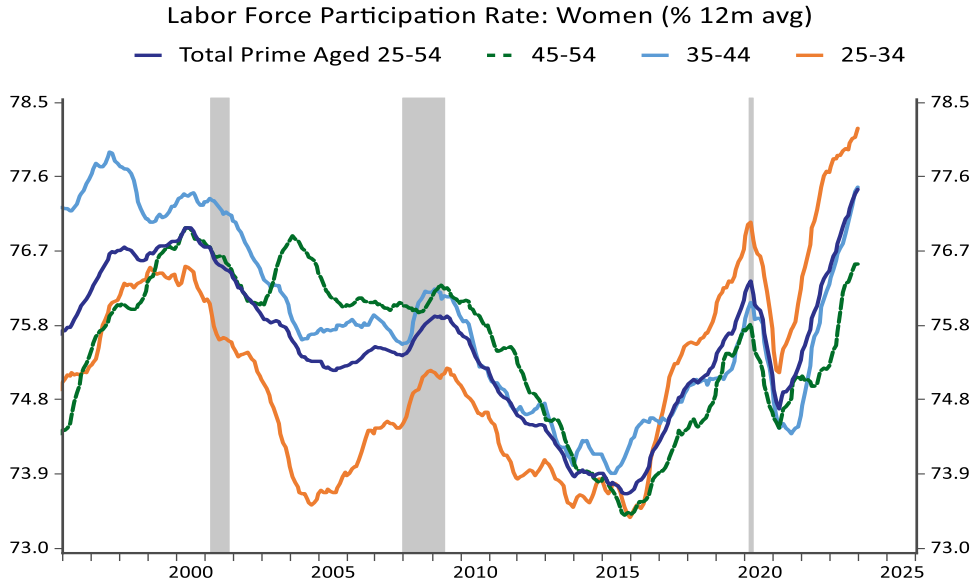
Immigration flows based on administrative records are available monthly from the State Department and are macroeconomically important.

The focus is often on extrapolating the impact of aging baby boomers without attention to other demographic trends—women's labor force attachment appears much stronger and more cyclical

Conclusion: Labor supply is dynamic and has once again proven more resilient, flexible and abundant than expected



Source: U.S. State Dept., Refugee Processing Center, MacroPolicy Perspectives LLC



Source: BLS/Haver/Macropolicy Perspectives LLC

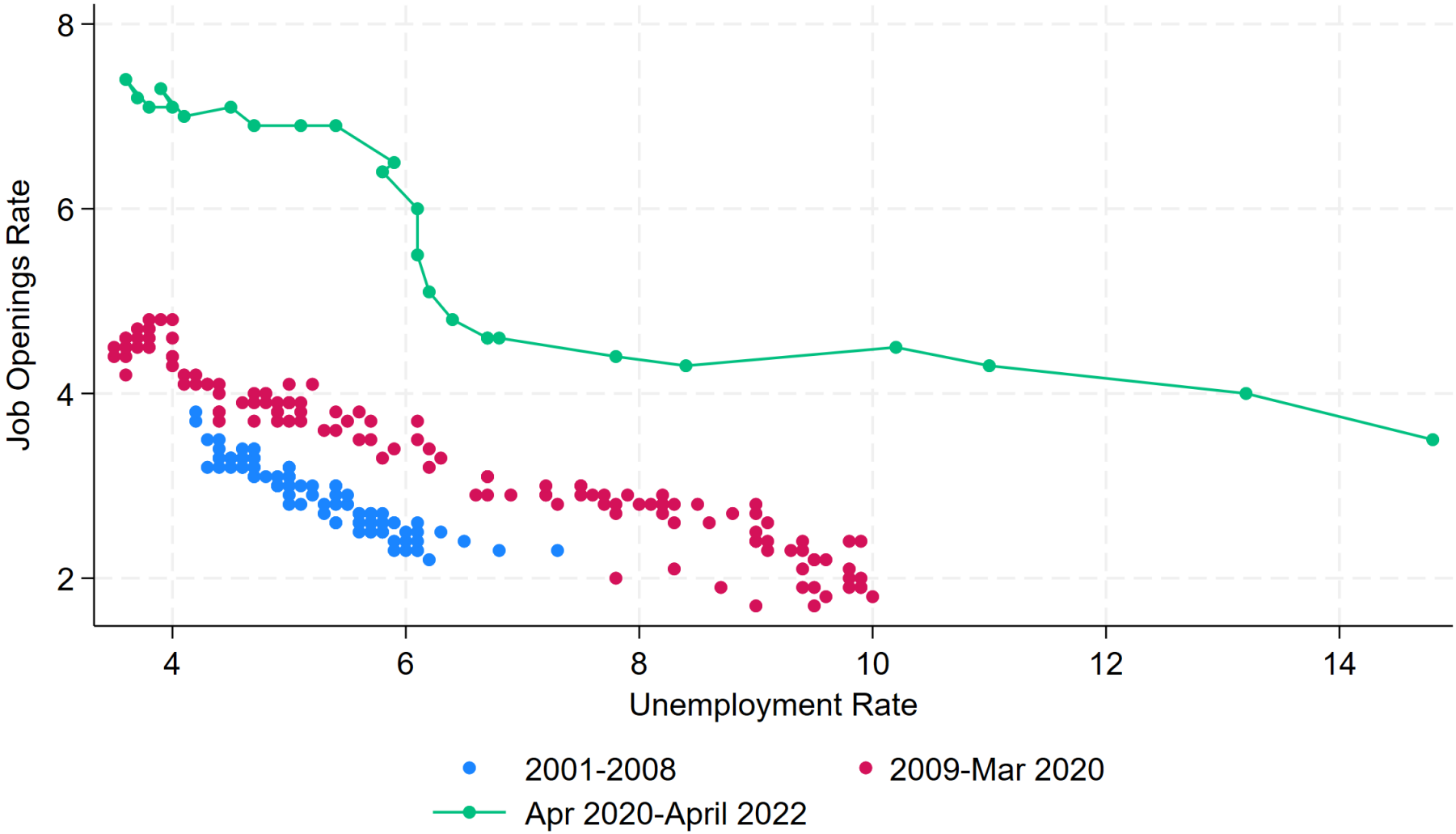
Brookings Firestarter: Beveridge Curve

Justin Bloesch

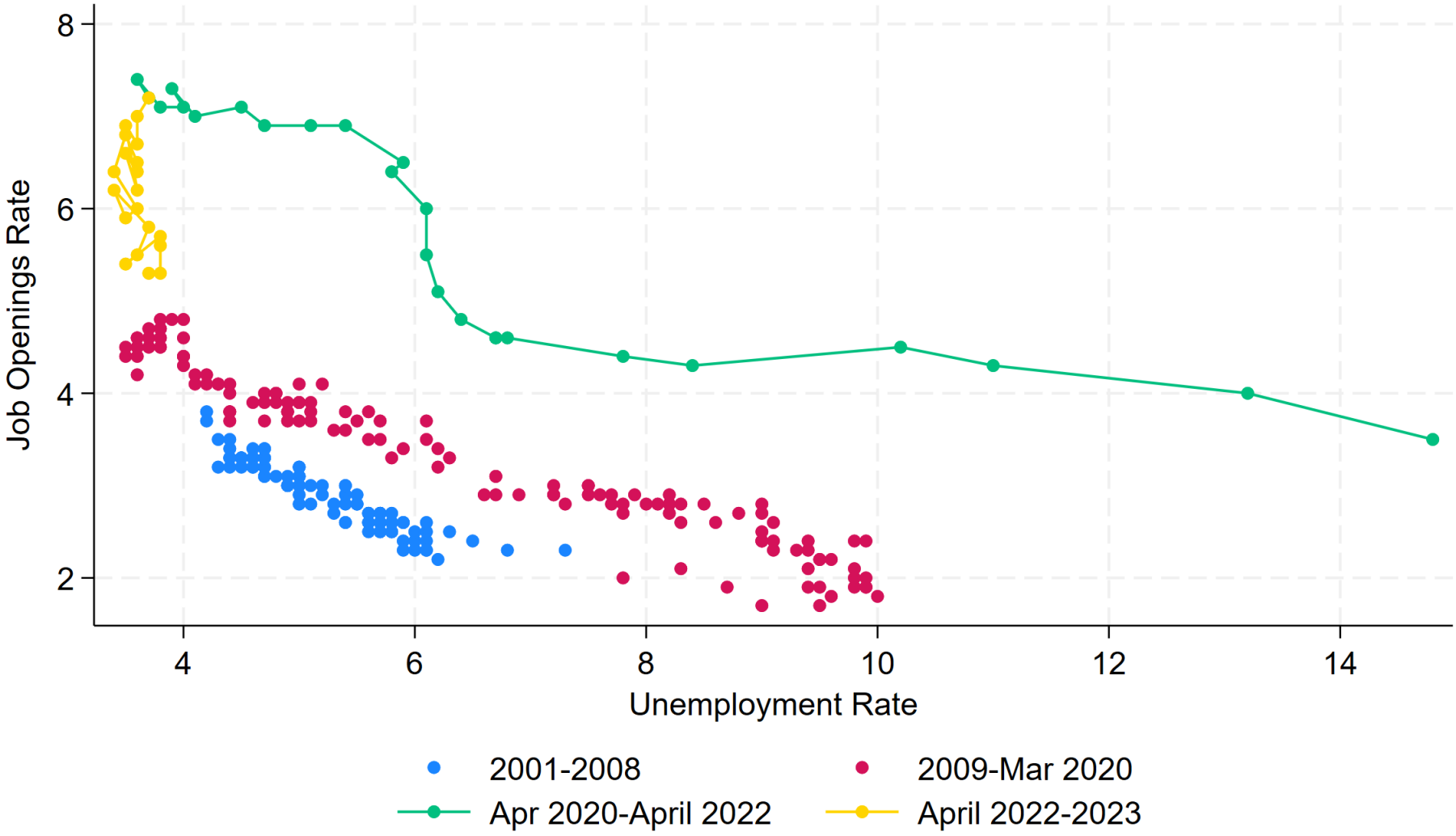
Cornell Department of Economics & School of Industrial and Labor Relations

January 18, 2024

Through April of 2022: A Shift Out in the Beveridge Curve



Since April '22: Declining Vacancies, Steady Unemployment



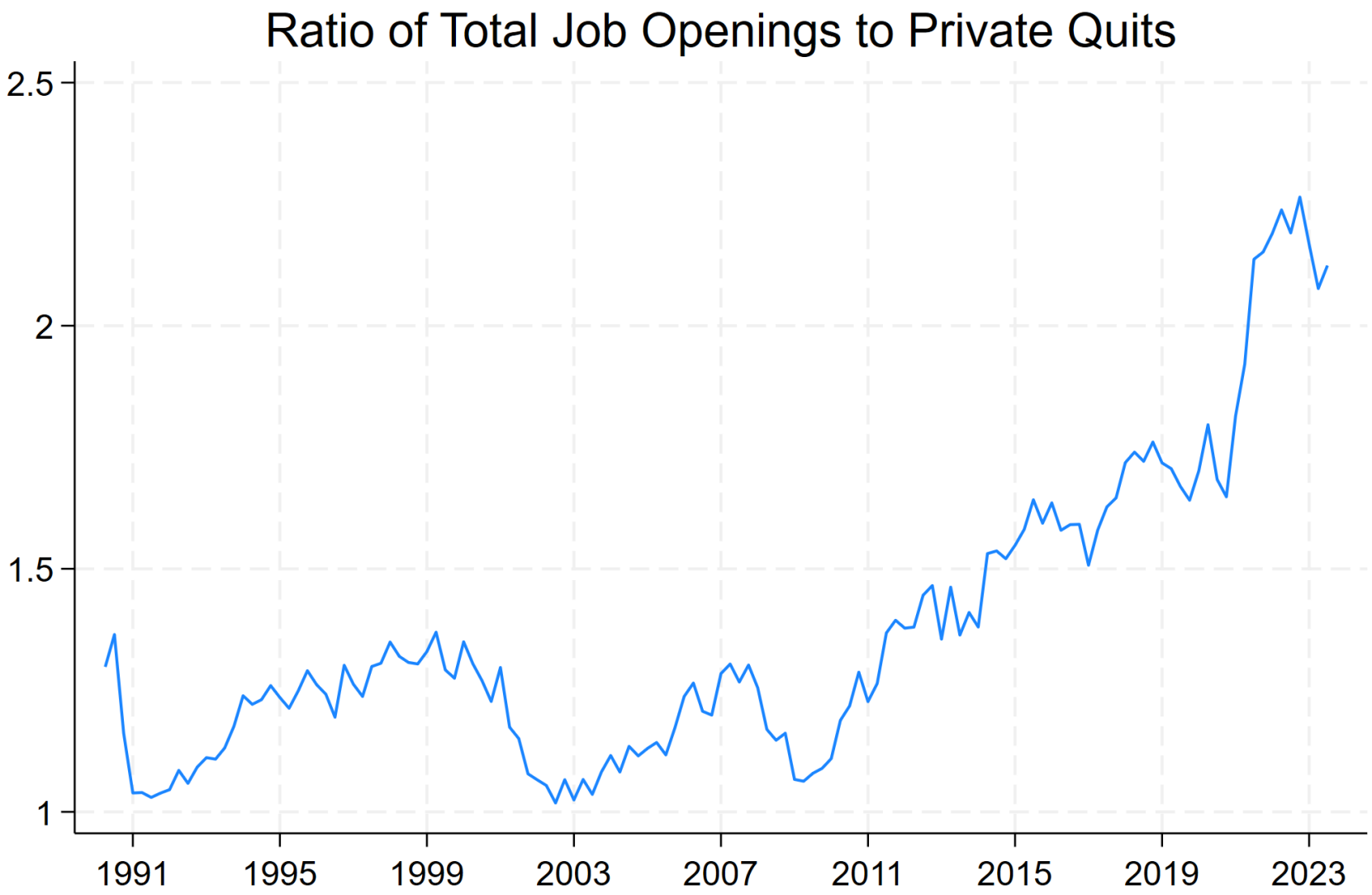
3 Reasons Matching Efficiency did not Permanently Fall

1. Beveridge curve is very steep at low levels of unemployment.
   - Figura & Waller (2022); Mongey (2022).

2. Low-frequency time trends in JOLTS job openings series.
   - Job openings rising relative to wage growth, quits, and hires since 2008.

3. Lower matching efficiency (higher mismatch) was temporary.
   - Industry employment composition is returning to pre-COVID trends.

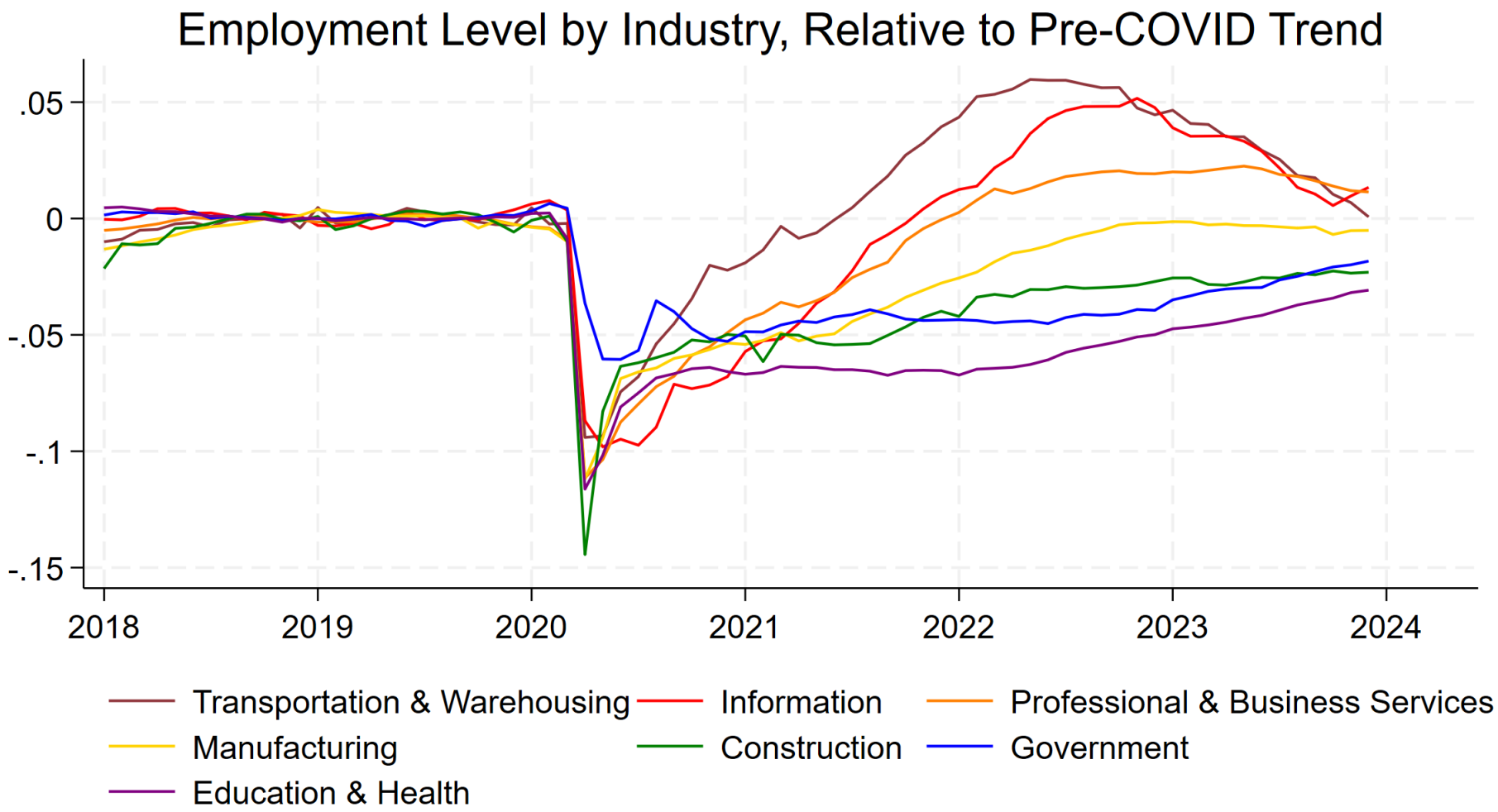
Time Trend in Job Openings since 2007



Sources: BLS JOLTS; Davis, Faberman & Haltiwanger (2012) extension of the JOLTS quits series; Barnichon (2010) Help Wanted Index.

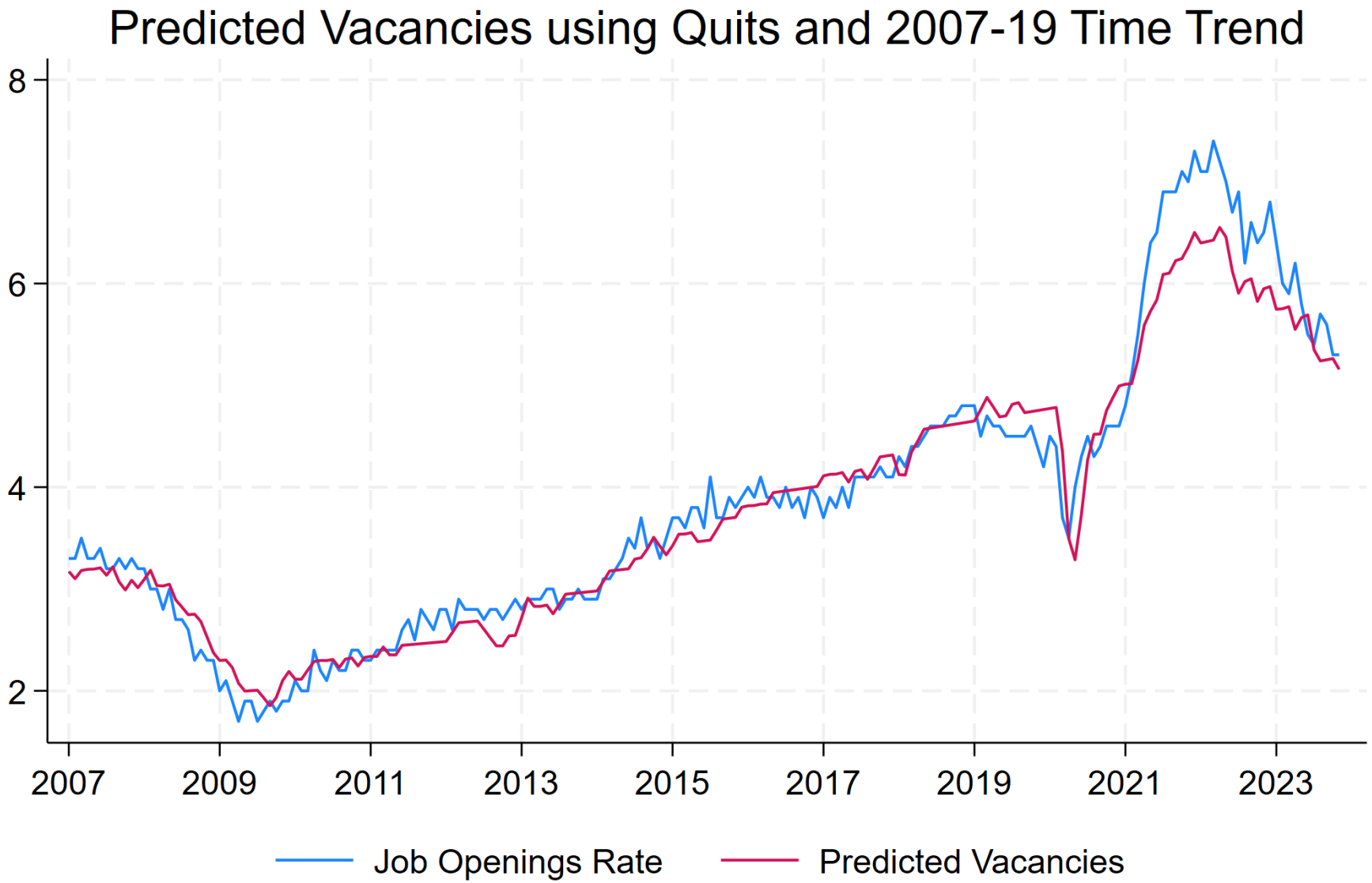
Wage Growth

Labor Market Mismatch due to COVID is Disappearing



Source: BLS, author's calculation.

Time Trend, Temporary Mismatch Describes Vacancies Well



Sources: BLS JOLTS, author's calculation.

Takeaways

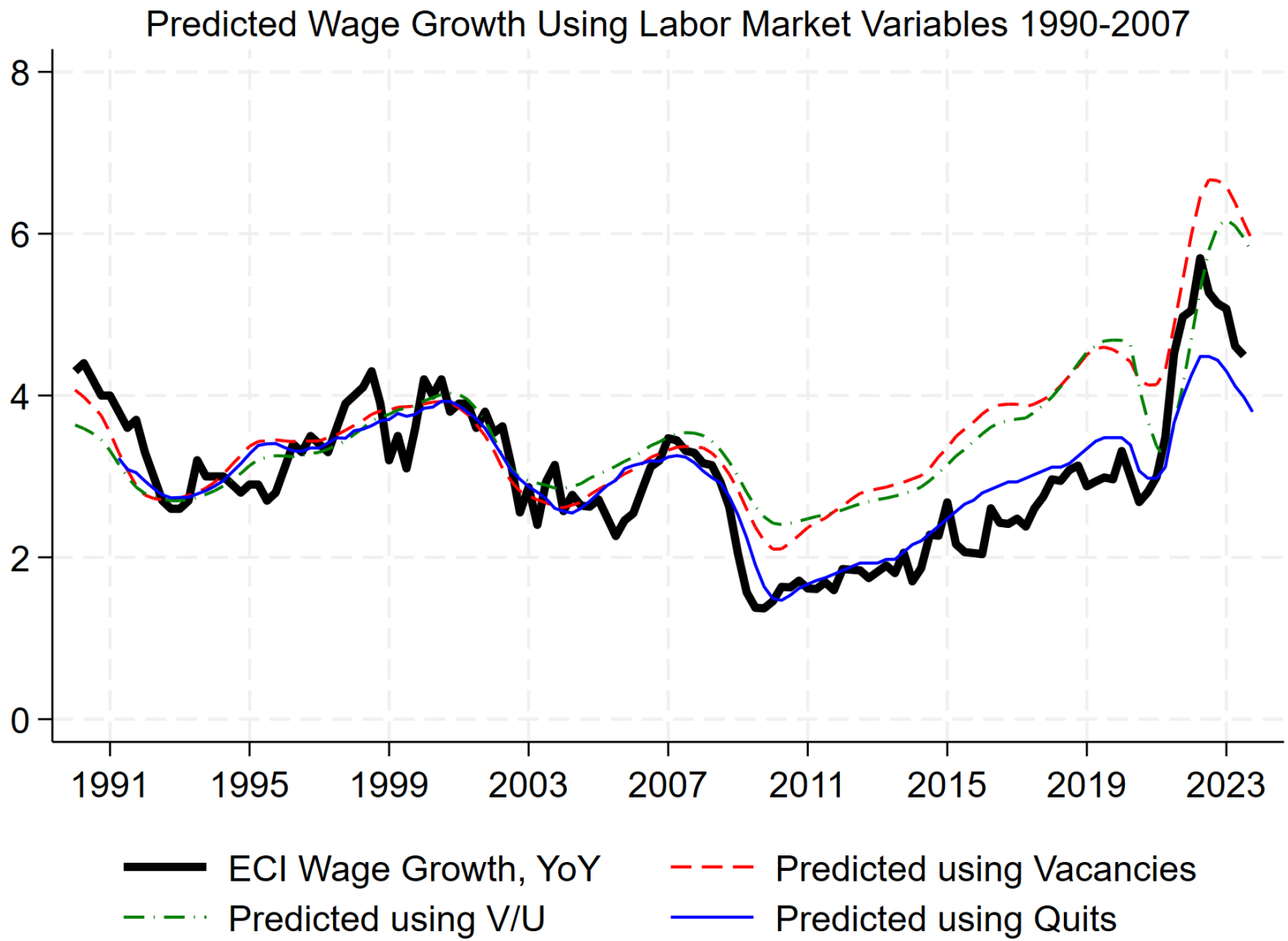
The Beveridge curve shift since 2019 does not reflect a permanent decline in matching efficiency.

- Continued time trend in job openings that began around 2008 reflects issues with measurement, not trends in matching efficiency.
- COVID-recovery mismatch has faded.

Takeway: caution against comparing the level of the job openings rate over time.

- The quits rate has a stable relationship with unemployment and wage growth $\rightarrow$ more comparable over time.

Vacancies Predicted Too Much Wage Growth from 2010-19



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Beveridge Curve Anomaly

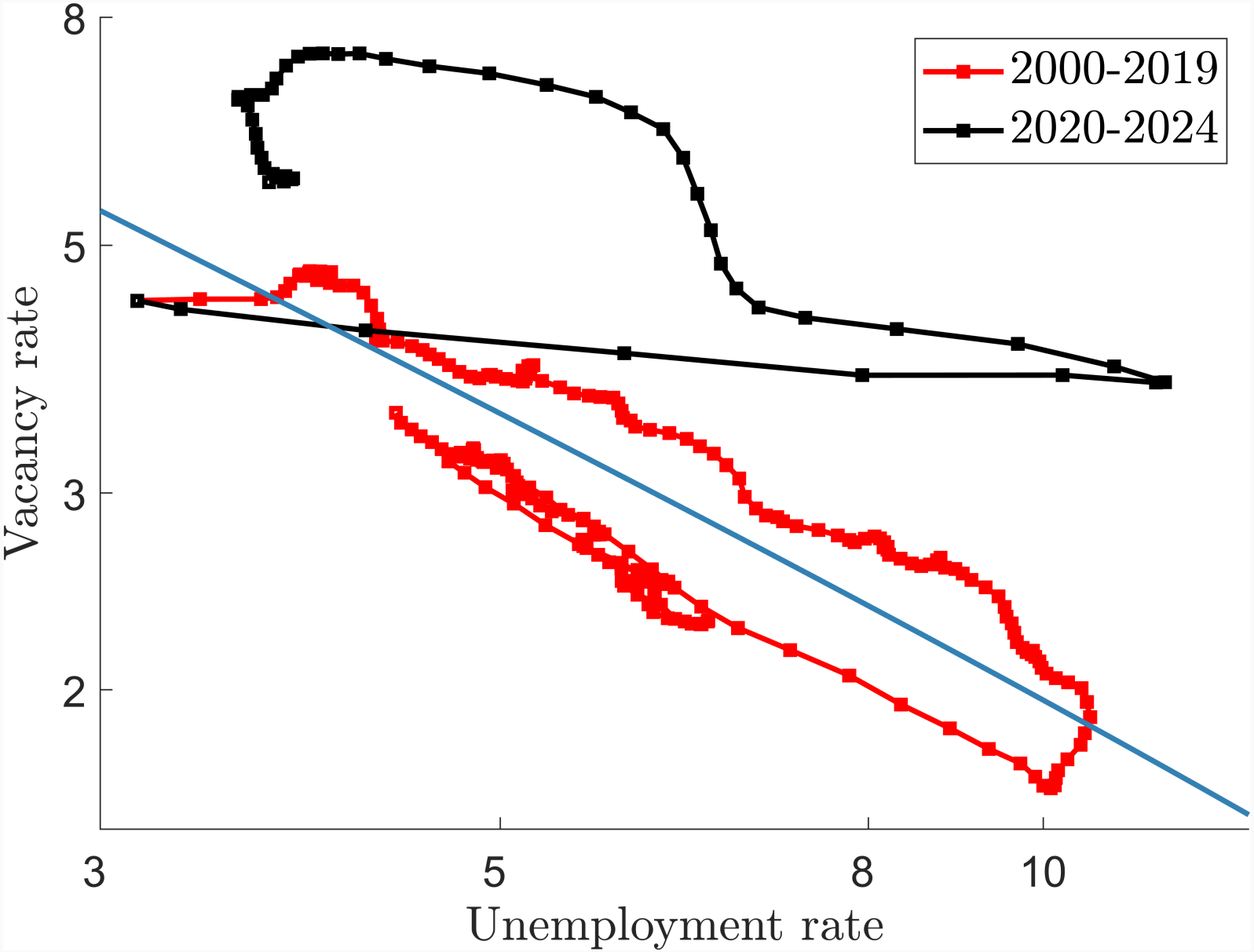
Fire-starter presentation at the Brookings Institution

Anton Cheremukhin

FRB Dallas[a]*

[a] All views expressed in this presentation are my own and do NOT reflect the views of FRB Dallas or the Federal Reserve system.

Recent Beveridge Curve Movements



Possible explanations

Traditional explanations of reduced matching efficiency:

1. covid-related disruptions: fear, isolation, remote work
2. fiscal stimulus => better outside options
3. structural changes: demand/skill shifts, mismatch, early retirement

BUT! by 2024:

- covid-related and fiscal-induced factors have dissipated
- structural shifts have mostly reversed

Why does this inefficiency persist?

Alternative explanation?

- Behavior of unemployment typical for a short recession
- Behavior of vacancies abnormal:
  - short-lived drop, huge expansion
  - positive trend predating the pandemic

Vacancies are used for two purposes:

- hiring unemployed (and out of labor force)
- poaching employed

Alternative explanation:

Disproportional expansion of poaching vacancies

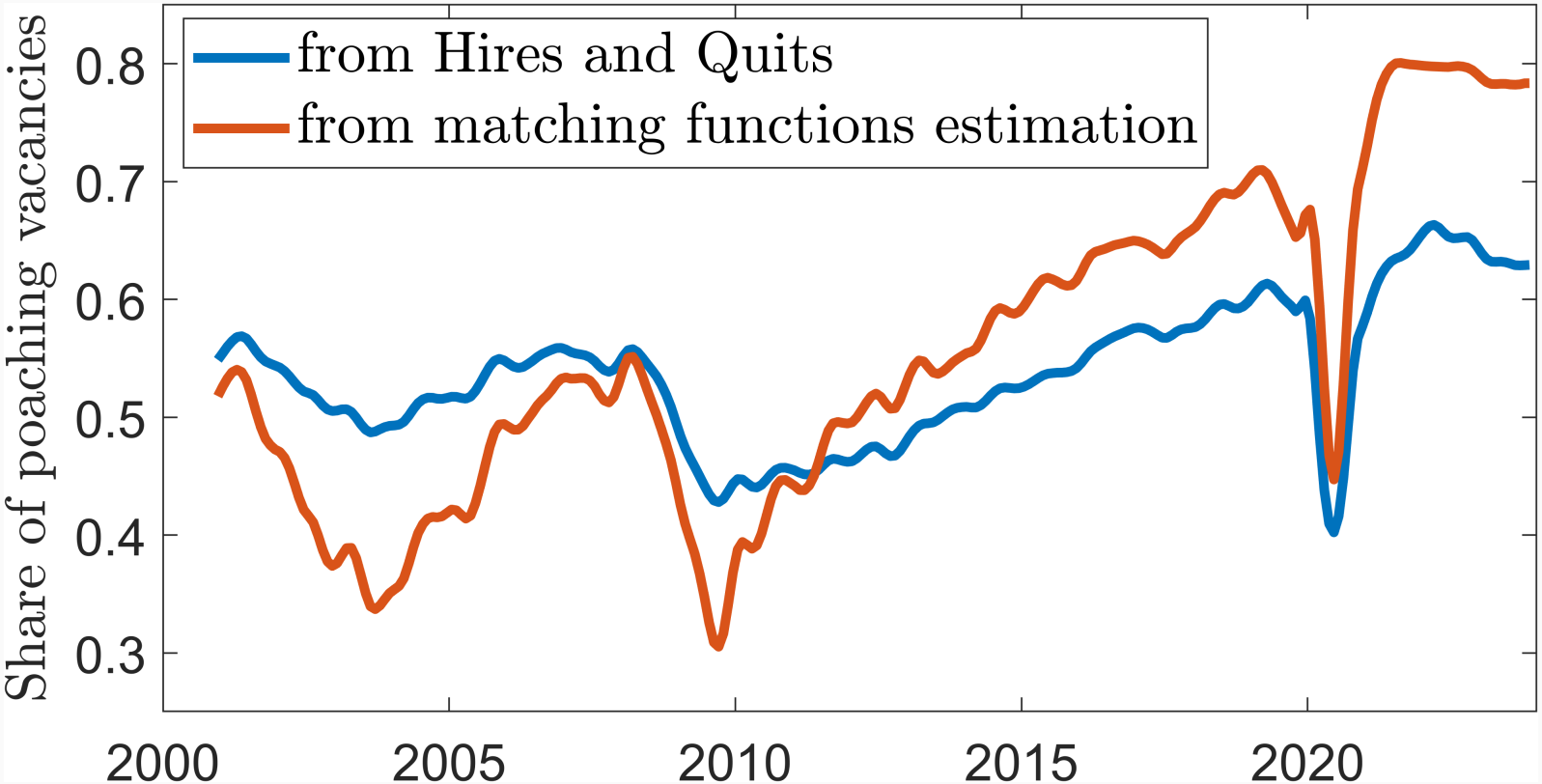
(No direct interaction with unemployed)

Analytical framework

- Two types of vacancies: hiring unemployed and poaching
- Two separate matching functions
- For each vacancy type a free-entry condition:

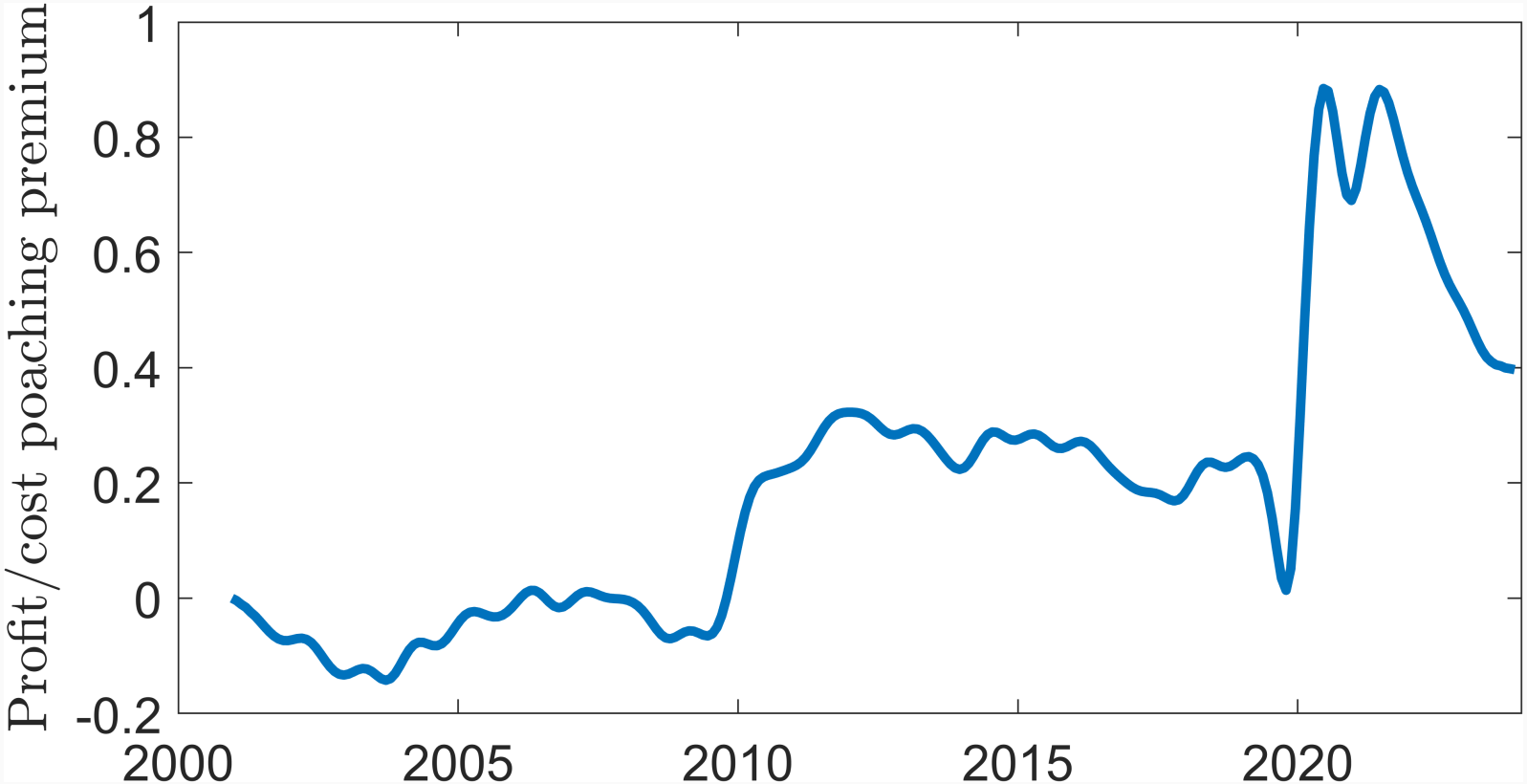
  vacancy cost = vacancy filling rate * share of match surplus

If costs and surpluses unchanged, then $\frac{V_p}{V_u} = \frac{Hires - Quits}{Quits}$



Discussion

Use analytical framework to infer profit/cost poaching premium:



Possible driving forces of poaching expansion:

- increased wage/productivity dispersion, skill/college premium
- reduced costs of vacancy creation

Backup slides: Analytical framework

Two matching functions: $m_1 = Bu^{\alpha}(v_1)^{1-\alpha}$, $m_2 = D(1-u)^{\beta}(v_2)^{1-\beta}$

Two free-entry conditions: $\frac{v_2}{v_1} = \frac{m_2(1-u,v_2)}{m_1(u,v_1)} \frac{\pi_2/k_2}{\pi_1/k_1}$

Beveridge curve for unemployed: $\lambda(1-u) = m_1(u, v_1)$

Compute $V = v_1 + v_2$ and derive:

$$\frac{\pi_2/k_2}{\pi_1/k_1} = \frac{\left(V - \left(\frac{\lambda(1-u)}{Bu^{\alpha}}\right)^{\frac{1}{1-\alpha}}\right)^{\beta}}{\frac{\left(\frac{\lambda(1-u)}{Bu^{\alpha}}\right)^{\frac{\alpha}{1-\alpha}}}{1-u} \frac{D(1-u)^{\beta}}{Bu^{\alpha}}}$$

Parameter calibration: $\lambda = 0.03, B = 0.55, D = 0.043, \alpha = 0.4, \beta = 0.8$

Back out LHS using data for unemployment and vacancy rate