Pandemic Pushed the U.S. into Recession … and Hourly Wages Rose?

Economic Education Summer Professional Development for Educators
Unemployment rate is highly cyclical - 2020 a 70+ year high
Slack labor market when actual unemployment rate > “natural” rate of unemployment
Labor slack increased dramatically in 2020 Q2

Unemployment Rate Gap

Slack labor market

Tight labor market
Wage growth slows in slack labor markets
Covid-19 should have significantly slowed wage growth
AHE growth increased significantly instead – why?
Understanding AHE growth

- AHE = aggregate wages / aggregate hours, ie “average wage”
- Growth in AHE has two components
  - Aggregation effect reflecting an earnings weighted average of individual wage growth
  - Composition effect reflecting the difference in average wages of individuals starting jobs vs leaving jobs
- Important point:
  Growth in an average wage is not the same as average wage growth
  - Average wage growth equally weights individual wage growth
  - Average wage growth has no composition effects
How “composition effects” can impact AHE growth

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- 2019 AHE growth of 3.79% < average wage growth of 4%
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- Bob’s job loss leads to a higher AHE and consequently positive composition effect
CPS data reproduces (with noise) AHE growth

Chart 2
CPS and BLS Average Hourly Earnings Measures Move Similarly
Percent change, year/year

NOTE: Gray bars indicate National Bureau of Economic Research recession dates.

Federal Reserve Bank of Dallas
Covid-19 job losers tended to have lower wages

Chart 3
Low-Wage Workers Disproportionately Lost Jobs Due to COVID-19

Density

0.08

0.07

0.06

0.05

0.04

0.03

0.02

0.01

0

0

20

40

60

80

100

120

140

Wage, dollars per hour

Remained employed
Became unemployed

NOTES: Employed means an individual reported working in 2019 and 2020. Unemployed means an individual reported working in 2019 but lost work in 2020. Density refers to the proportion of individuals in a category with the corresponding hourly wage. The area under each line sums to 1.


Federal Reserve Bank of Dallas
Composition term of CPS AHE growth spiked during Covid-19

Chart 4
Composition Effect Accounts for Much of CPS Average Hourly Earnings
Percent change, year/year

NOTES: Gray bars indicate National Bureau of Economic Research recession dates. The aggregation effect refers to the contribution of already employed workers to wage growth. The composition effect is the contribution of workers entering or leaving jobs to wage growth. Average hourly earnings equals the sum of the aggregation and composition effects.
Implications

- AHE growth is a common measure of wage growth
  - Generally lower than average wage growth due to weighting individual wage growth by relative earnings
  - Fastest wage growth tends to occur early in careers when individuals still have relatively low earnings
- Composition effects typically push down AHE growth
  - Composition effect is generally negative reflecting higher wages for those leaving jobs as compared to starting jobs
  - Covid-19 caused a large positive composition effect as low wage workers lost their jobs at much greater rate
Comparing average wage growth to AHE growth
Connections In the Classroom: Unemployment Paradox

Tamara Redic Cottrell | Economic Education Advisor
Connections In the Classroom: Embed

• **Discussion**: Explore the implications of career pathways with discussion questions.
  - What is the perceived impact that education has on the unemployment paradox?

• **Graphic Organizer**: Revisit four types of involuntary unemployment
  - Demonstrate how paradox fits into each type.
Connections In the Classroom: Extend

• **Opportunity Occupations:**
  The Federal Reserve System initiative facilitated by Kansas City Fed and others to examine jobs that don't require a bachelor's degree but pay above national annual median wage.

• **Navigate:**
  The Dallas Fed's College and Career Readiness publication that can be used to predict careers that will have growth and to reevaluate career pathways.

  **Opportunity Occupations: Good pay; no degree required** - Federal Reserve Bank of Kansas City (kansascityfed.org)

  **Opportunity Occupations Monitor** - Federal Reserve Bank of Atlanta (atlantafed.org)

  **Navigate — Exploring College and Careers workbook** (dallasfed.org)