Discussion of *Wage-Price Spirals* by Lorenzoni and Werning

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Lorenzoni and Werning (2023)

Focus: Examine the drivers and the timing of price and wage inflation dynamics through the lens of the NK framework

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Recent inflation dynamics characterized as:

- Production uses labor L and a non-labor input X (flex price, inelastic supply)
- Price of non-labor input X $\uparrow$ as demand $\uparrow$
- This scarcity reduces MPL (low substitutability between X and L)
- Non-core inflation increases
- Distributional tension between workers and firms $\longrightarrow$ wage-price spiral
- Real wages go down initially as price inflation picks up

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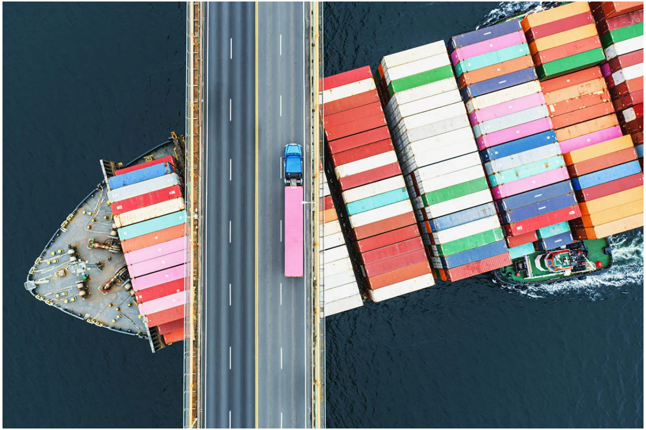
Key Takeaway: The fact that nominal wage growth is currently exceeding price inflation can be given an optimistic interpretation, as a sign of real wages going back to trend, and not necessarily as a concern of an ongoing spiral.

My Comments

1. **Role of X in accounting for inflation**
    - Key assumptions
    - Goods vs. services
2. **Wages**
    - Labor turnover and wage rigidity
    - Workers' and Firms' Aspirations
        - Reservation wages
        - Posted wages
3. **A quick look at the post-pandemic labor market**
    - An alternative view on wage dynamics without conflict
    - Workers' aspirations for non-wage amenities
4. **Takeaways**

What is X?



Key condition

Proposition 2: In response to a monetary shock that leads to a transitory increase in employment, real wages fall on impact if and only if

$$\Lambda_p \frac{s_X}{\epsilon} > \Lambda_w(\sigma s_L + \eta)$$

Key assumptions:

- X: inelastically supplied with flexible price
- X: high share (s_X) and complement to labor (low ϵ)
- Wages more rigid than prices ($\Lambda_w < \Lambda_p$)

Mechanism more relevant for goods sector

Elasticity of substitution and relative rigidity of wages and prices important for wage-price dynamics:

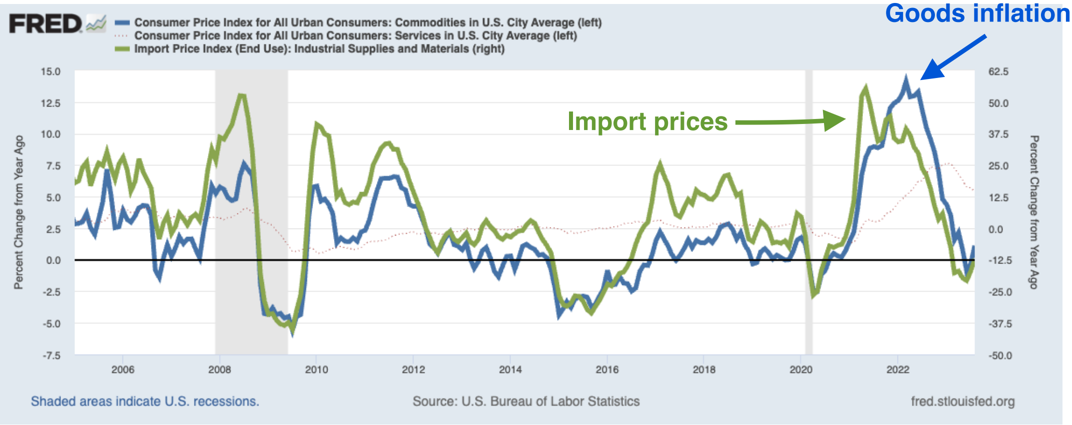
- **Goods:** high s_X and low ϵ
  $\longrightarrow$ literature finds complementarity between intermediates

  Atalay, 2017; Boehm,Flaaen, and Pandalai-Nayar, 2019

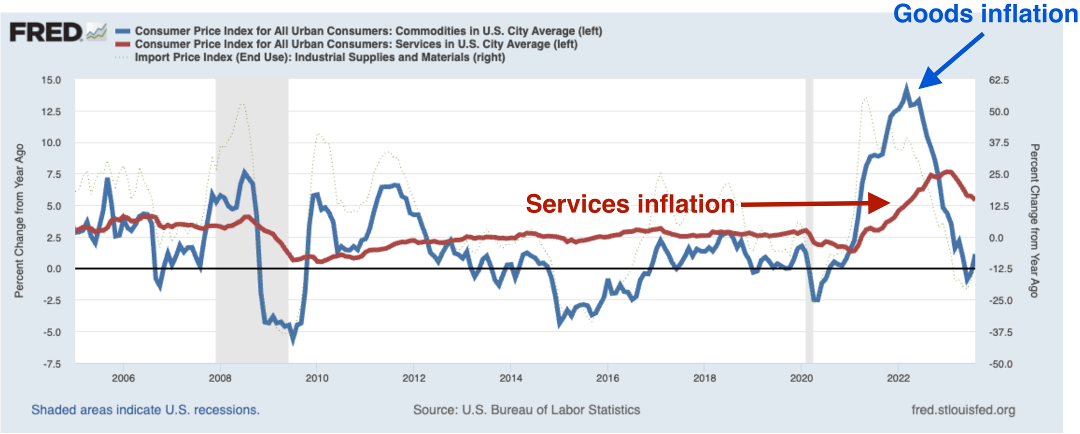
- **Services:** high s_L and high ϵ
  $\longrightarrow$ higher labor turnover limits wage rigidity

Important point: With $\epsilon = 1$, wage and price inflation dynamics are very similar.

Rise in price of industrial supplies and materials coincided with goods inflation



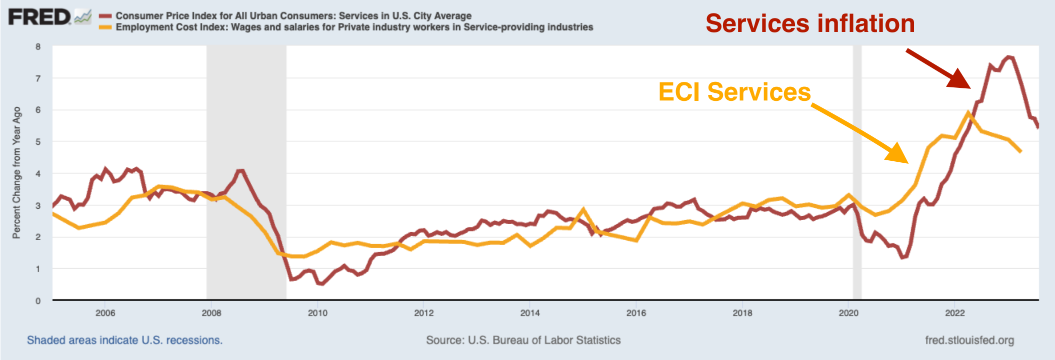
Services inflation followed a different timing



Nominal wages and prices in the goods sector

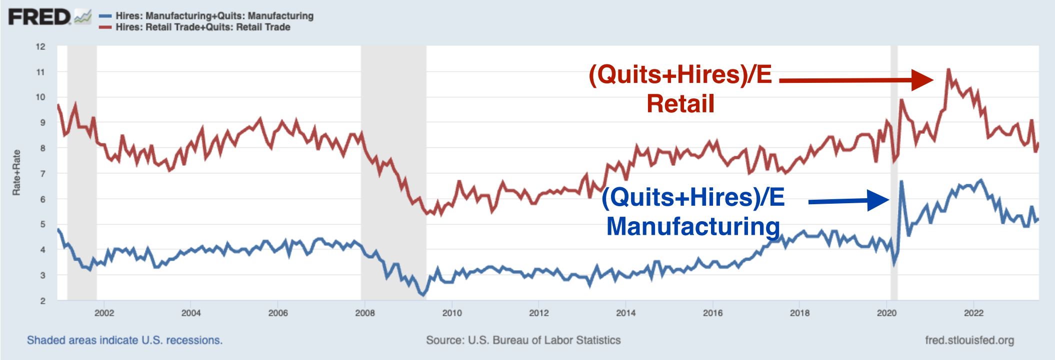
Similar to wage-price inflation dynamics in Lorenzoni and Werning (2023): *shocks that produce high prices in the goods market only gradually lead to higher wage demands in the labor market.*

Different timing in the services sector



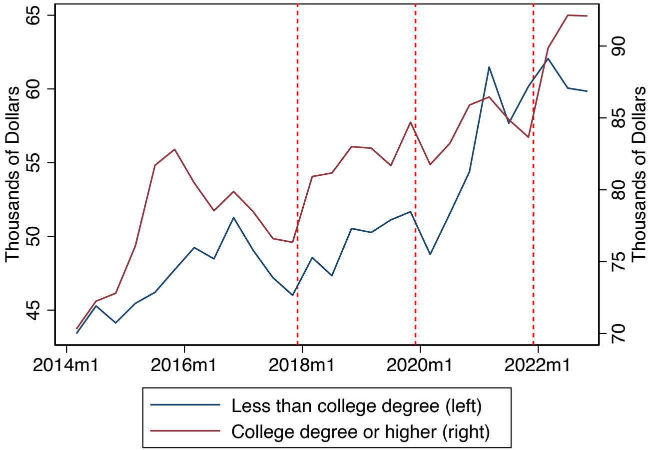
Wage-price inflation dynamics remains puzzling in the services sector.

Wage rigidity likely not the answer



Rise in labor turnover as measured by quits and hires, especially in the services.

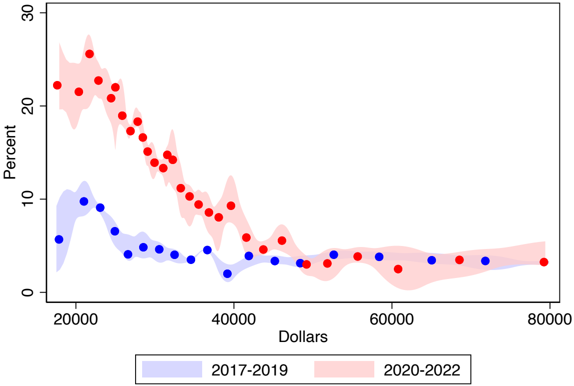
Workers’ aspirations: reservation wages



Increase in reservation wages more pronounced for workers with less education.

Survey of Consumer Expectations (SCE)

Firms' aspirations: posted wages



Rise in posted wages at the firm/position level for low wage workers.

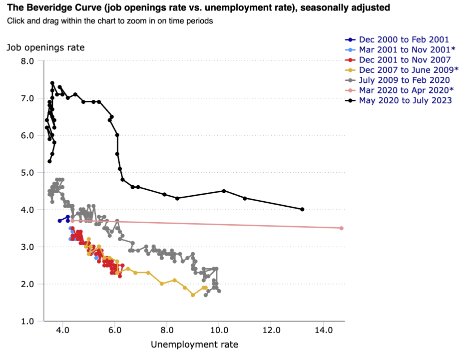
Crump, Eusepi, Giannoni, and Şahin (2022)

A lot going on in the labor market

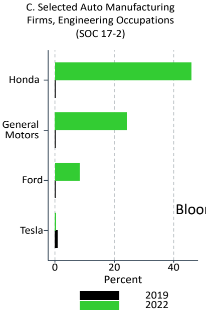
Beyoncé’s new song is an anthem for the *Great Resignation*

Workers willing to accept pay cuts of 10% on average in exchange for 2 workdays a week of ***WFH***.

US: Is a Soft Landing Possible? What the ***Beveridge Curve*** Reveals

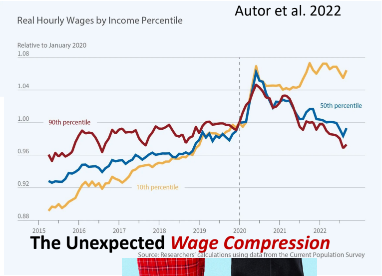


Source: U.S. Bureau of Labor Statistics.



Bloom et al. 2023

Autor et al. 2022



The Unexpected ***Wage Compression***

47% of Employees Say They'll Quit if Employer Orders Return to Office Full Time, According to Integrated Benefits Institute Analysis

Has the *Willingness to Work* Fallen during the Covid Pandemic?

Post-pandemic labor market dynamics without conflict/wage rigidity

Equilibrium model of on-the job search with amenities: **shift in workers' preferences**

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- Vacancies $\uparrow\uparrow$

  $\longrightarrow$ partly due to hard-to-fill low-amenity vacancies

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- Job-filling rate $\downarrow\downarrow$

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- Job-filling rate $\downarrow\downarrow$

  $\longrightarrow$ due to a shift in worker preferences to more flexible jobs
- Wage growth $\uparrow\uparrow$ at the bottom of the distribution

  $\longrightarrow$ Wage Compression

Bagga, Mann, Şahin, Violante (2023)

Alternative view on wage dynamics

The shift in worker preferences coupled with a rapid recovery triggered an increase in quits in search for more flexible job opportunities and put downward pressure on wages in high amenity jobs.

Going forward:

- Real wages imperfect proxy for inflationary pressures as non-wage amenities become more important for workers
- Wage aspirations imperfect proxy for workers' aspirations
- Non-wage amenities and high turnover increase labor costs and might also affect pass-through
- As reallocation from low to high amenity jobs subsides, job-to-job transitions could be more inflationary

Takeaways from Lorenzoni and Werning (2023)

- timely paper on an important topic
- focuses on *conflict* inflation as a key driver
- emphasizes the important role for recent supply chain disruptions

  Amiti et al. 2023, Comin et al. 2023, di Giovanni et al. 2022, 2023
- argues that the behavior of real wages not so informative
- important reference applicable to future (?) inflationary episodes!

Wish list: more sophisticated labor market and multiple sectors to confront the data with full force.