



Osher Lifelong Learning Institute, Summer 2022
Contemporary Economic Policy

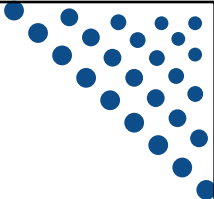
Rochester Institute of Technology
July-Aug, 2022

Jon Haveman, Ph.D.
National Economic Education Delegation

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National Economic Education Delegation

- **Vision**
 - One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.
- **Mission**
 - NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.
- **NEED Presentations**
 - Are nonpartisan and intended to reflect the consensus of the economics profession.

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Who Are We?

- **Honorary Board: 54 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 651+ members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 49 Ph.D. Economists**

- Aid in slide deck development

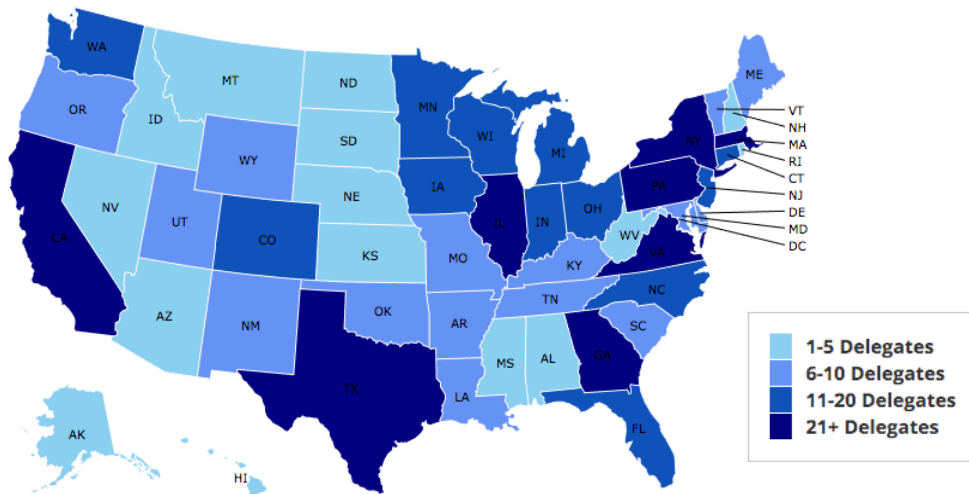


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Where Are We?



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Available NEED Topics Include:

- Coronavirus Economics
- US Economy
- Climate Change
- Economic Inequality
- Economic Mobility
- Trade and Globalization
- Minimum Wages
- Immigration Economics
- Housing Policy
- Federal Budgets
- Federal Debt
- Black-White Wealth Gap
- Autonomous Vehicles
- Healthcare Economics



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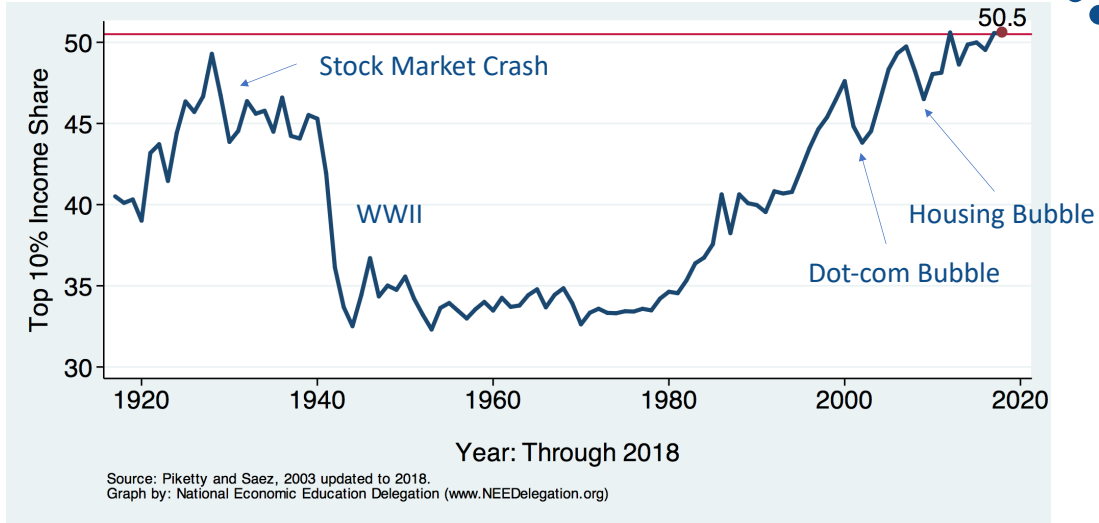
Course Outline

- **Contemporary Economic Policy**
 - **Week 1 (7/11): Economic Update (Jon Haveman, NEED)**
 - Week 2 (7/18): Economic Inequality (Christopher Herrington VCU)
 - Week 3 (7/25): Trade and Globalization (Alan Deardorff, University of Michigan)
 - Week 4 (8/1): Economic Mobility (Jon Haveman, NEED)
 - Week 5 (8/8): The Black-White Wealth Gap (Jon Haveman, NEED)
 - Week 6 (8/15): Climate Change Economics (Jon Haveman, NEED)
 - Week 7 (8/22): Autonomous Vehicles (Jon Haveman, NEED)



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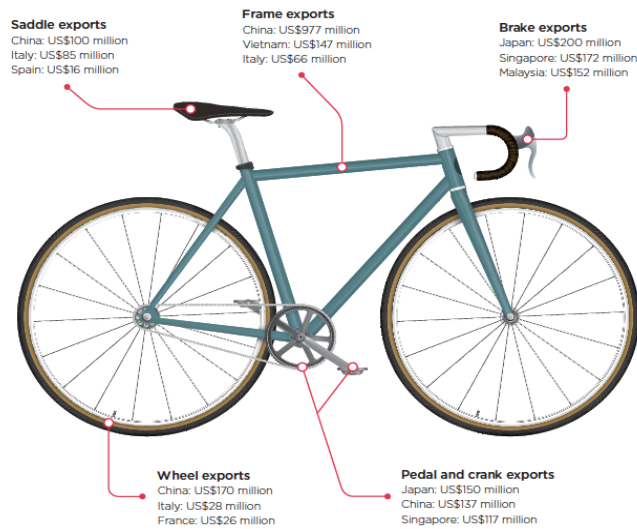
Income Inequality: Share of Top 10%



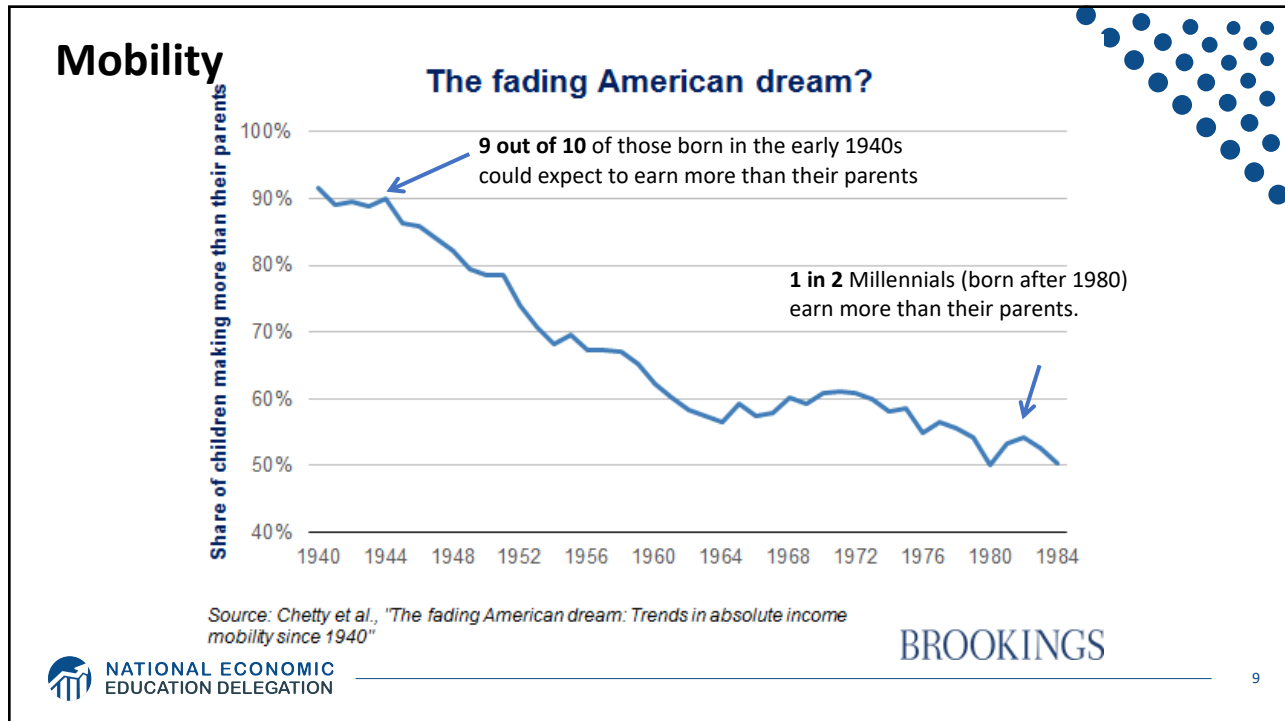
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Trade: Bicycle Supply Chain

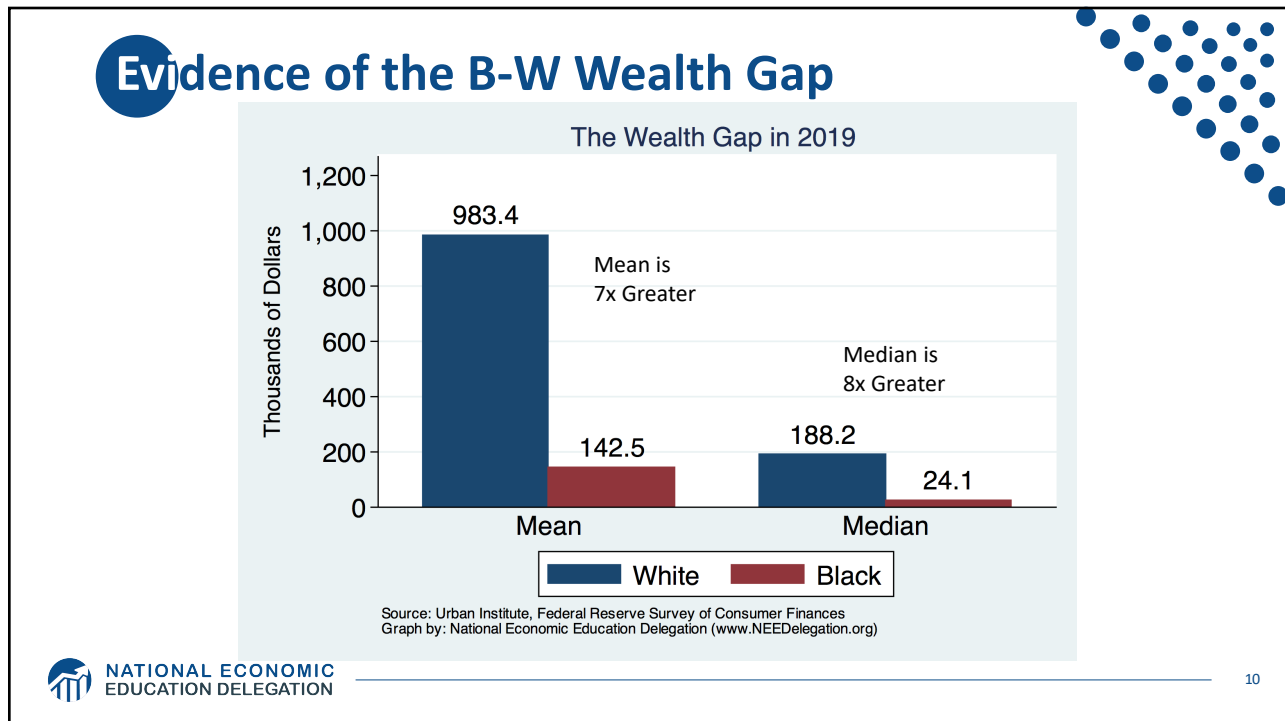
Figure 1.1 Where do bicycles come from?



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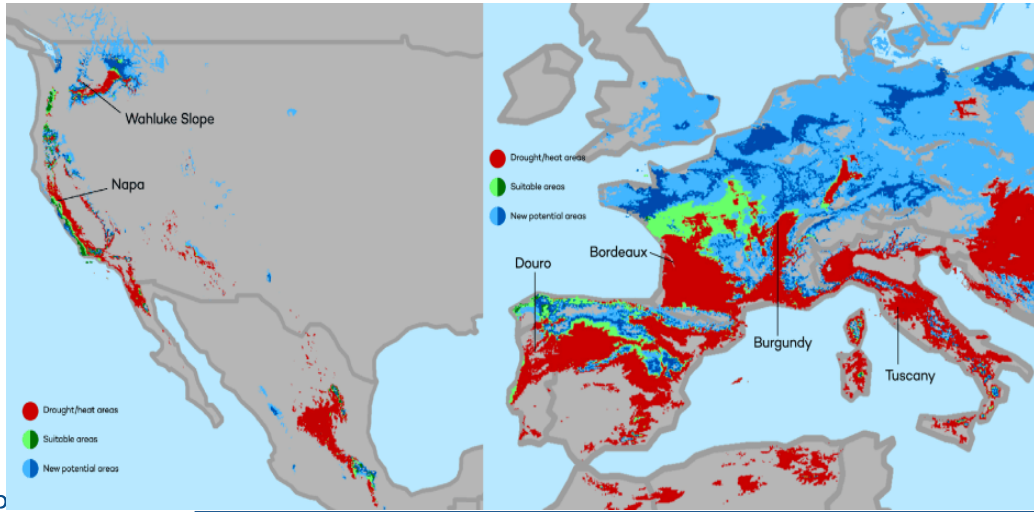
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Climate Change Economics

The changing map of the world's wine-growing regions.



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Autonomous Vehicles



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Submitting Questions

- **Please submit questions of clarification in the chat.**
 - I will try to handle them as they come up.
- **We will do a verbal Q&A once the material has been presented.**
- **OLLI allowing, we can stay beyond the end of class to have further discussion.**
- **Slides will be available from the NEED website tomorrow (https://needdelegation.org/delivered_presentations.php)**

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US Economic Update



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Credits and Disclaimer

- **This slide deck was authored by:**

- Jon D. Haveman, NEED
- Scott Baier, Clemson University
- Geoffrey Woglom, Amherst College (Emeritus)
- Brian Dombeck, Lewis & Clark College
- Doris Geide-Stevenson, Weber State

- **Disclaimer**

- NEED presentations are designed to be nonpartisan.
- It is, however, inevitable that the presenter will be asked for and will provide their own views.
- Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).



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Outline

- **State of the pandemic**
- **The U.S. Economy**
- **Hot Topics**
 - Government policy
 - Inflation



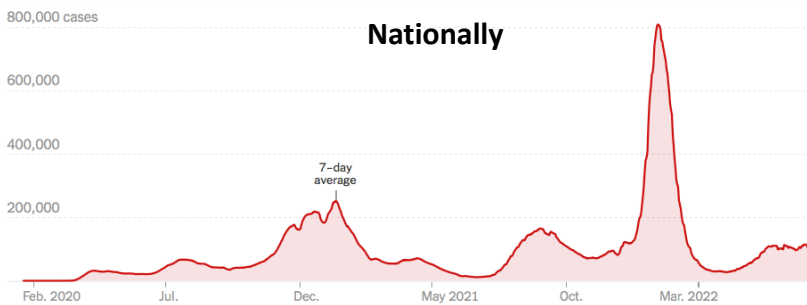
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State of the Pandemic

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Making Real Progress...Until Omicron

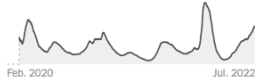
New reported cases



Vaccinations

	AT LEAST ONE DOSE	FULLY VACCINATED
All ages	78%	67%
5 and up	83%	71%
65 and up	95%	92%

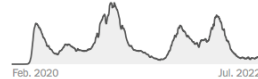
Test positivity rate



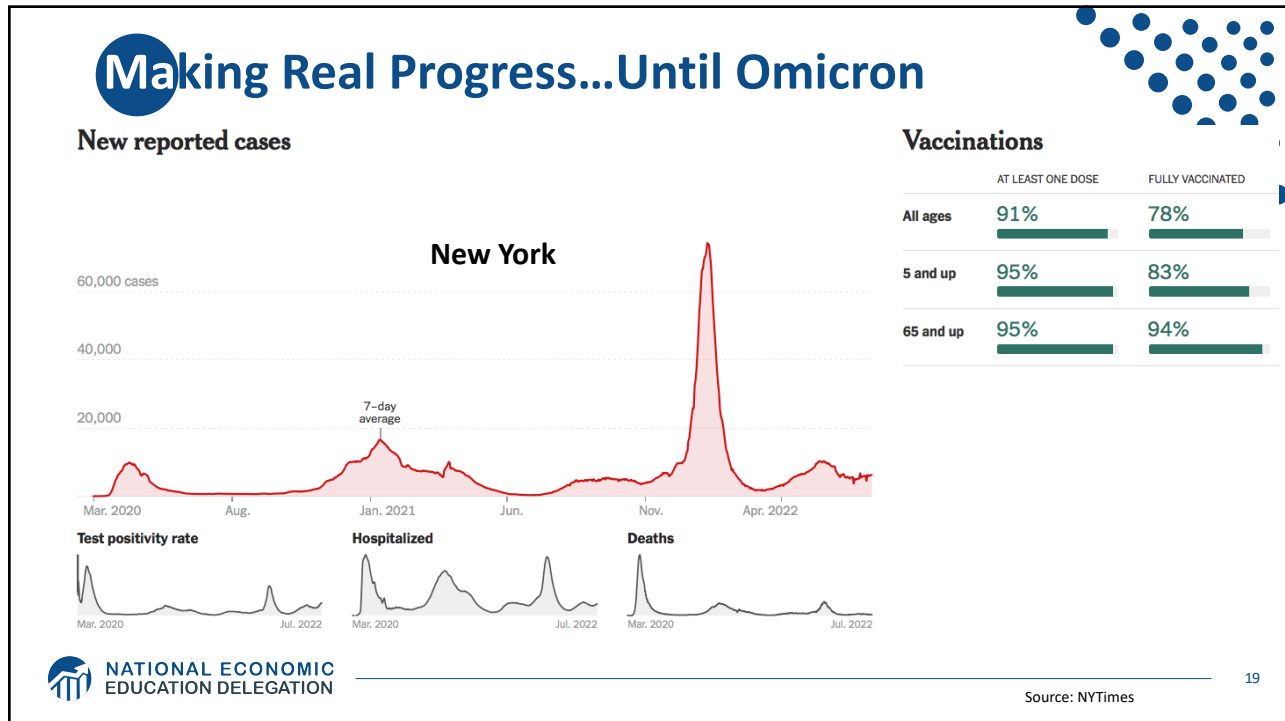
Hospitalized



Deaths



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Some Basic Statistics

Statistic:	Value
Population	332.9 Million
Labor Force (age 16+)	164.4 Million
Employment (Nonfarm)	151.7 Million
Gross Domestic Product (GDP)	\$24.4 Trillion
Income per Capita	\$63,884
Ave. Hourly Earnings	\$31.95

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U.S. Economy in Global Perspective

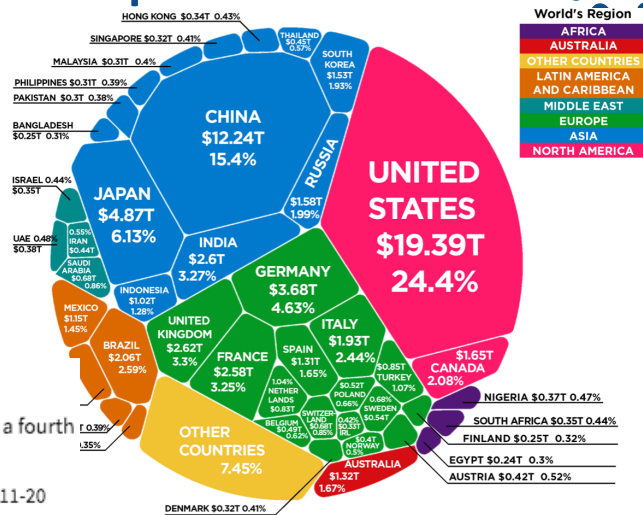
U.S. Nominal GDP:

\$21.747 trillion in 2019-Q4
\$19.487 trillion in 2020-Q2
\$24.383 trillion in 2022-Q1

% Share of the Global Economy

The 173 countries outside the top 20 make up less than a fourth of the total global economy.

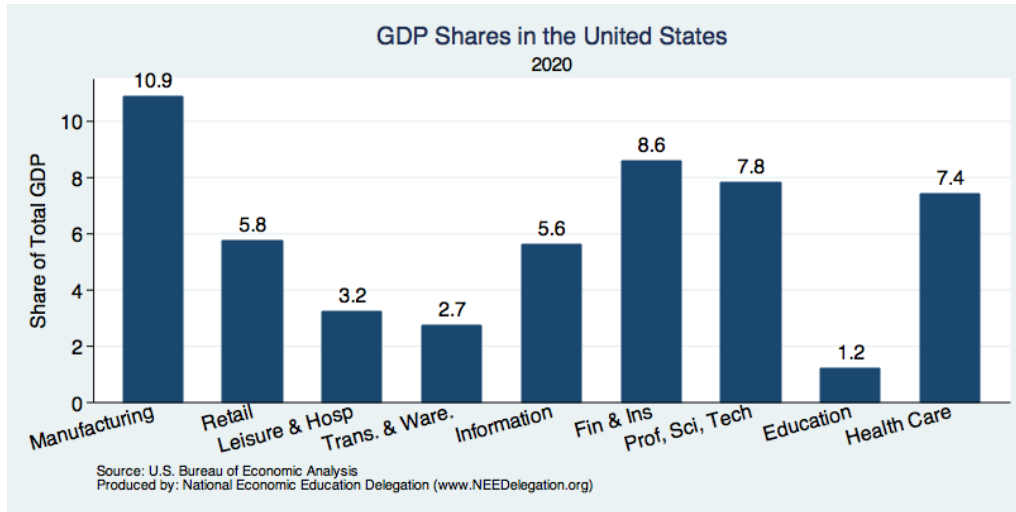
- United States
- 173 Rest
- China
- Countries 11-20
- Countries 6-10
- Japan
- Germany
- United Kingdom



Article and Sources:
<https://howmuch.net/articles/the-world-economy-2017>
<https://databank.worldbank.org/data/download/GDP.pdf>

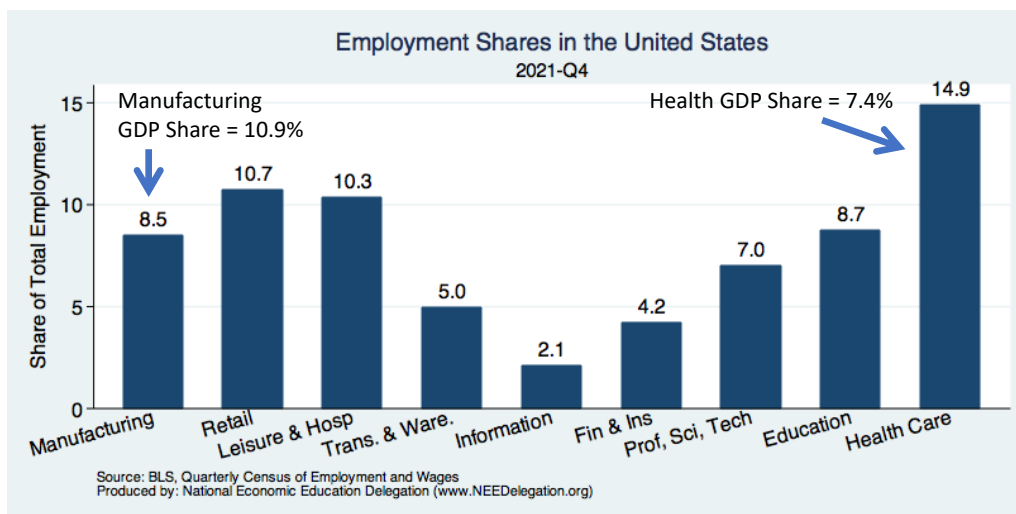
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Composition of the U.S. Economy: GDP



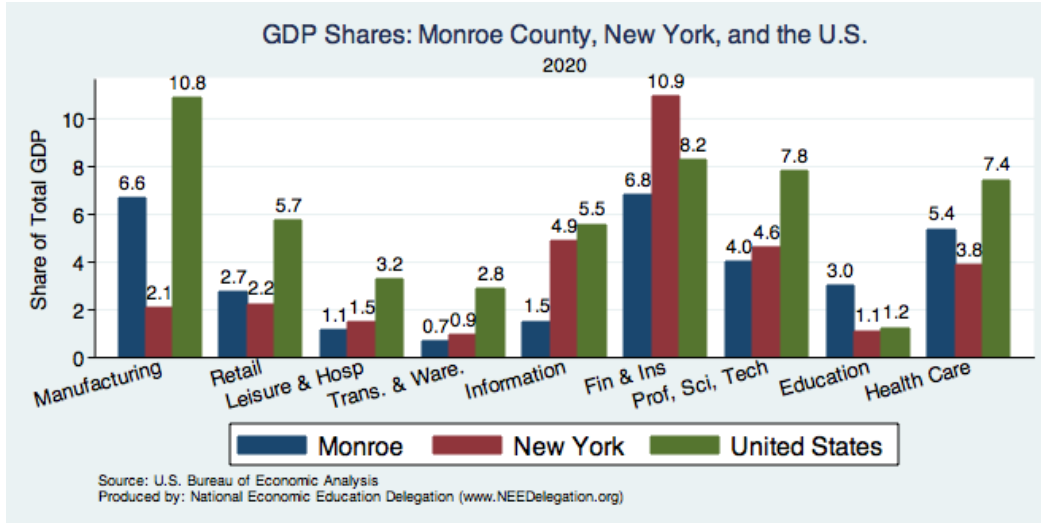
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Composition of the U.S. Economy: Employment



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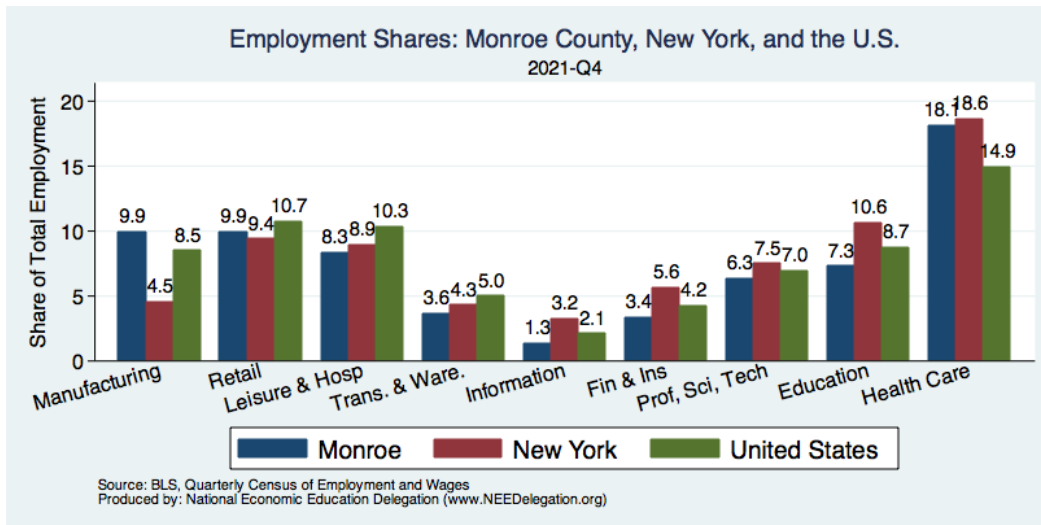
Monroe County GSP: Manuf, Finance, Health



Note: Does not add to 100% because of omitted sectors.

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Monroe County Employment: Health



Note: Does not add to 100% because of omitted sectors.

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Evidence of Impact

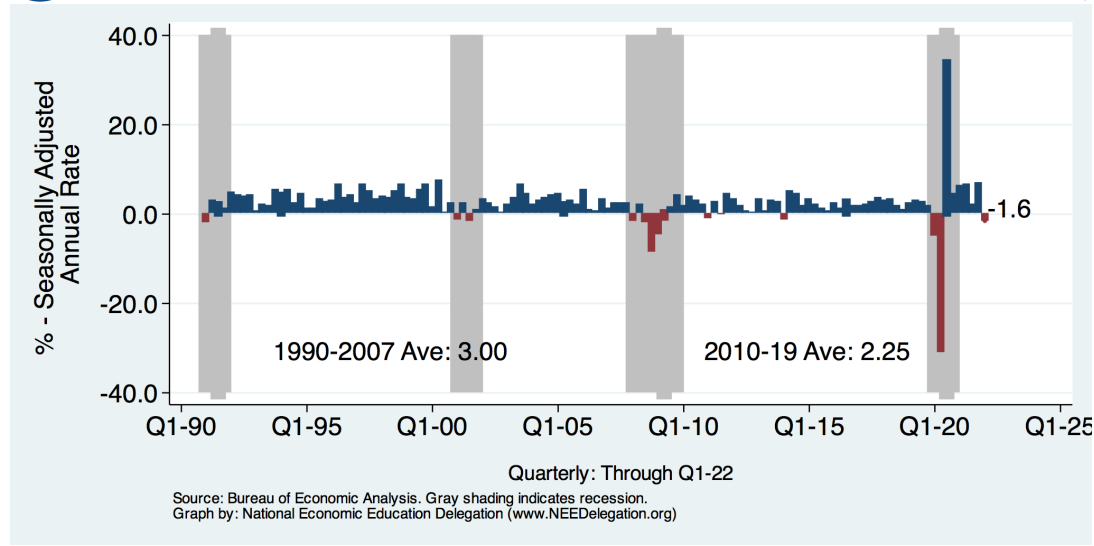


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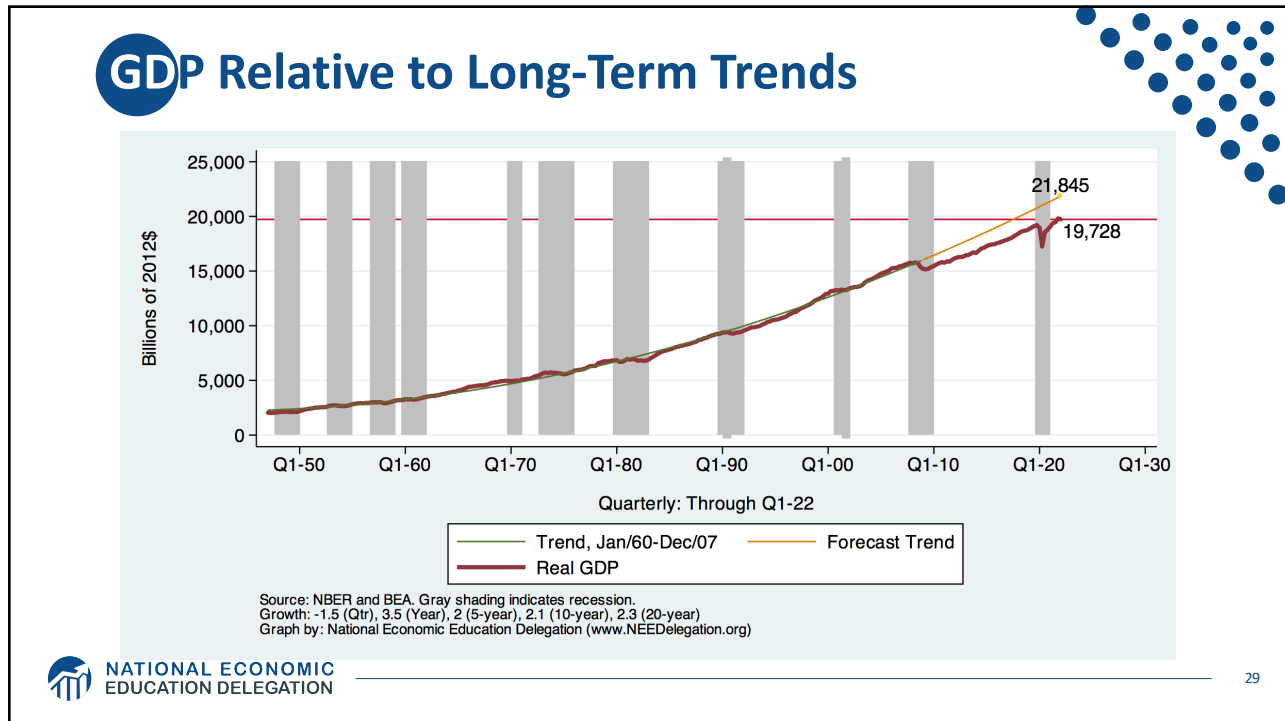
GDP: Quarterly Growth



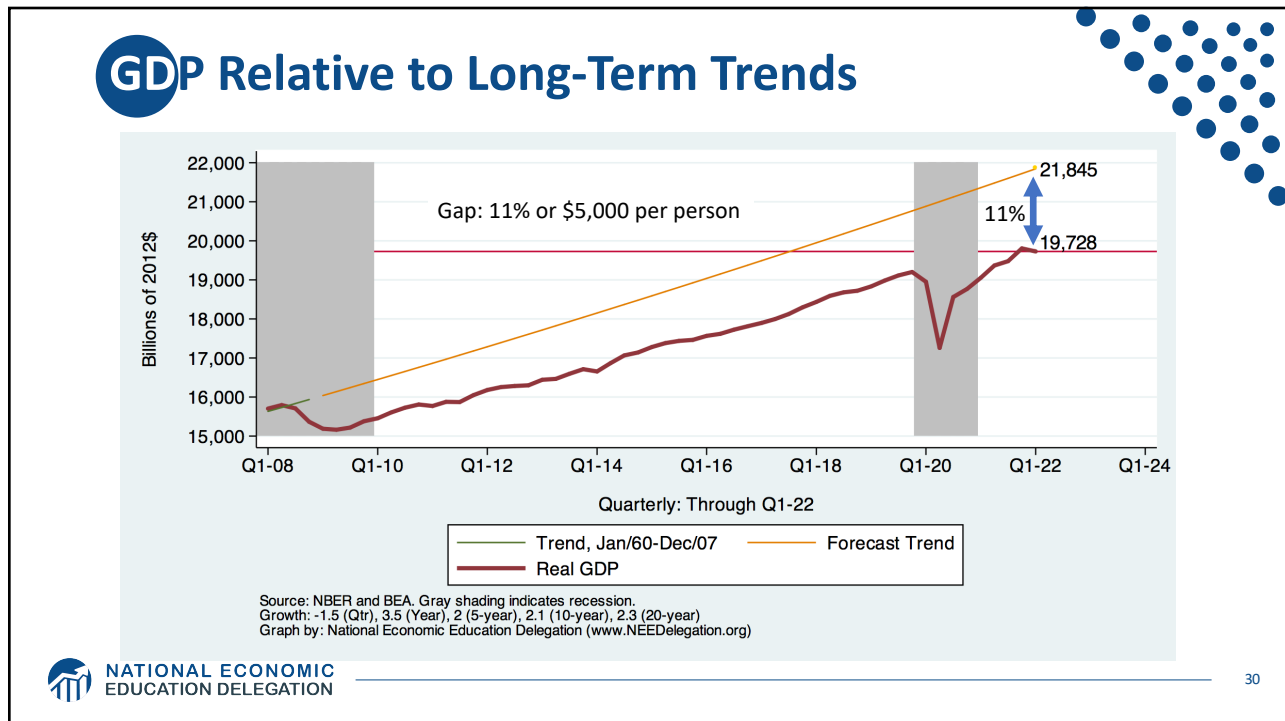
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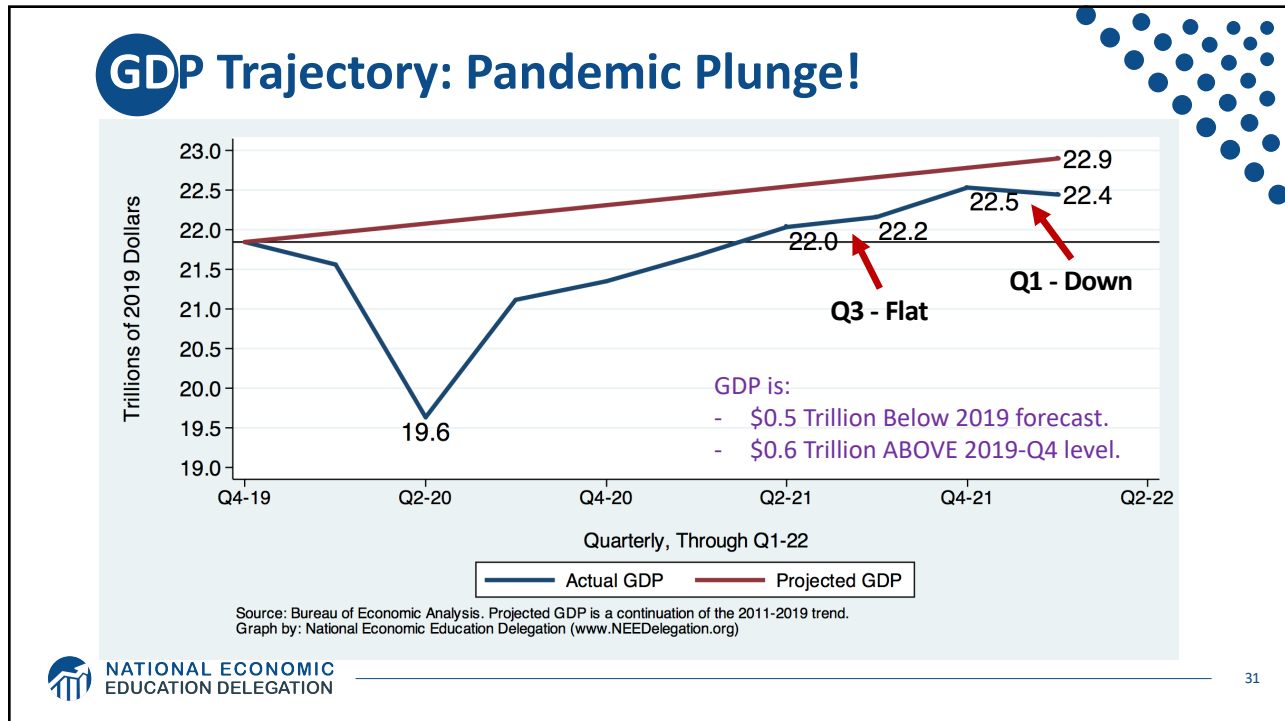
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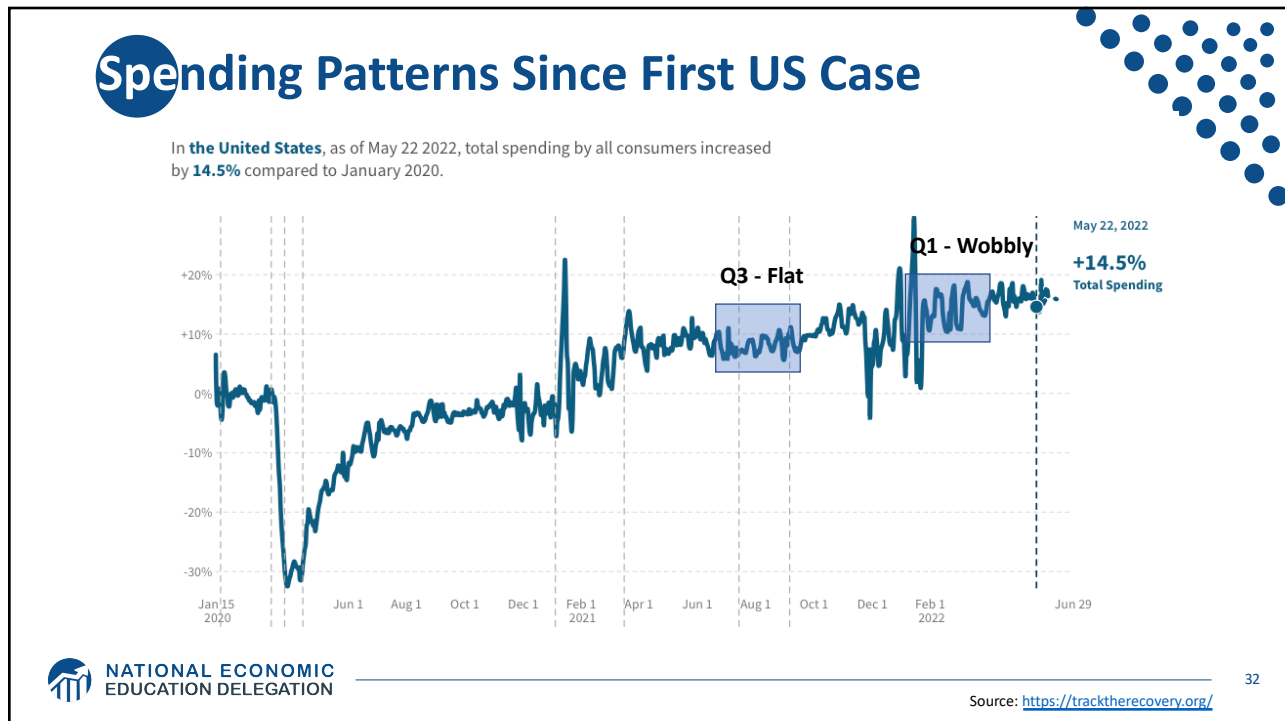
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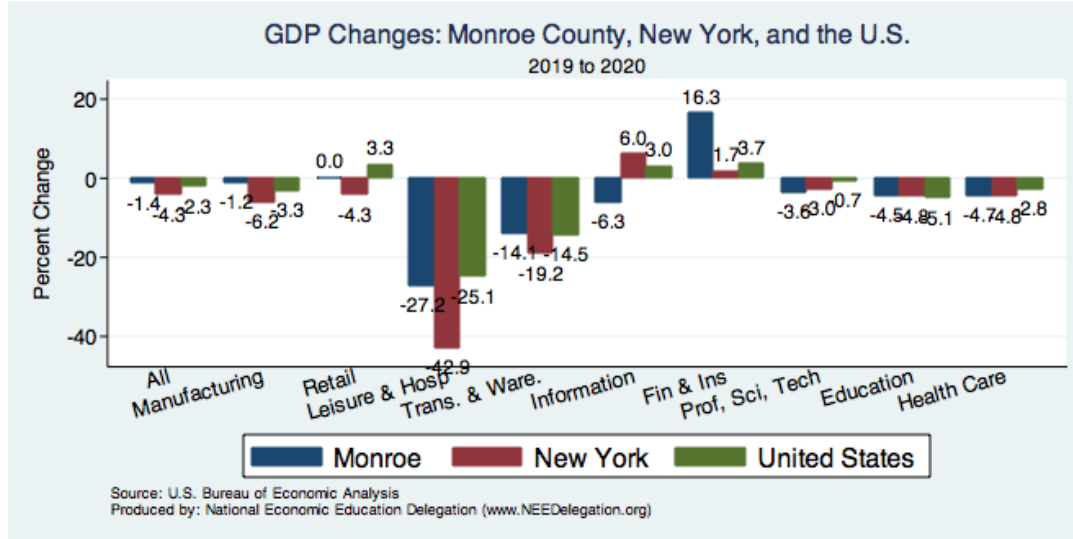


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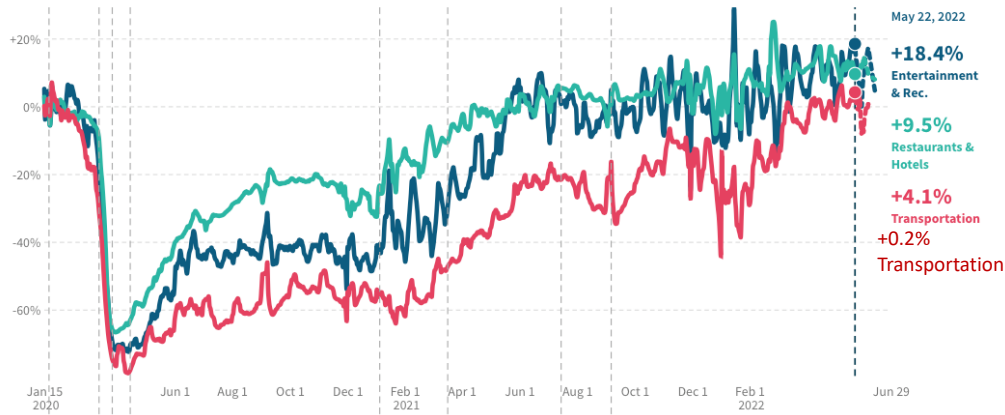
But Not All Industries Were Equally Harmed



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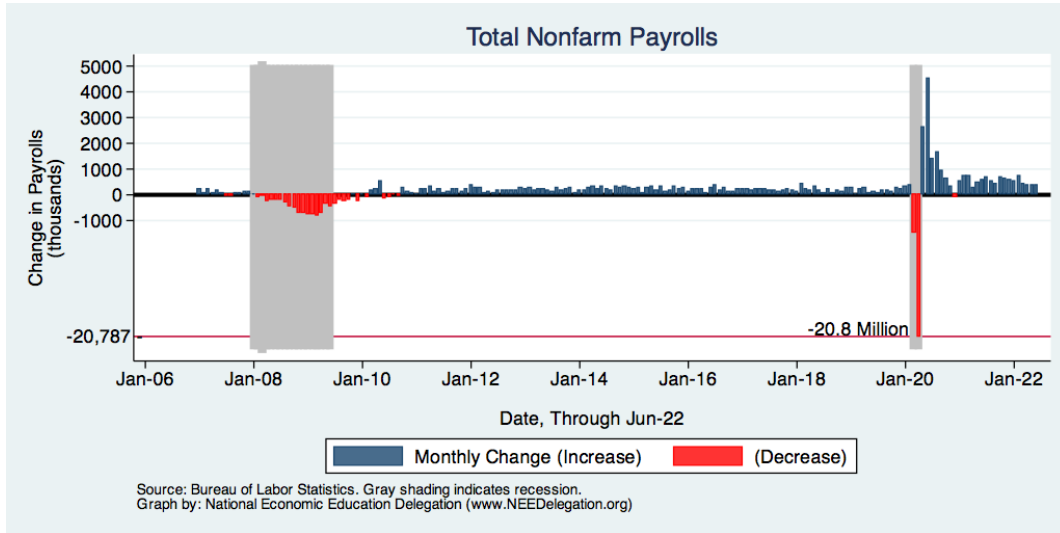
Spending Patterns – Hardest Hit Sectors

In the United States, as of May 22, 2022, arts, entertainment, and recreation spending by all consumers increased by **18.4%** compared to January 2020.



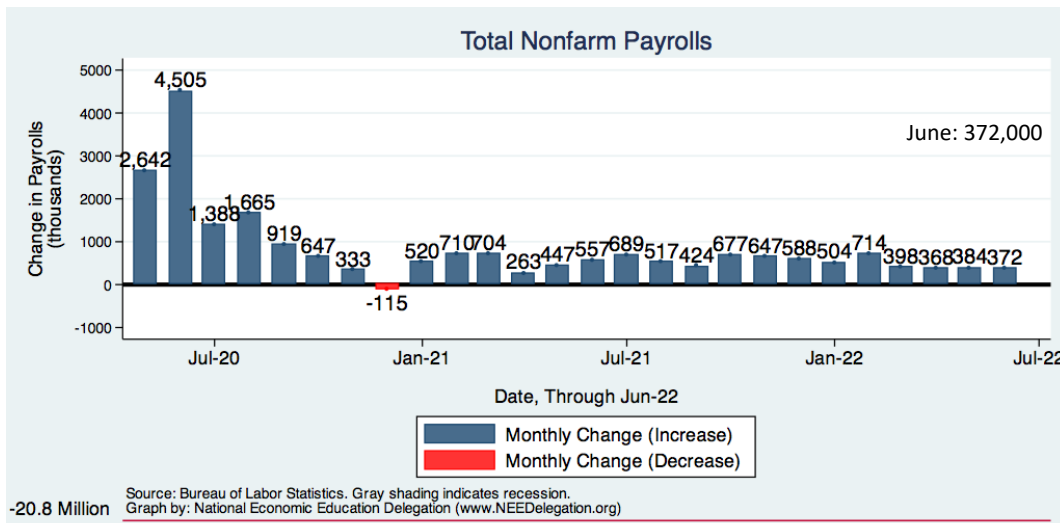
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Monthly Changes in Nonfarm Employment

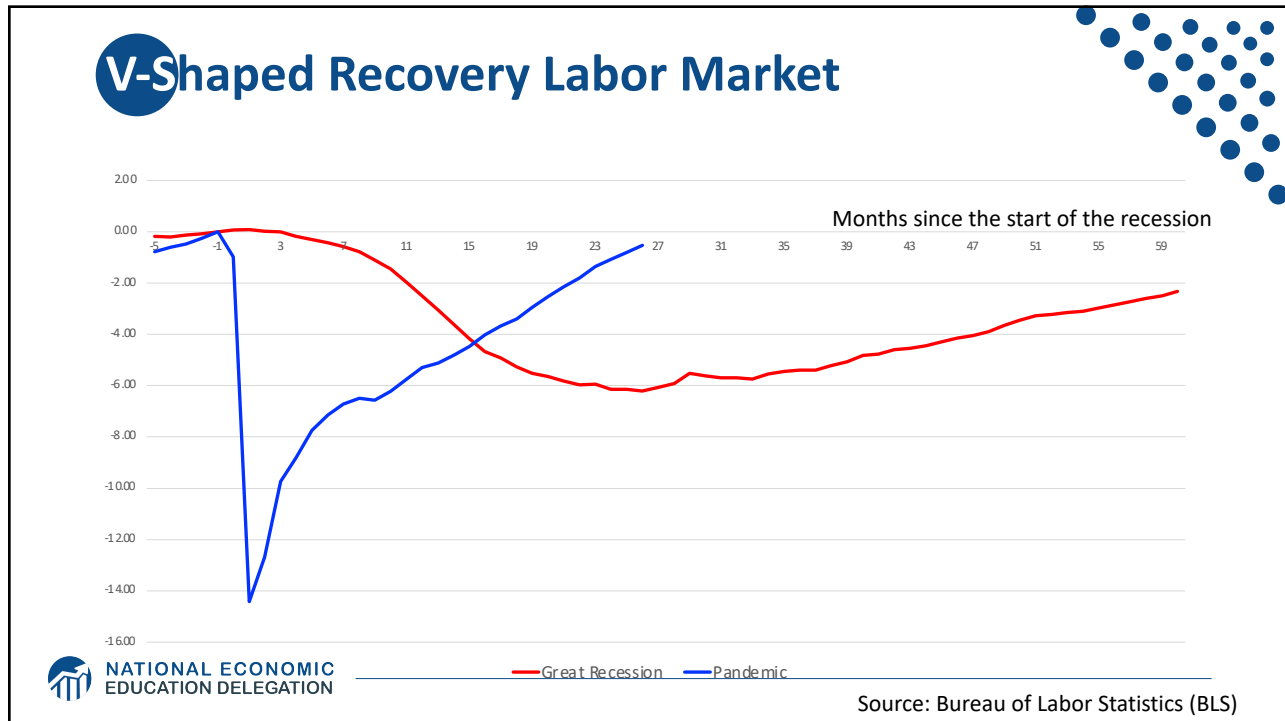


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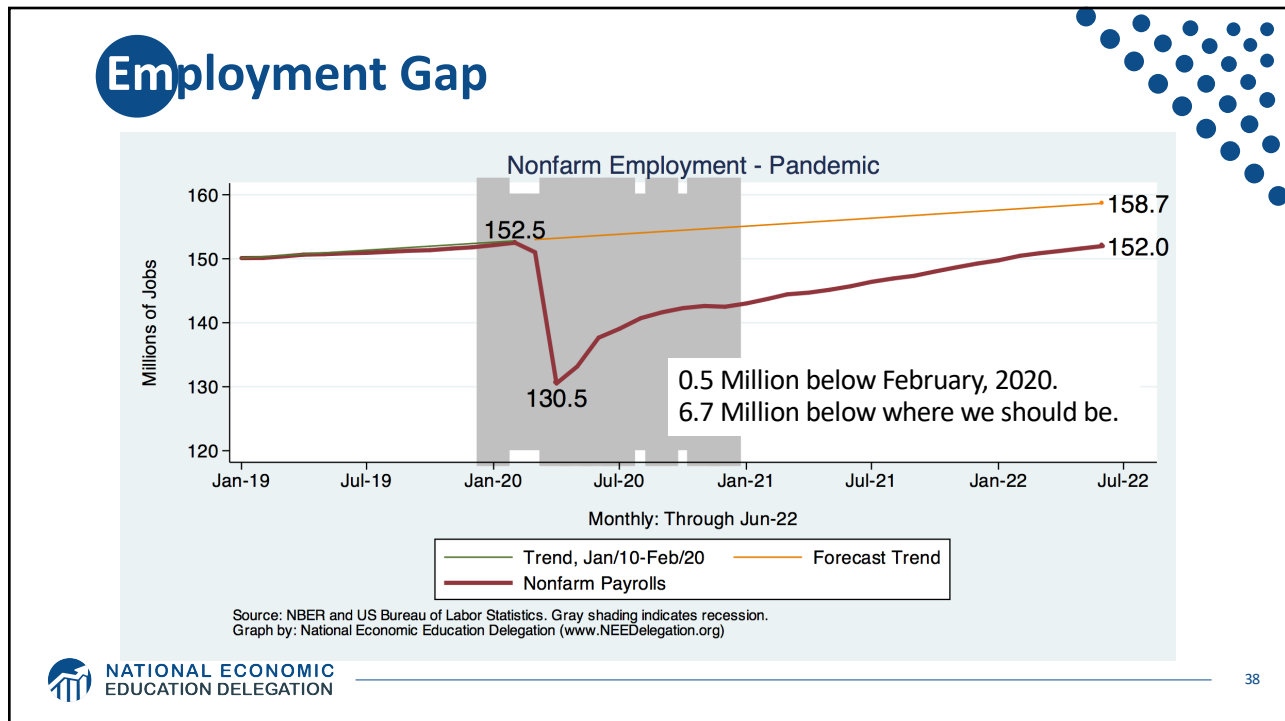
Monthly Changes in Nonfarm Employment



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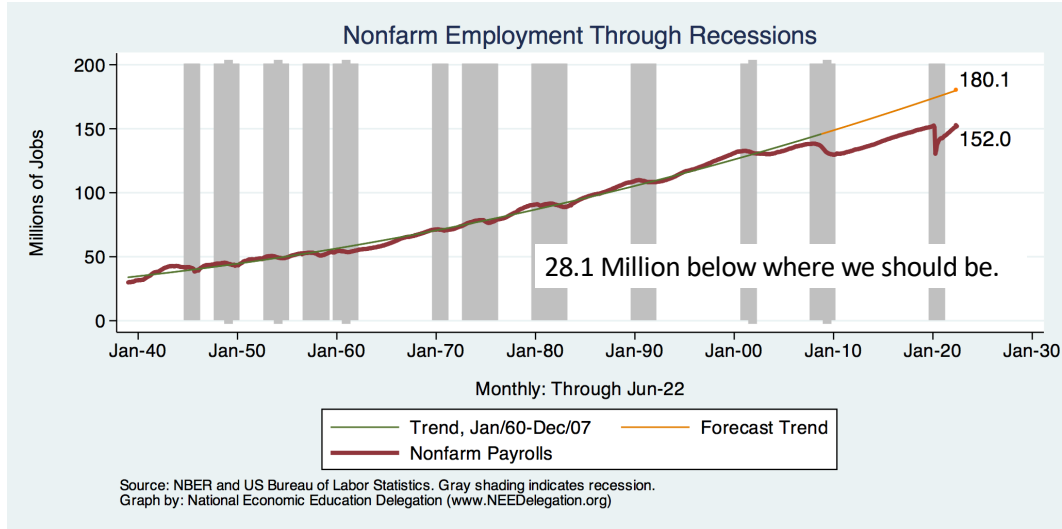


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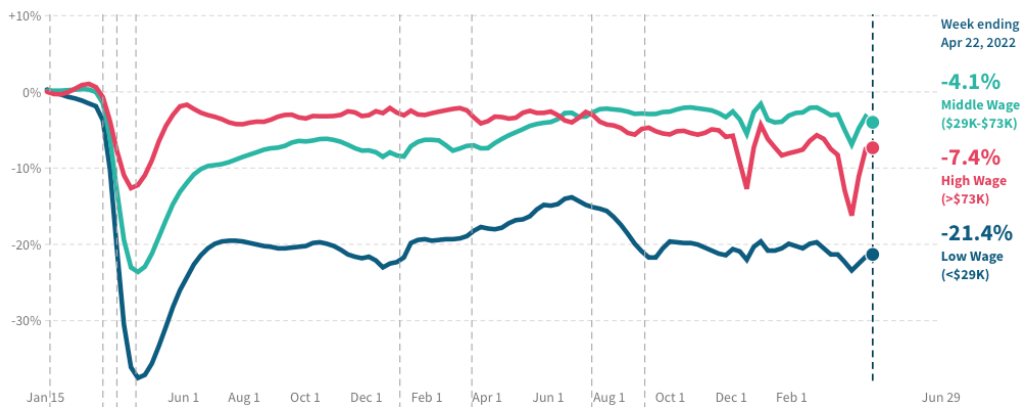
Employment Gap – In Historical Perspective



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Low Wage Employment is Lagging

In the United States, as of April 22, 2022, employment rates among workers in the bottom wage quartile decreased by **21.4%** compared to January 2020 (not seasonally adjusted).



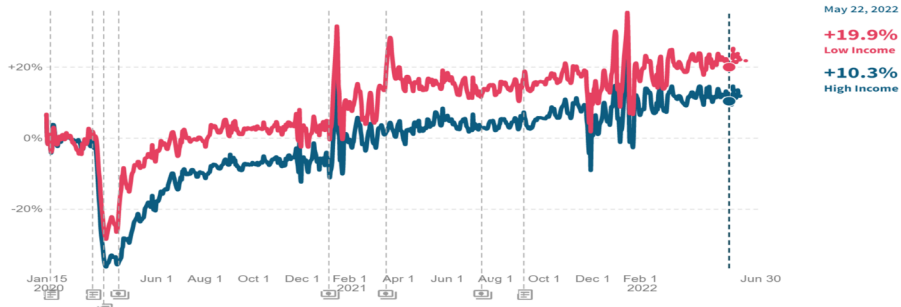
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Stimulus Payments Saved Low Wage Workers

OPPORTUNITY INSIGHTS ECONOMIC TRACKER HARVARD UNIVERSITY FEDERAL RESERVE BILL & MELINDA GATES FOUNDATION

Percent Change in All Consumer Spending*

In the United States, as of May 22 2022, total spending by high-income consumers increased by 10.3% compared to January 2020.



*Change in average consumer credit and debit card spending, indexed to January 4-31, 2020 and seasonally adjusted. The dashed segment of the line is provisional data, which may be subject to non-negligible revisions as newer data is posted. This series is based on data from Affinity Solutions.

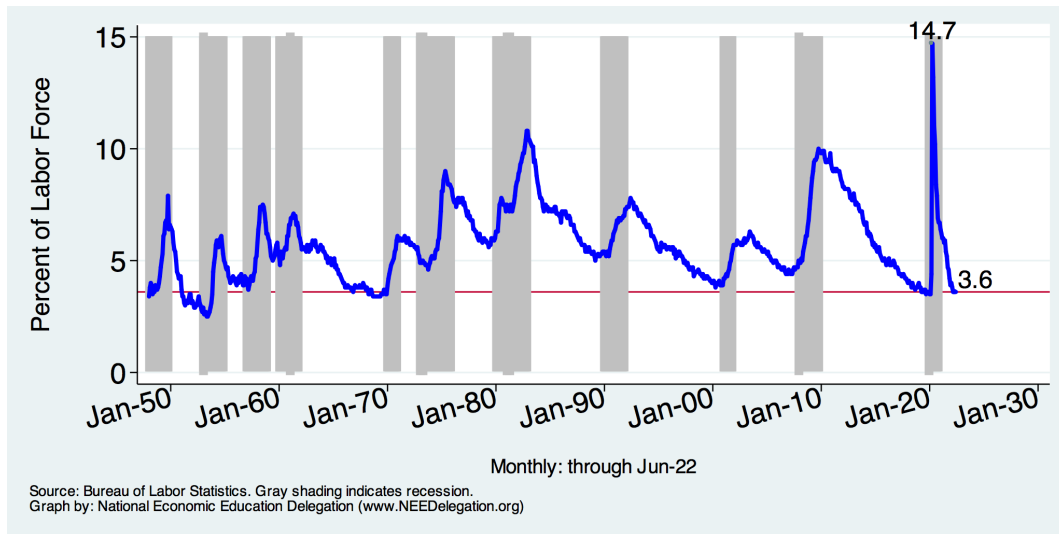
last updated: June 21, 2022 next update expected: July 01, 2022

data source: Affinity



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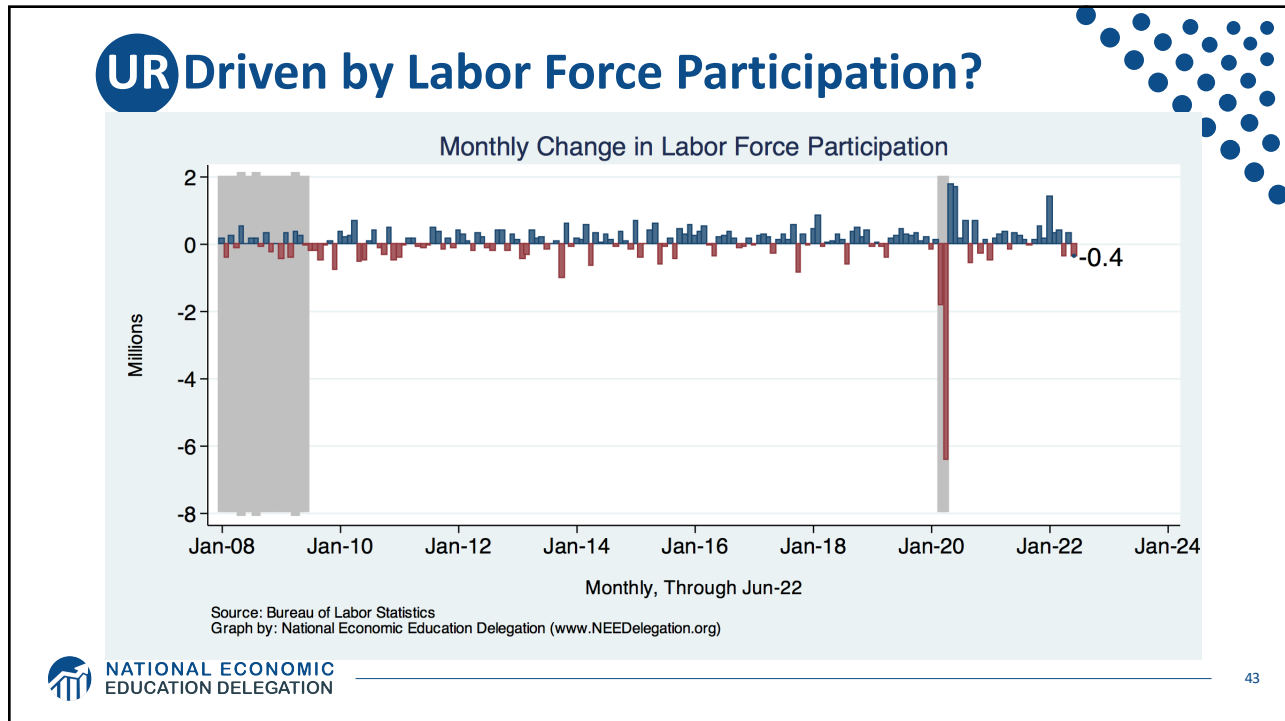
Unemployment Rate



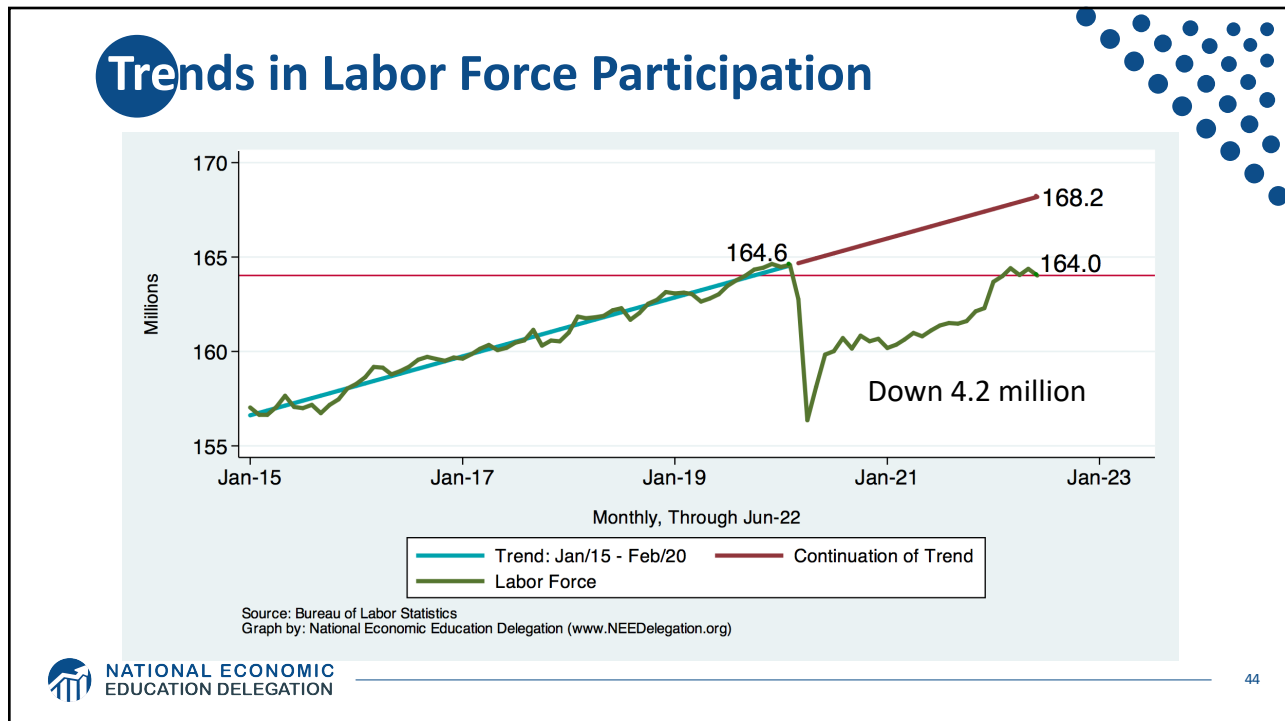
Source: Bureau of Labor Statistics. Gray shading indicates recession. Graph by: National Economic Education Delegation (www.NEEDelegation.org)



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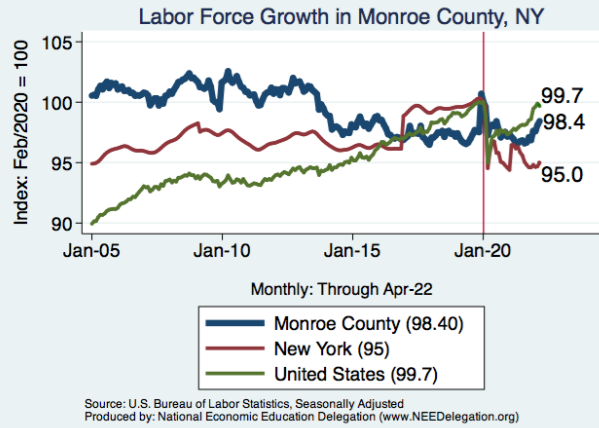
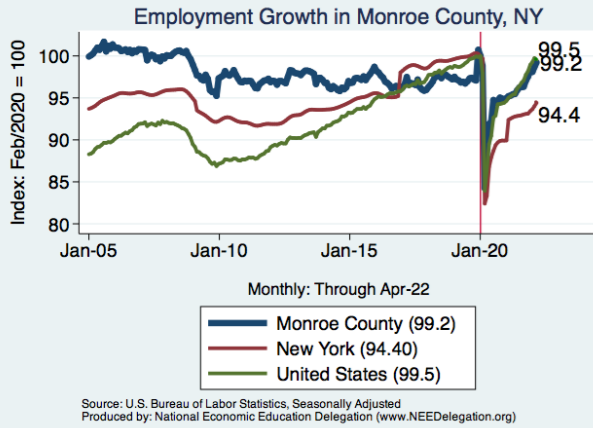


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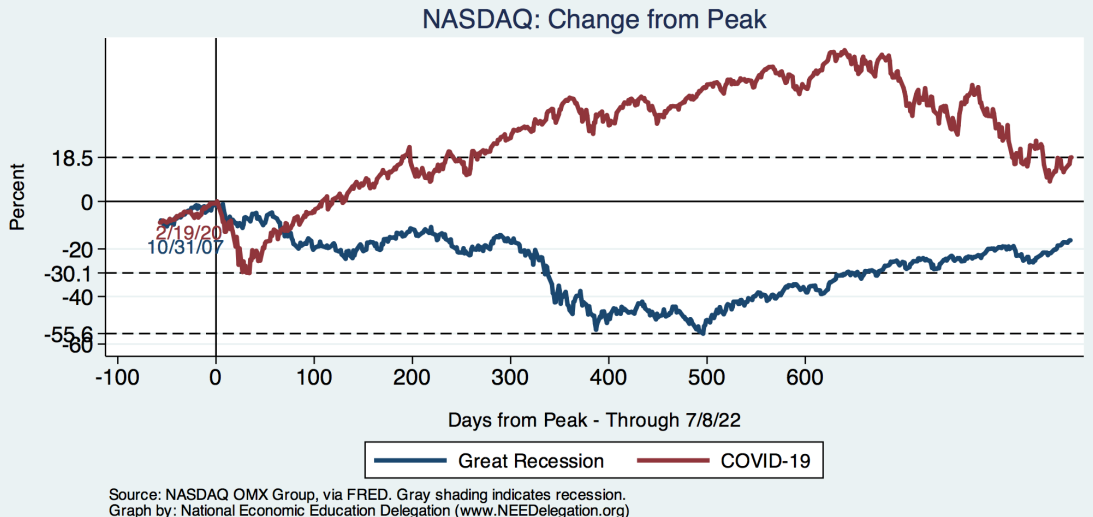
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Employment in Monroe County



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Stocks: Bounced Back Faster This Time



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Hot Topics

- **Government policy**
- **Inflation**



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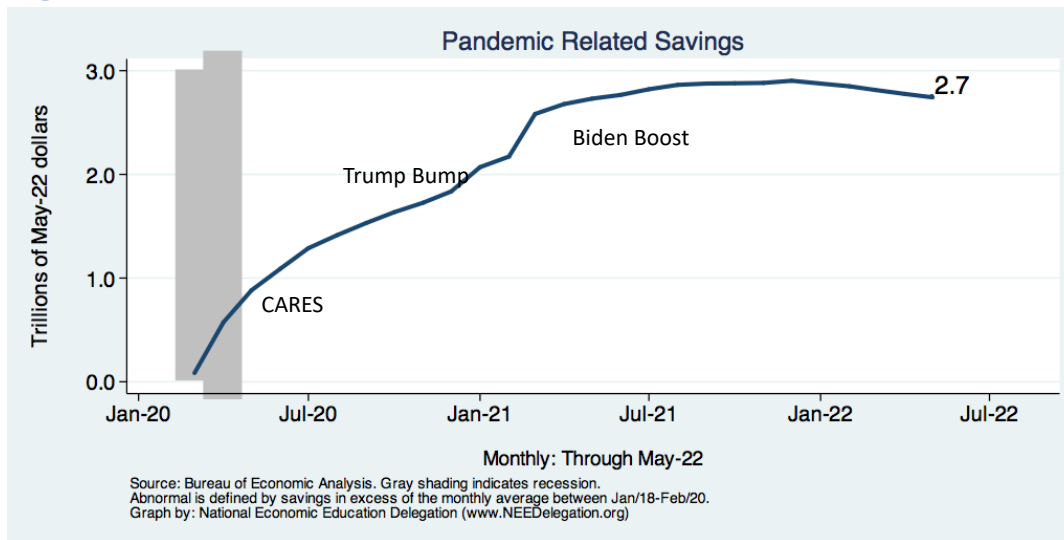
What Have Been Policy Effects?

- **MONETARY POLICY (Fed) acted quickly and effectively to prevent a financial market meltdown and to keep credit flowing. But the Fed lends and does not spend.**
- **FISCAL POLICY (Congress) acted quickly, but inevitably made some mistakes.**
 - Stimulus Checks, A (\$268b)
 - Expanded Unemployment, B (\$268b)
 - Paycheck Protection Program, C- (\$525b)



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Abnormally High Savings



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Monetary Policy: Federal Reserve

- **Primary goal is to keep interest rates low, to facilitate continued borrowing.**
 - Federal Funds Rate – rate at which banks lend to each other, usually overnight.
 - Purchases of U.S. Treasury securities – keep money flowing to the government at low rates of interest.



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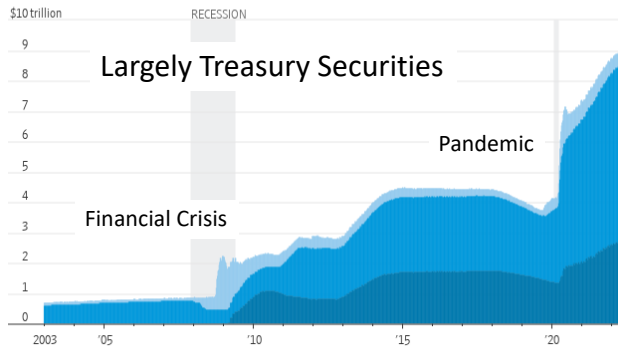
Fed Policy during the Recovery

- Zero interest rates until March and a Big QE program

Bond Binge

The Federal Reserve's asset holdings have more than doubled since March 2020

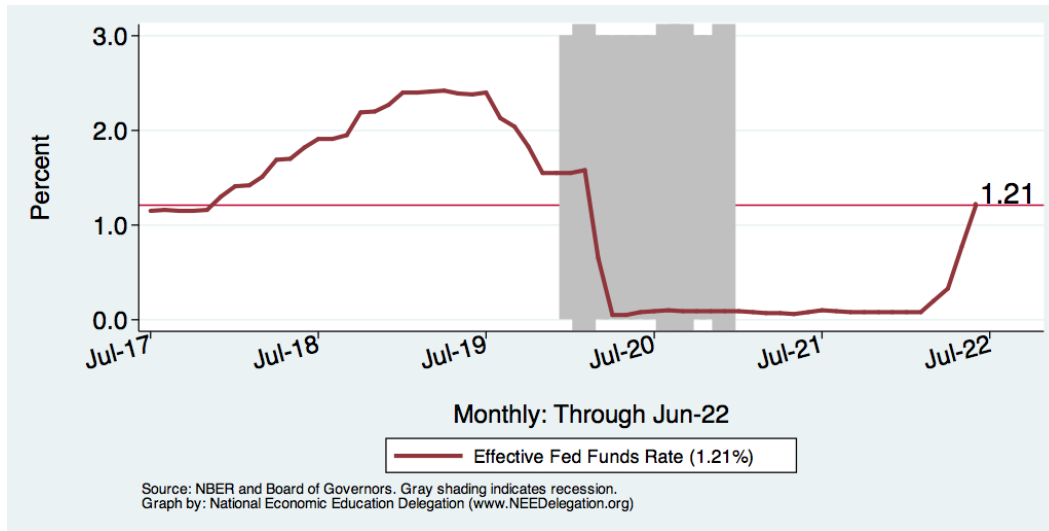
■ Mortgage bonds ■ Treasuries ■ Other



NATIONAL ECO EDUCATION DELEGATION Source: Federal Reserve

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Federal Funds Rate – Last 5 Years



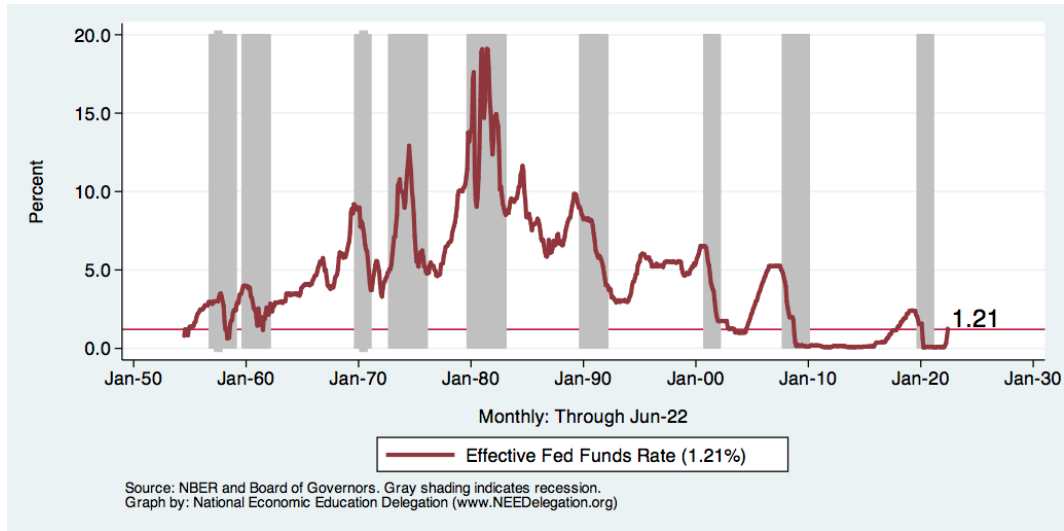
Source: NBER and Board of Governors. Gray shading indicates recession. Graph by: National Economic Education Delegation (www.NEEDelegation.org)



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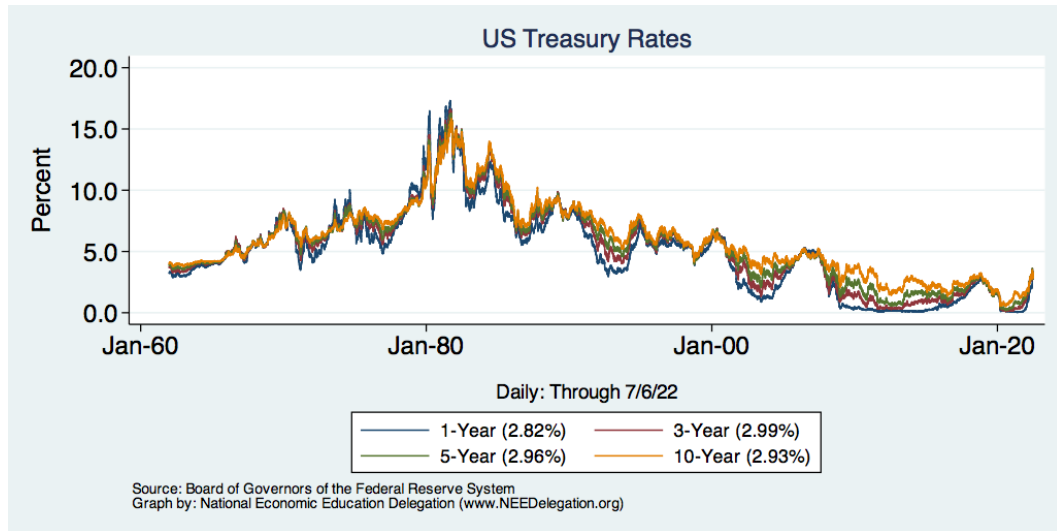
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Federal Funds Rate



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Treasuries – Low Interest Rates

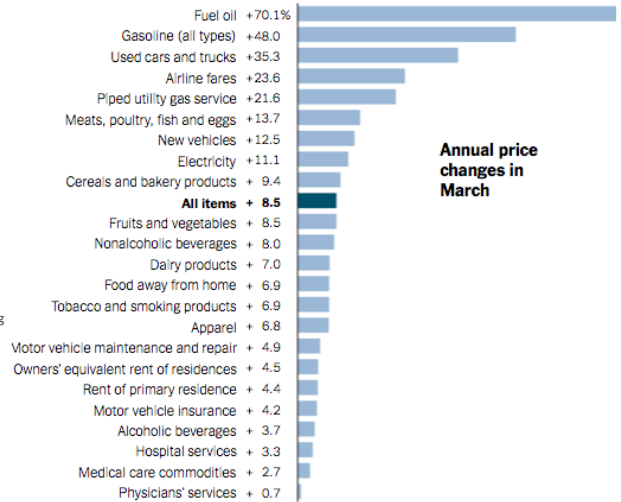
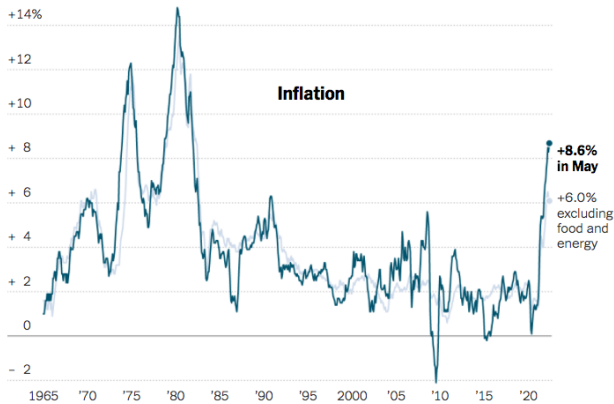


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Inflation

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Inflation News

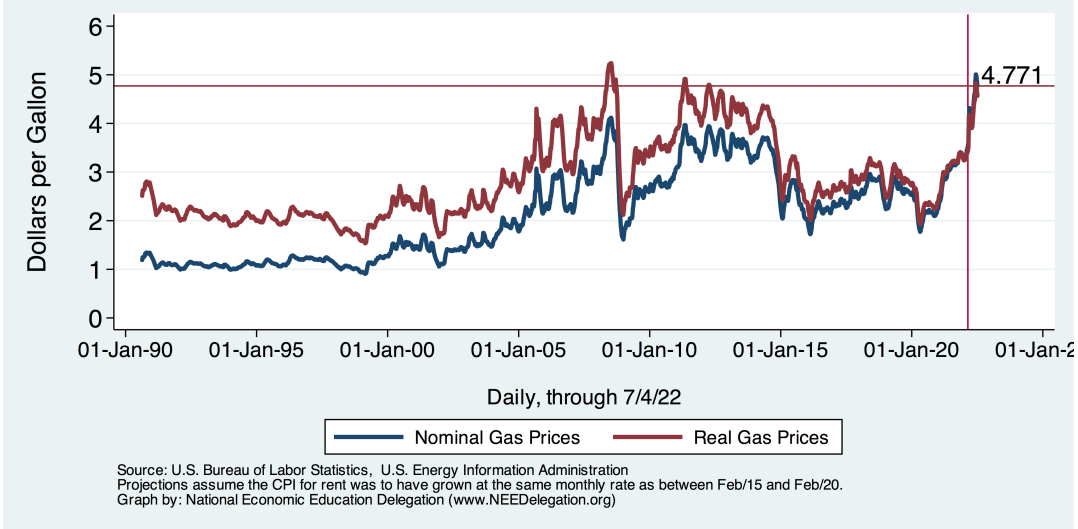


Year-over-year changes in a selection of categories of the Consumer Price Index - Source: Bureau of Labor Statistics - By The New York Times

Source: New York Times, Wall Street Journal

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Gas Prices: National Average at the Pump



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How Does Inflation Work?

Inflation represents the rate at which the cost of goods and services increase over a period of time.

Demand-Pull



When demand for goods/service exceeds production capacity.

Cost-Push



When production costs increase prices.

Built-In

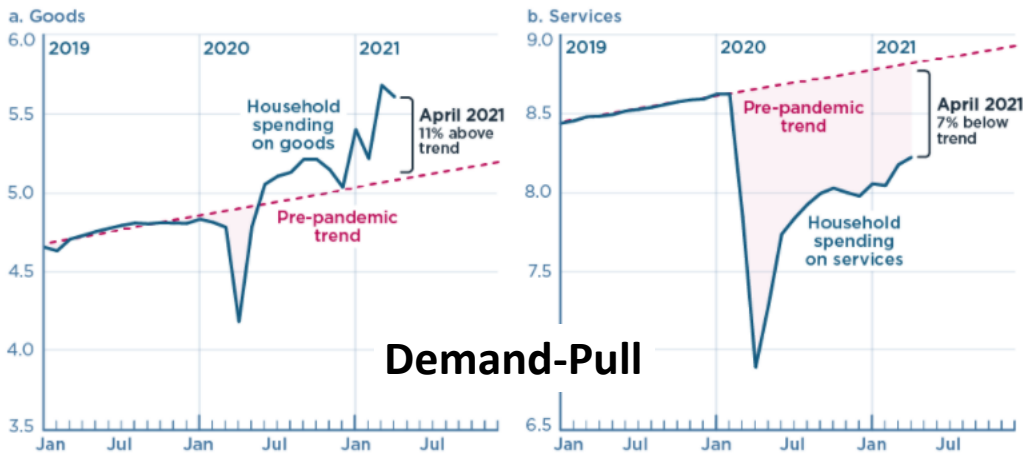


When prices rise, wages rise too, in order to maintain living costs.

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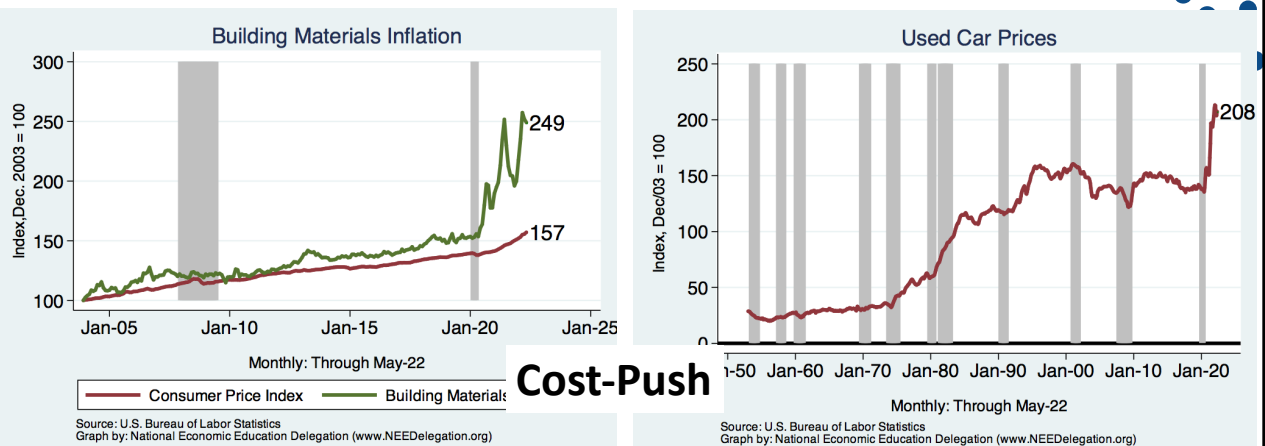
We're Buying Mostly ... Stuff

Real monthly household spending at an annualized rate, trillions of chained 2012 dollars



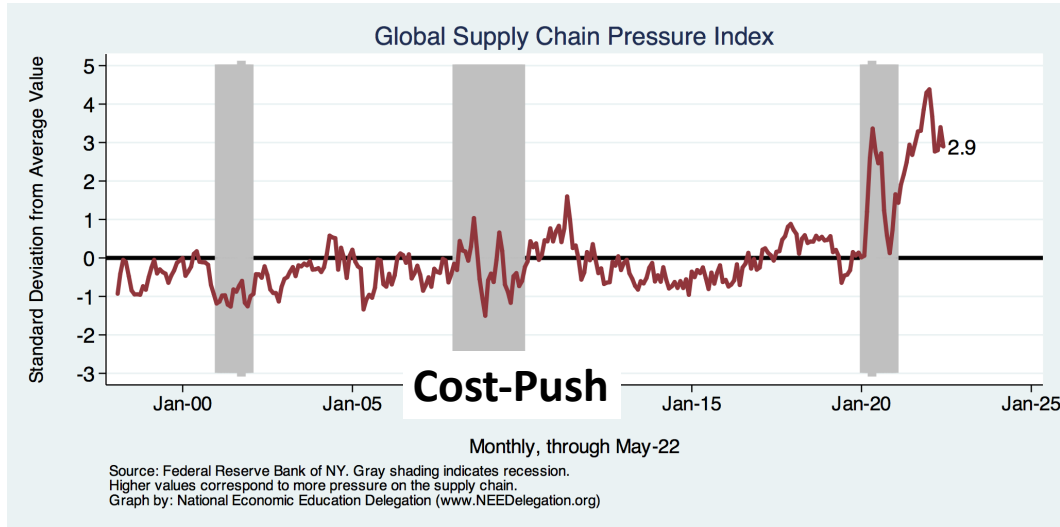
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Inflation: Concentrated



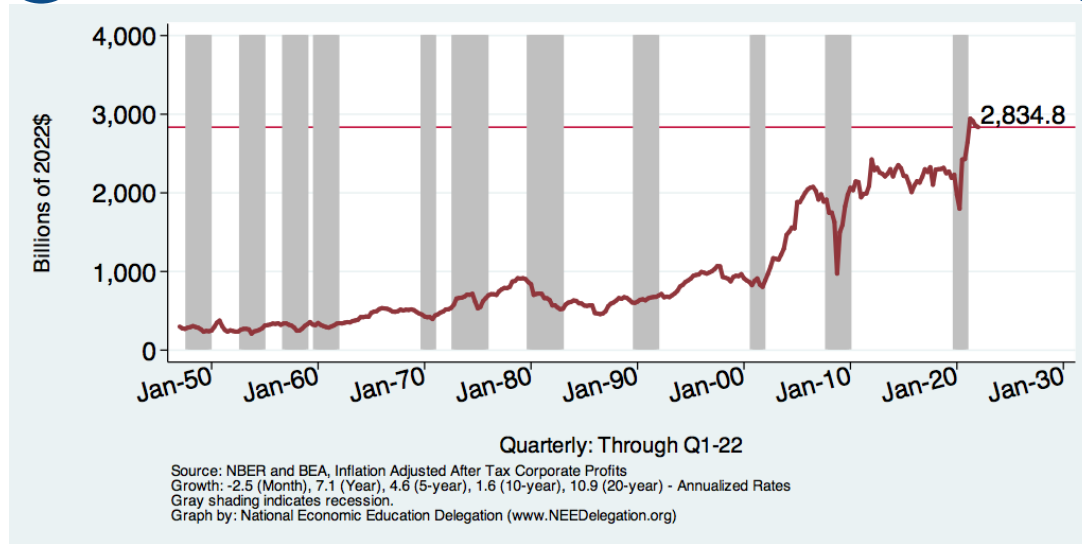
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Supply Chains



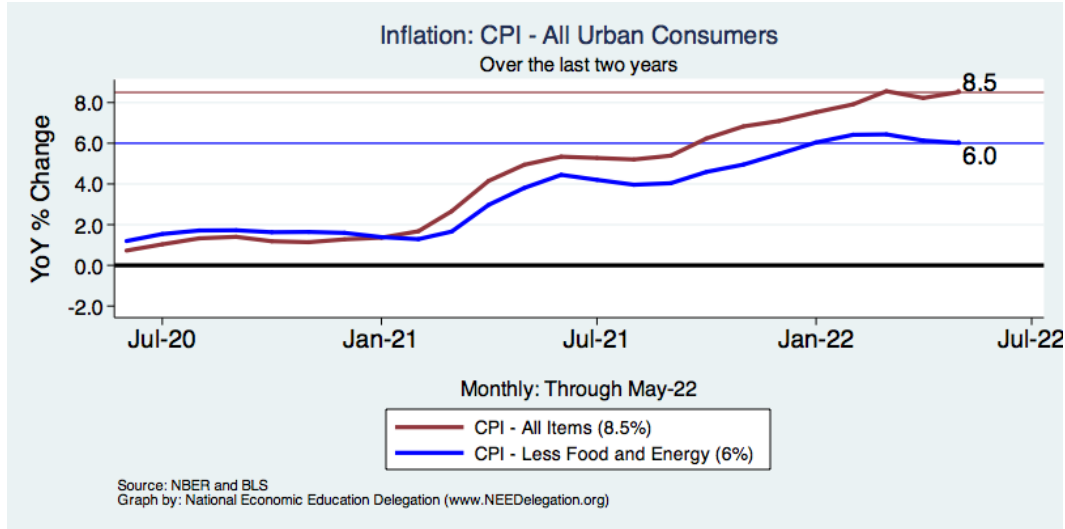
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Corporate Profits...Adding to Inflation?



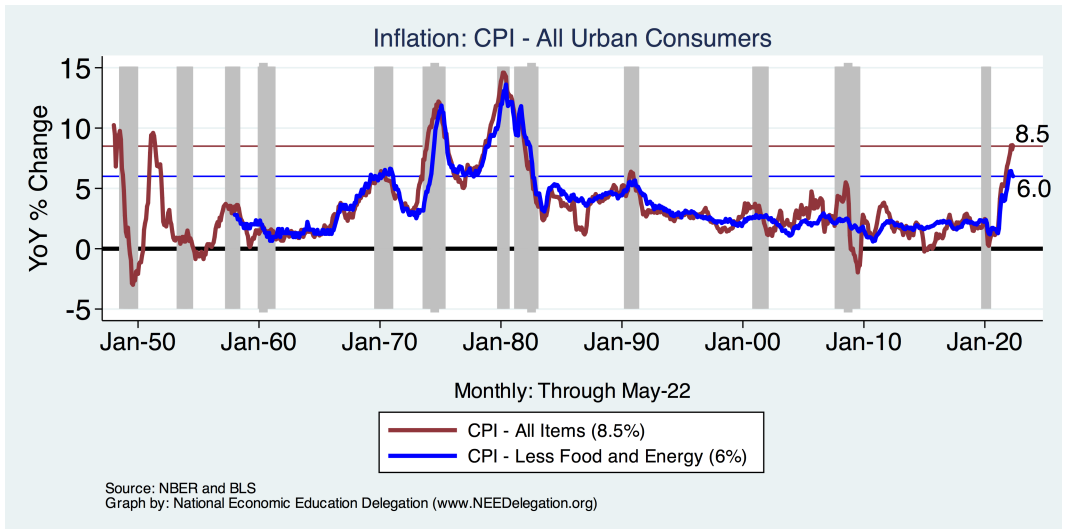
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Inflation – Climbing! Should we worry?



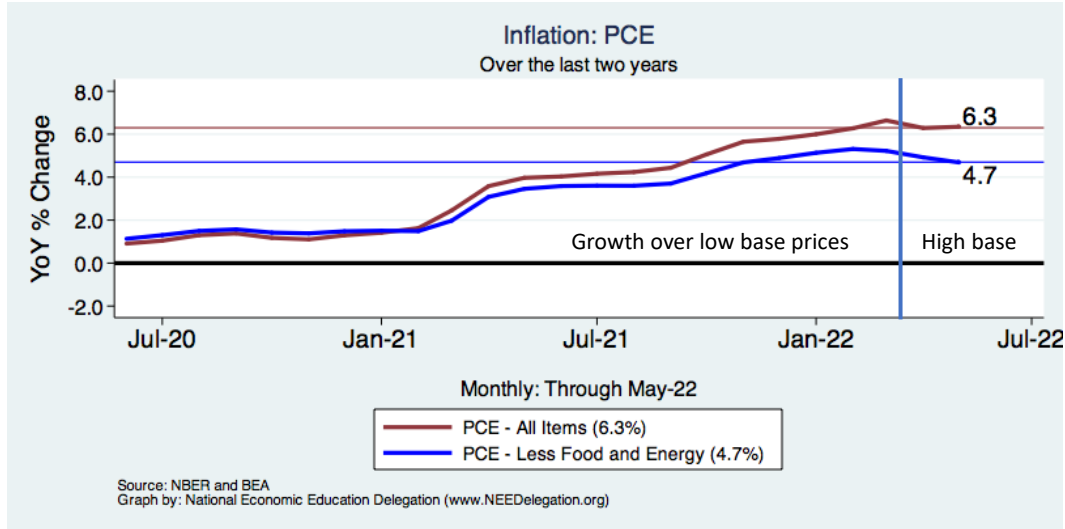
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Inflation in Historical Perspective



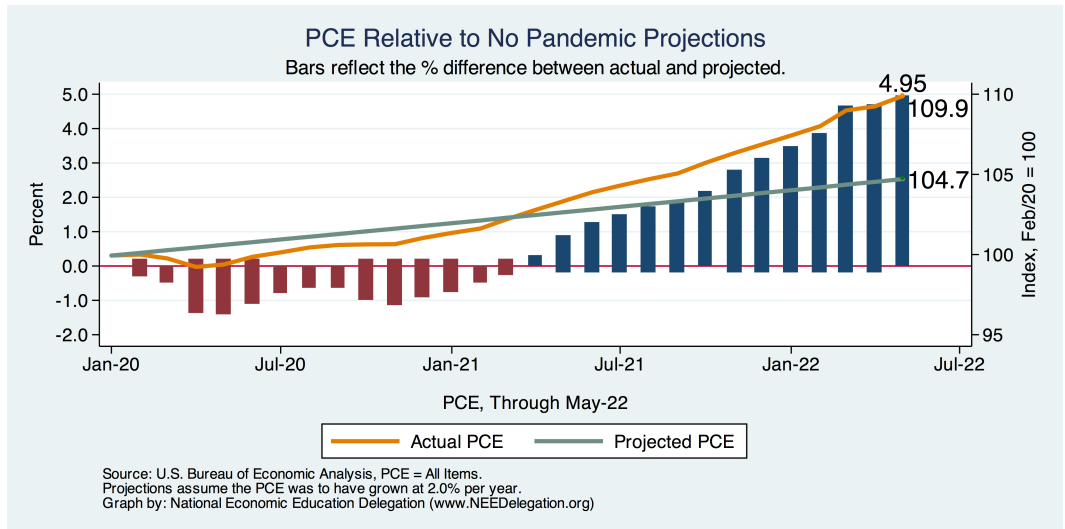
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Inflation – The Fed’s Metric! Should we worry?



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Inflation – PCE and Fed Suggest: Probably



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My Diagnosis for the Uptick in Inflation

- Yes, there were supply chain issues that affected some areas in particular (e.g., computer chips).
- But there is too much total spending and in the absence of bold Fed actions is likely to continue.
- Fiscal stimulus led households to increase saving over 2021 by more than \$2 trillion. Strong retail sales numbers suggest they are prepared to spend it.
- Whose to Blame: ARP probably too big, but the Fed could have acted sooner.

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Measure of Inflation Expectations



Breakeven Inflation Rate = Difference between nominal and real 5-year and 10-year Treasury constant maturity securities.

Market participants expect around 2.4% of inflation annually over the next 10 years and 2.6% over the next 5 years.

Inflation expectations are calming down.

Source: NBER and Federal Reserve Bank of St. Louis. Grey indicates recession. Difference between standard treasury security interest rate and the inflation-indexed rate. Graph by: National Economic Education Delegation (www.NEEDelegation.org)

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Russia and Ukraine

- **Gas prices – Russia is a major world supplier**
- **Food prices – region’s breadbasket**
- **Fertilizer – prices are 3-4x their 2020 levels**
- **Palladium – catalytic convertors, Russia supplies 40%**
- **Neon – semiconductors, Ukraine supplies 70%**

- **Therefore: more supply chain issues, more inflation, food insecurity.**



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Primary Topics Covered

- **GDP**
 - Recovered the decline, but not where it should be.
 - Won’t recover previous forecast until late 2022...at the earliest.
- **Employment**
 - Still down 6.7 million jobs relative to forecast.
 - Labor force is 4.2million smaller than forecast.
 - Rising wages are not enticing low-wage workers back to work.
- **Inflation**
 - Going to be high for a while, but transitory – maybe?



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Takeaways

- **Economic Growth: The recovery has been V-shaped.**
- **The economic recovery should continue through 2022.**
 - IMF expects US growth to be 3.78% -- downward revision from 5.2%.
 - Economic growth in 2022:Q1 was muted for the reasons discussed below.
 - Tailwinds: Strong consumer demand (but maybe stalled a little).
 - Headwinds: Inflation, supply chain disruptions, rising commodity prices, labor market challenges.
- **The labor market still faces some challenges**
 - The unemployment rate is low.
 - In many sectors, we have not reached pre-pandemic employment levels.
- **Inflation: What is fueling inflation?**
 - Supply chain disruptions
 - Changes in the composition of demand



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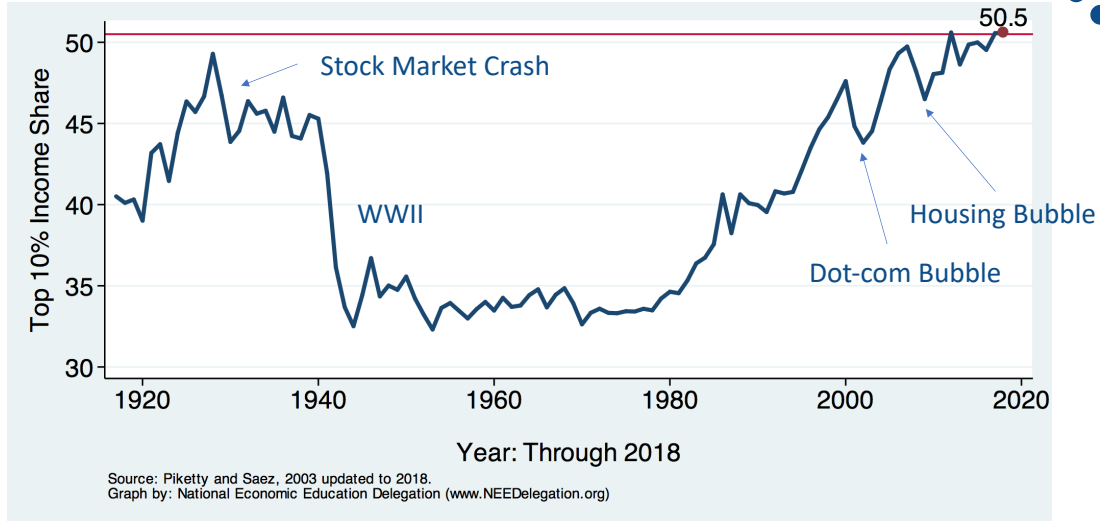
Takeaways

- **Is a recession on the horizon?**
 - Larry Summers, Jamie Dimon, and Elon Musk are worried about a recession.
 - While the chances of slipping into a recession have increased, I think on many dimensions the economy is doing quite well.
 - o Consumer's have been driving the recovery, and consumer's account for two-thirds of GDP.
 - o Job creation remains robust – 390k in May.
- **What about first-quarter GDP?**
 - 2022:Q1 was -1.6%
 - Some of this lower growth was driven by Omicron variant.
 - Much of this lower growth was driven by lower inventory.
 - o Inventories led GDP growth in 2021:Q4, didn't sell, so production in Q1 fell.



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Income Inequality: Christopher Herrington



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Thank you!

Any Questions?

www.NEEDelegation.org

Jon D. Haveman

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Structural Changes?

- **Pandemic has been an accelerant.**
 - Not a change agent.

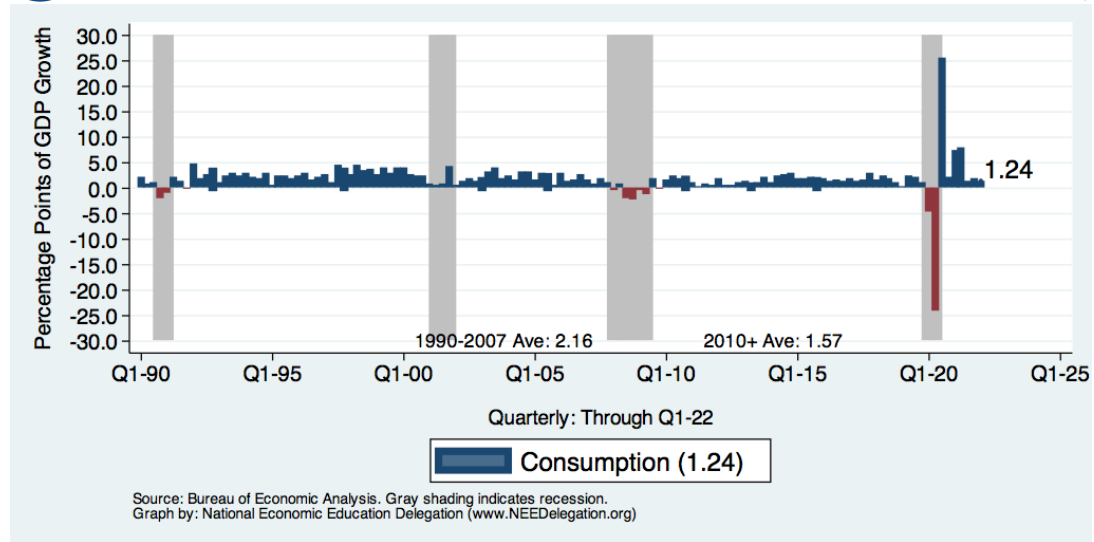
- **Retail**
- **Telecommuting**
- **Telehealth**
- **Business travel?**

- **Wealth concentration**
- **Industry concentration**
- **Automation**



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Consumption: Quarterly Growth

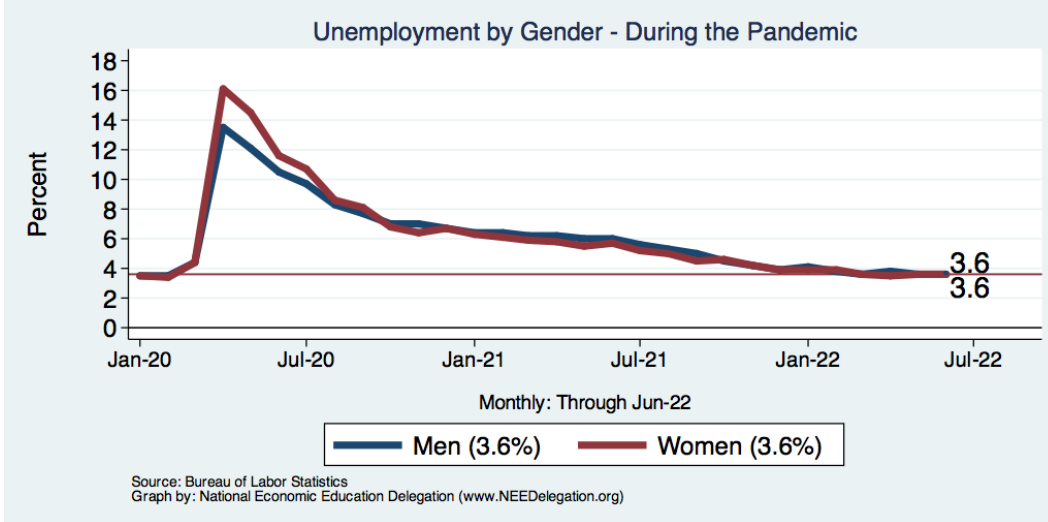


Source: Bureau of Economic Analysis. Gray shading indicates recession.
 Graph by: National Economic Education Delegation (www.NEEDelegation.org)



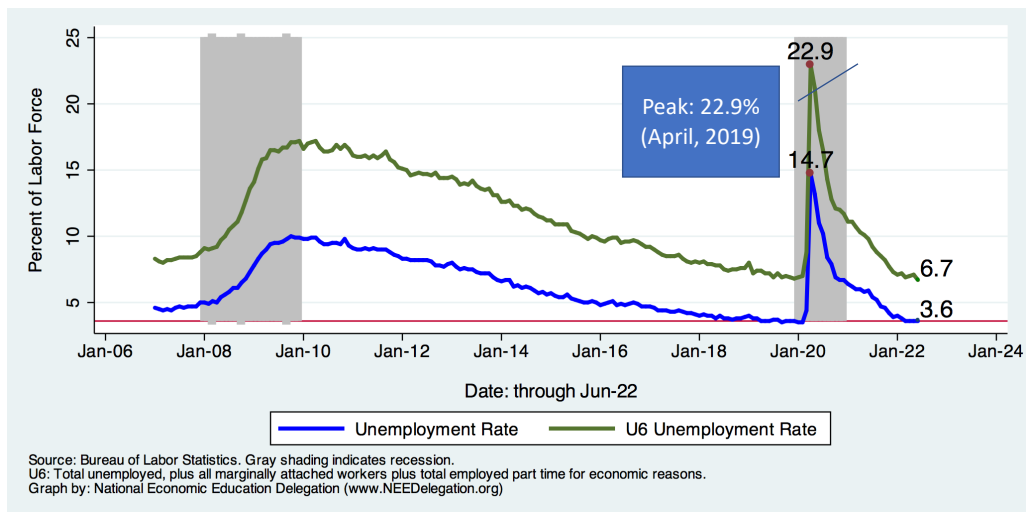
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Affected Women More Than Men?



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Another Measure: Unemployment



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What Are Supply Chains?

The Journey of a Semiconductor

Steps and firm locations in the production of a smartphone chip

Design

1. Intellectual property licensed (Europe)
2. Design software developed (U.S.)
3. Chip designed (U.S.)

Equipment

4. Manufacturing equipment developed (U.S., Europe, Japan)

Materials

5. Silicon dioxide mined and refined (U.S.)
6. Silicon formed into ingot (Japan)
7. Ingot sliced into wafers (South Korea)

Manufacturing

8. Wafers imprinted with circuits (Taiwan)
9. Chip packaged (Malaysia)
10. Chip assembled (China)

Sale

11. Smartphone sold to consumers (U.S.)

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<https://www.cfr.org/article/what-happened-supply-chains-2021>

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Why does spending matter?

Spending Categories as Share of GDP (2019)

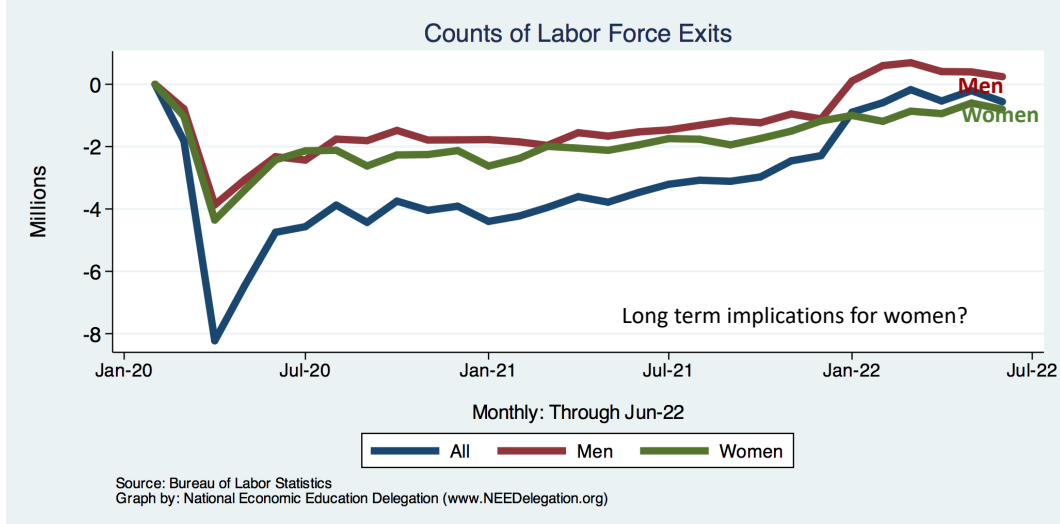
Spending:	
Goods	20%
Services	44%
Total	64%

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Affected Women More Than Men



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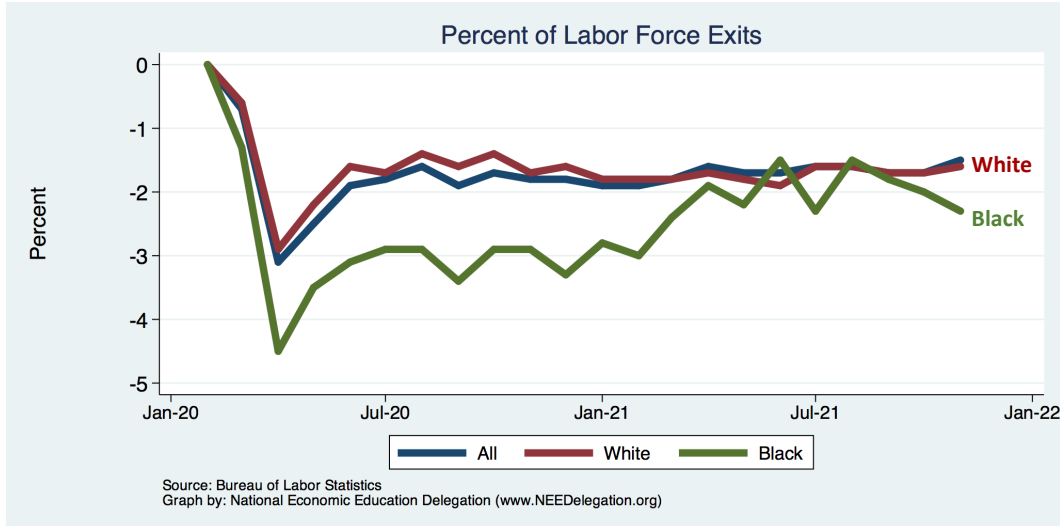
Why Women More Than Men?

- Women are disproportionately represented in low-wage and face-to-face jobs.
- Our childcare and school systems don't meet the needs of working mothers.
- COVID-19 has upended the labor market, with disastrous consequences for working women and their families.
 - Many women continued working in high risk jobs.
- The difference in impact is waning.



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Affecting Black Workers More than White



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What Index to Follow: CPI or PCE?

- **CPI is the headline statistic, followed by most newspapers.**
 - Allows more granularity – ability to look at specific products.
- **PCE is the one followed by the Fed.**
 - Why?
 - Accounts for short term fluctuations in consumer purchases.
 - Based on more reliable data.
- **Fed generally pays attention to the core inflation #s.**
 - Excluding food and energy.



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Inflation: Critical Issues

- **Inequities**

- Price changes vary wildly across goods.
- How inflation hits you depends on what you buy and your level of income.
 - o Some evidence that lower income individuals face higher inflation.

- **Online inflation is much lower than the CPI**

- Estimates suggest about 2% lower.

- **Both have implications for the policy response.**

- Safety net? Antitrust action?

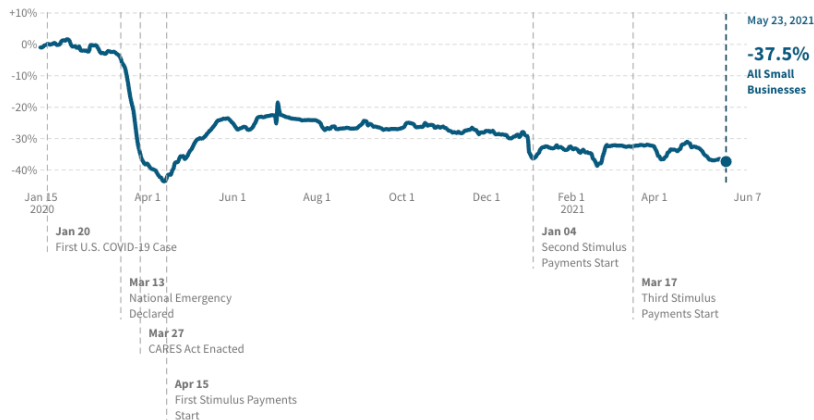
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A Hard-Hit Sector: Small Business

Small Biz Closures in the United States

In **the United States**, as of May 23 2021, the number of small businesses open decreased by **37.5%** compared to January 2020.

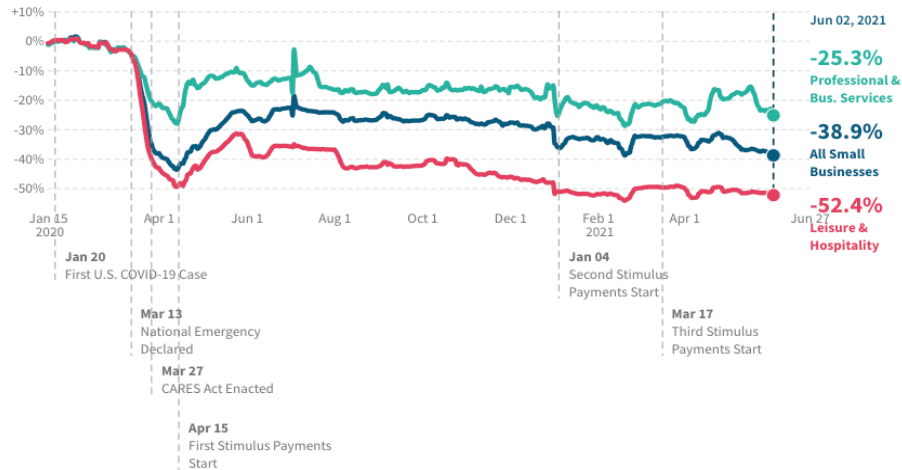
[DOWNLOAD CHART](#)



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Small Businesses: They Didn't Get Enough PPP

In the United States, as of June 02, 2021, the number of small businesses open decreased by **38.9%** compared to January 2020.



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A "K-shaped" recovery?

Executive Summary

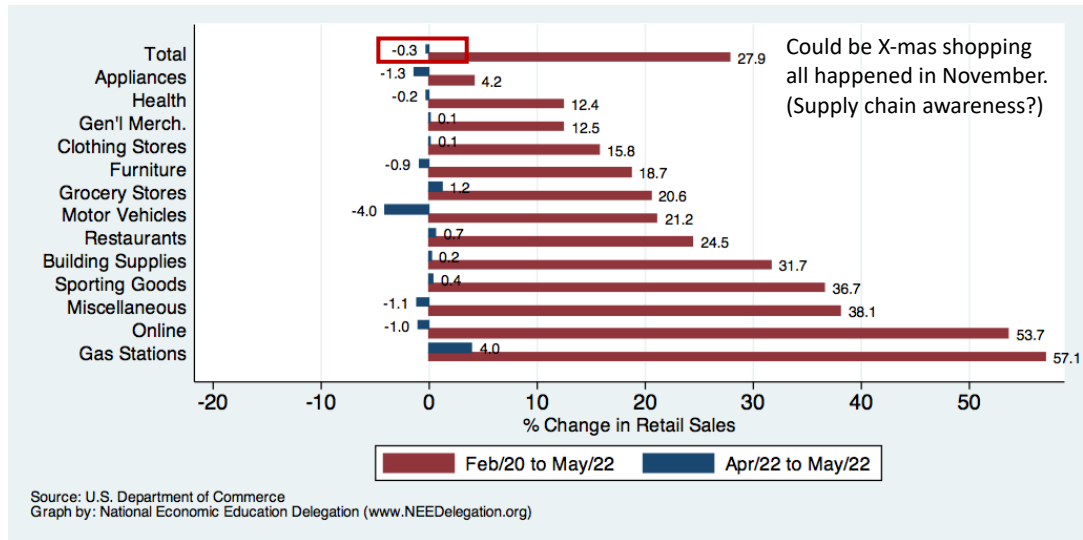
- Those with financial wealth/residential real estate have seen its value grow in excess of inflation.
- High income earners (>60k/yr) have largely kept their jobs;
 - middle and low income earners have depressed employment rates
- Women are disproportionately exiting labor force.
- Food insecurity has been very high.

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Coronavirus and Inequality

- Resources to weather the storm.
- Racial inequities.
- Educational inequities
- Telecommuting
- Low wage jobs are at risk.

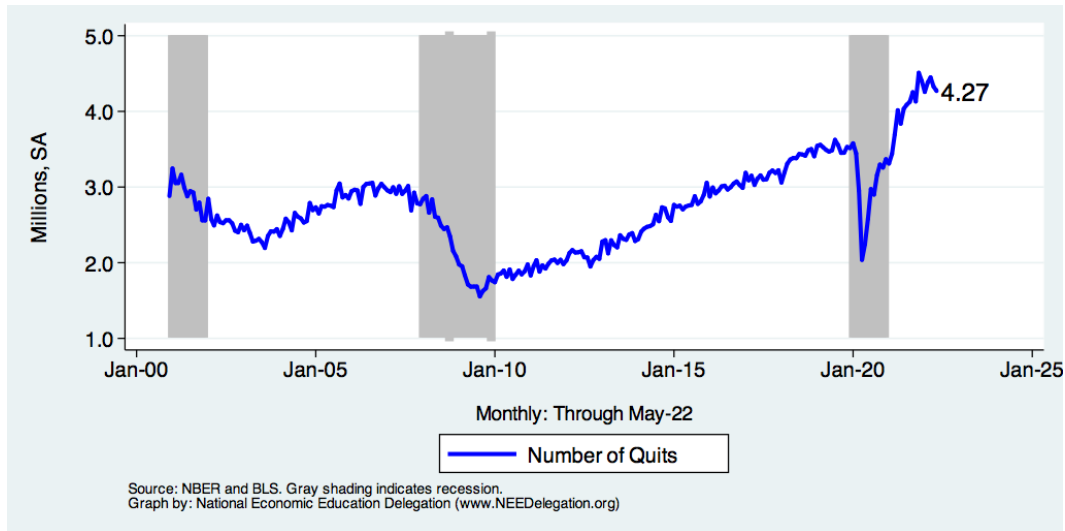
Retail Sales Are Slowing – Q4-21? Q1-22?



The Great Resignation

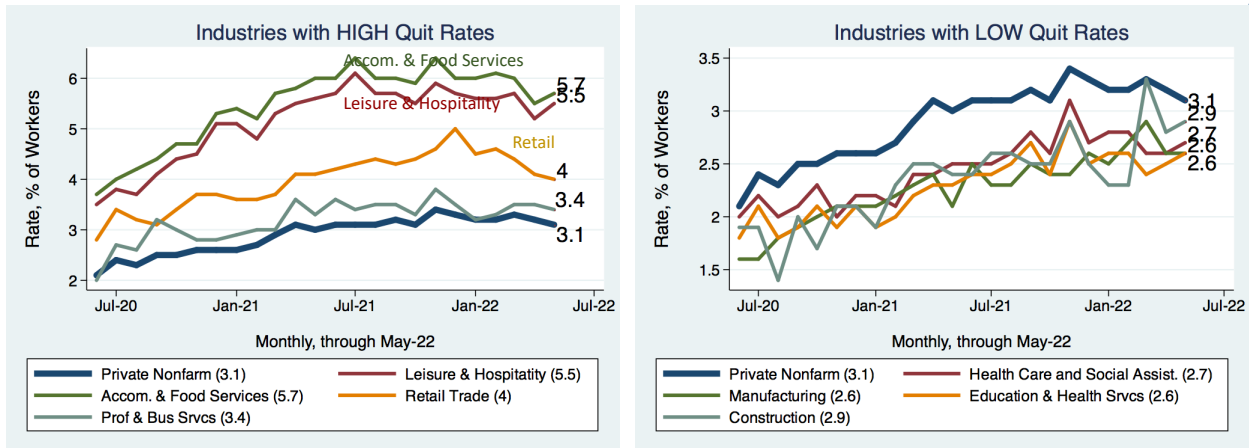
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Quits Are High! The Great Resignation



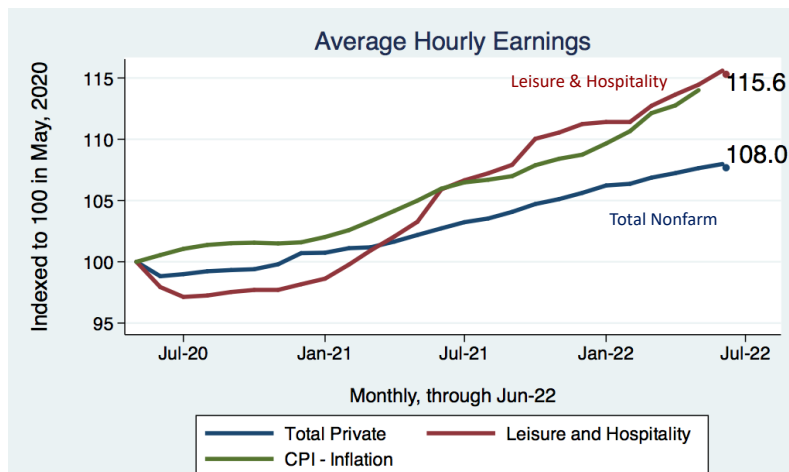
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Quits – Rising, but More in Some Industries



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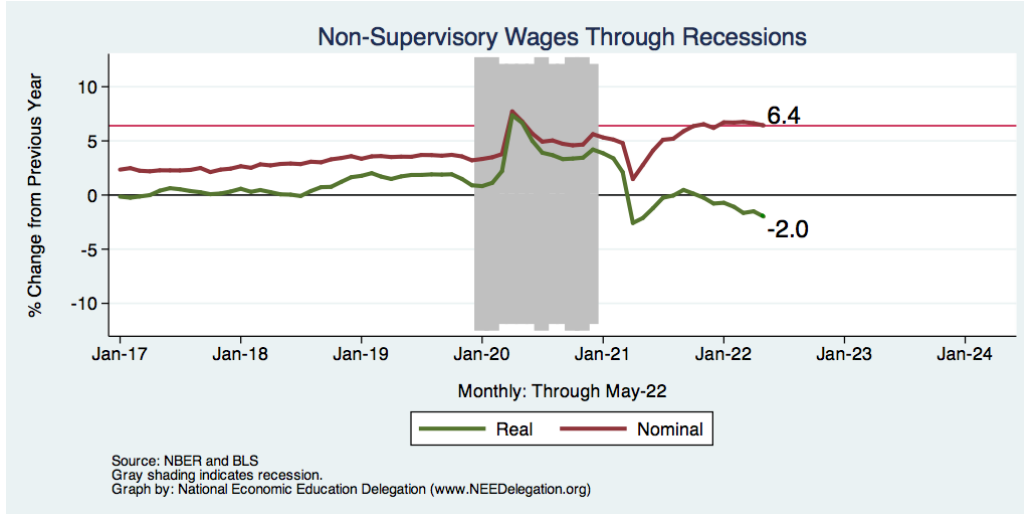
This is Happening Despite Rising Wages



Source: U.S. Bureau of Labor Statistics.
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

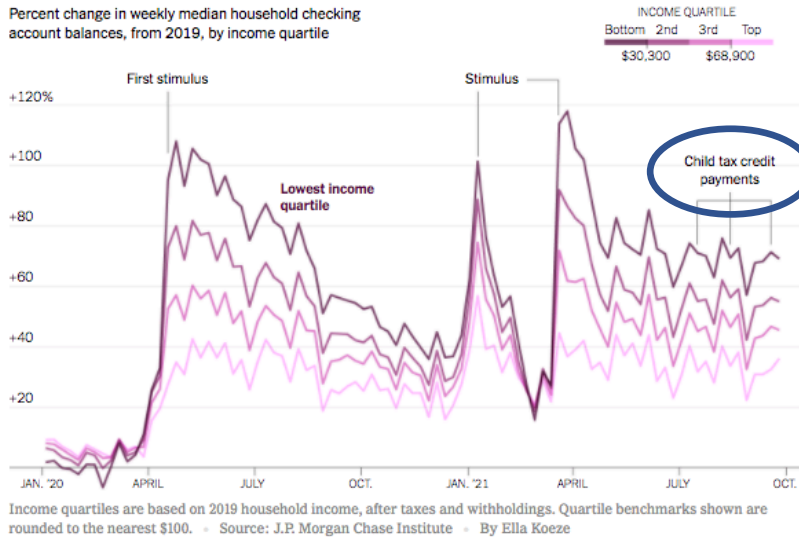
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Inflation Adjusted Wages Are Falling



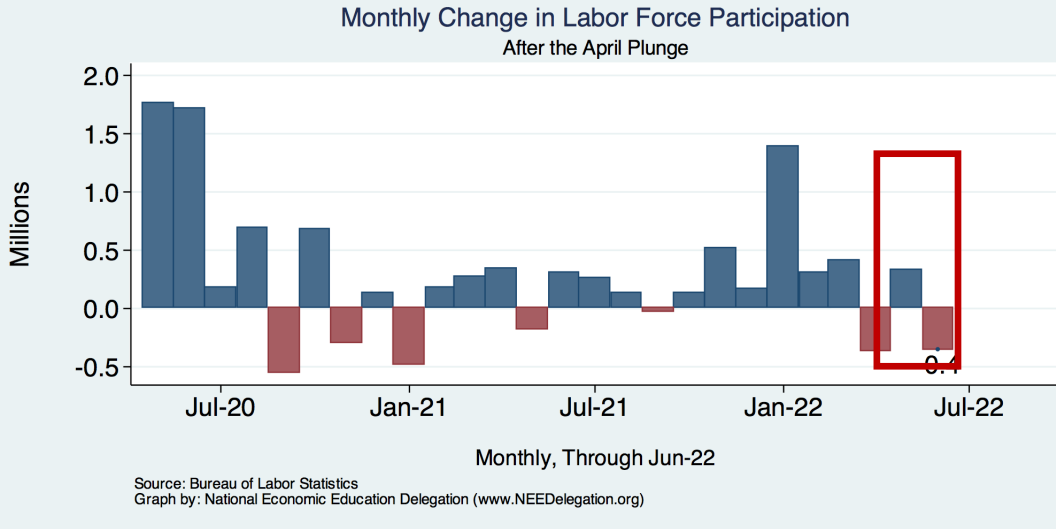
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Declining Resources May Change Things

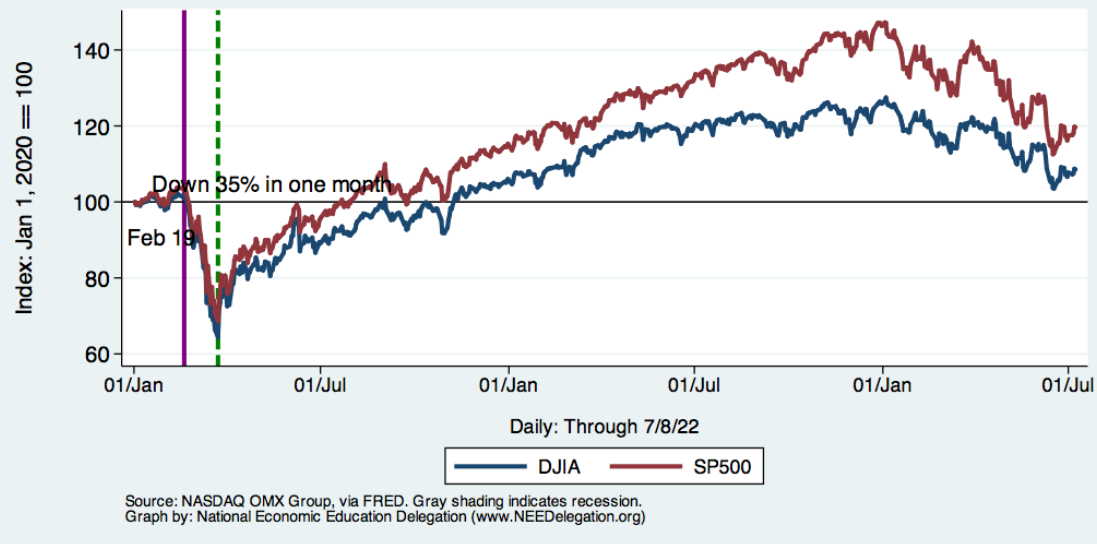


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CTC Expiration Spurs Labor Force Growth



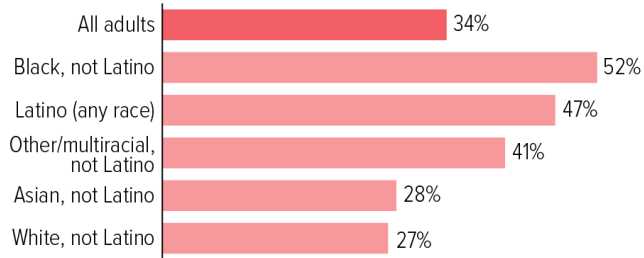
Stocks: Bounced Back Quickly, But..



Low Income Troubles

1 in 3 Adults Had Trouble Paying for Usual Household Expenses in Last 7 Days

Share of adults reporting that it was somewhat or very difficult for their household to pay for usual expenses



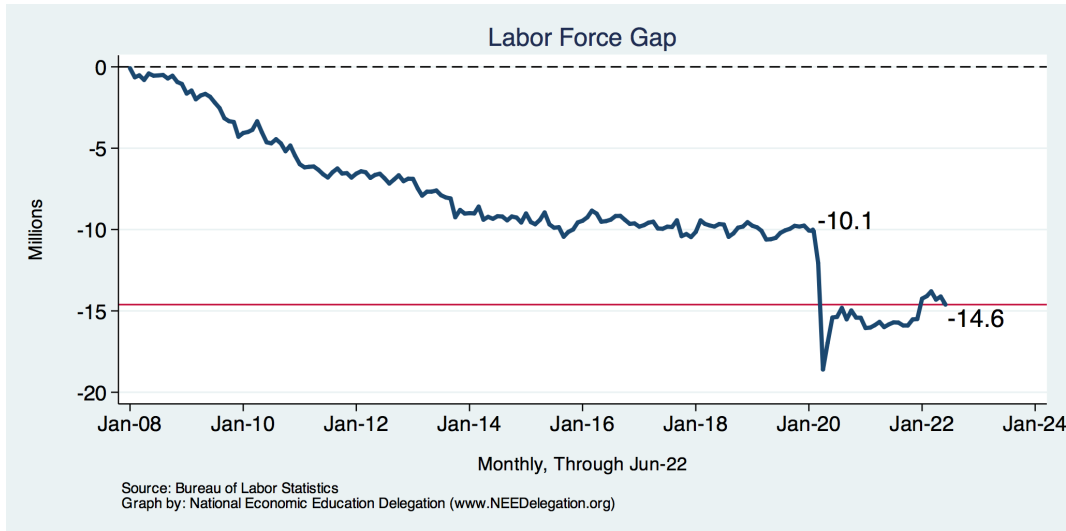
Note: Other/multiracial, not Latino = people identifying as American Indian, Alaska Native, Native Hawaiian or Pacific Islander, or more than one race. Percentages exclude individuals who did not respond to the question.

Source: CBPP analysis of Census Bureau Household Pulse Survey tables for October 28 – November 9, 2020

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Labor Force is Shrinking – Drives Down UR



Russia/Ukraine(/Belarus)



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Consequences for the Global Economy

- **Primarily:**
 - Oil
 - Wheat
- **Why?**
 - Major suppliers of each
 - 29% of world wheat production
 - 20-40% of Europe's oil and gas
 - Russia part of OPEC+
 - Russian and Ukrainian combined economies are small.
 - Don't forget Belarus.



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The Conflict in Ukraine and the US Economy

- **Short run**

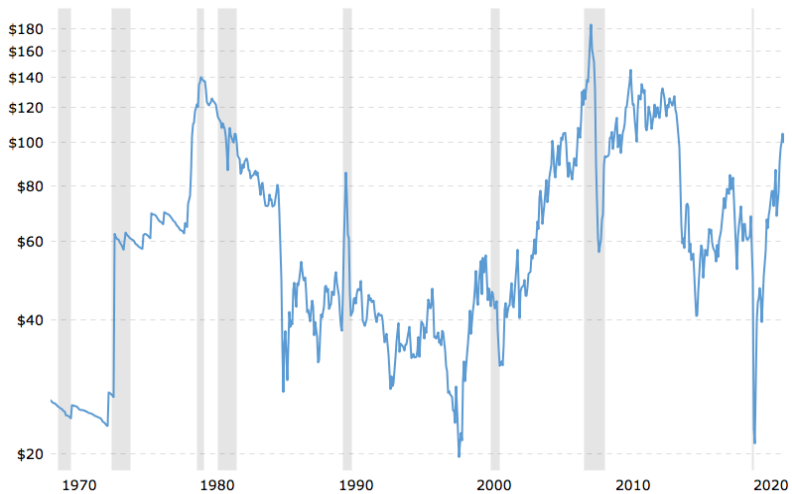
- Uncertainty
- Recession?
- Increase in cost of food and fuel

- **Long run**

- Decrease in globalization

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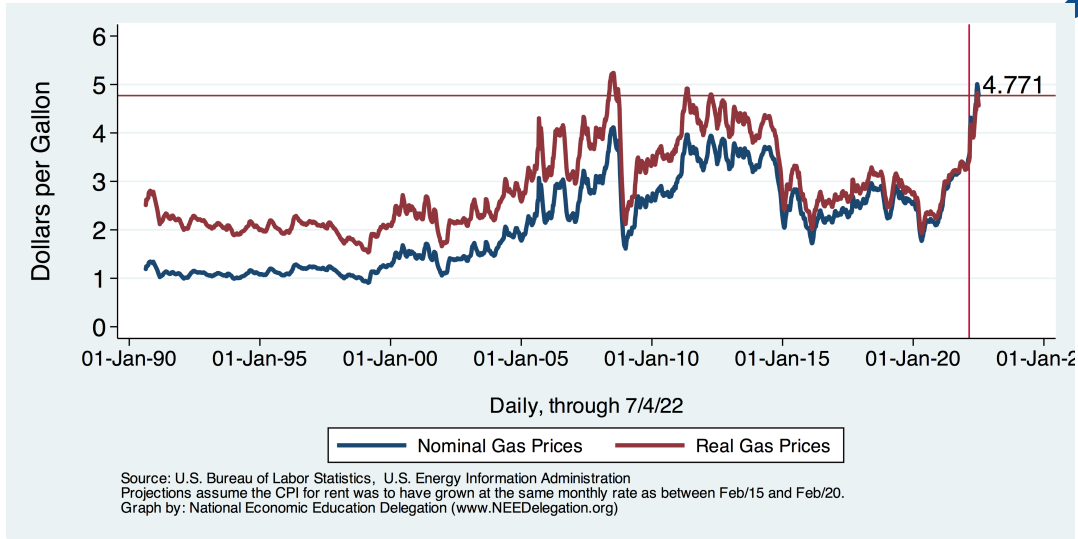
Supply Shocks: Then and Now



Historical Oil Price
adjusted for Inflation.
\$99.76 on May 10/22

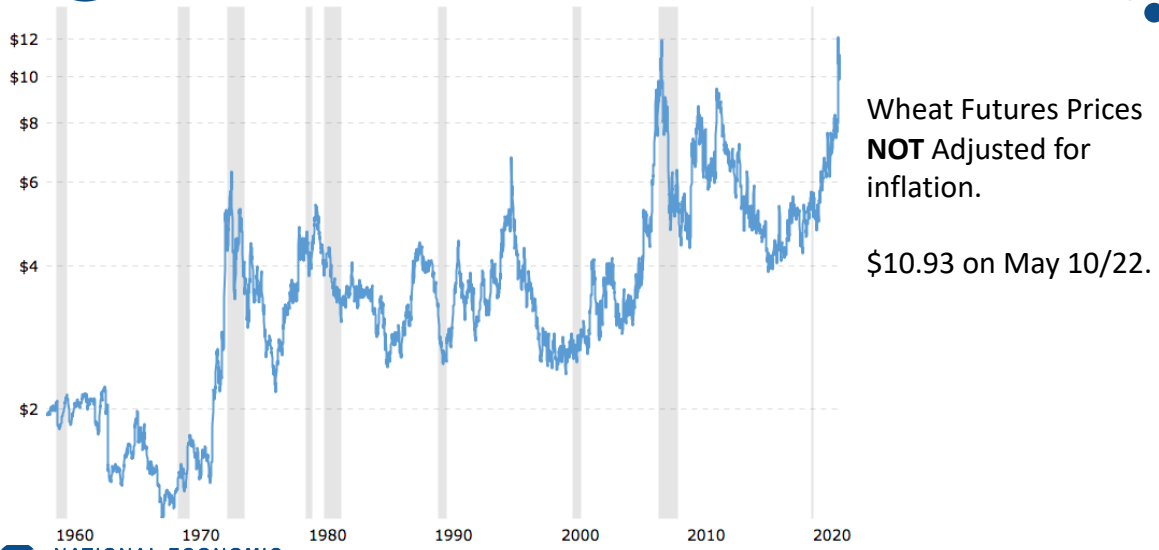
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Gas Prices at the Pump

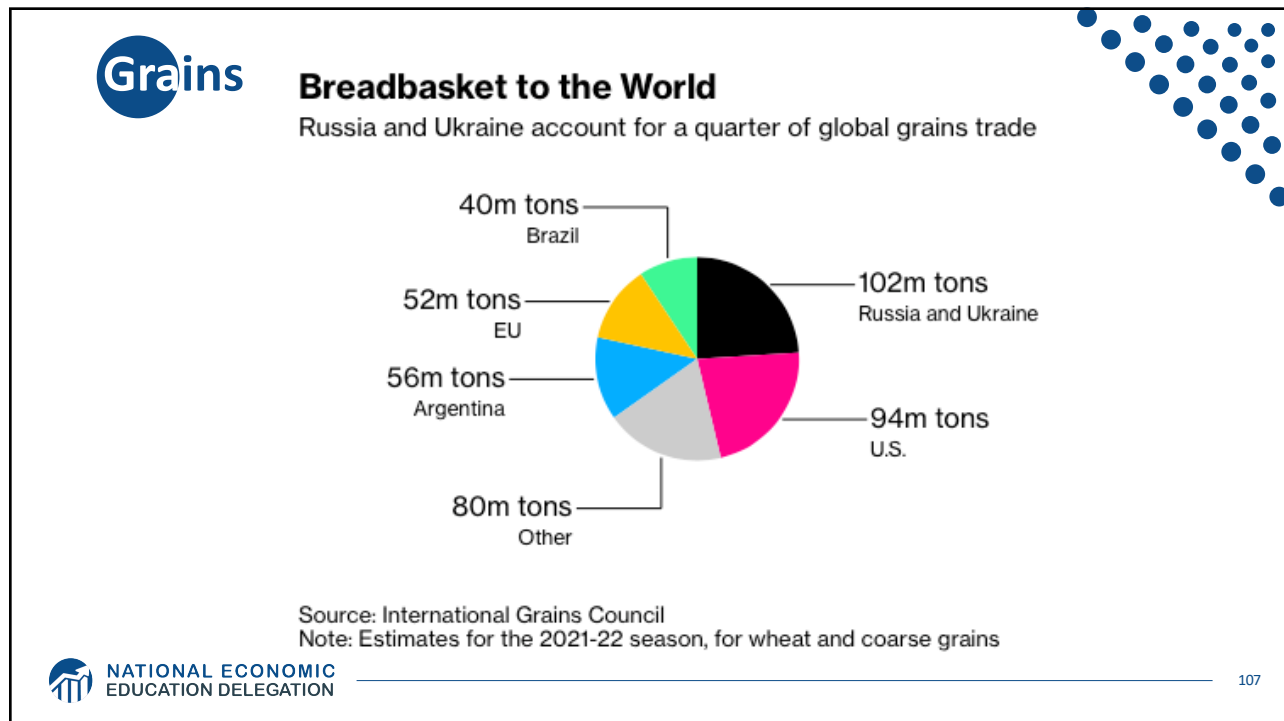


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Wheat Prices Also Look Scary



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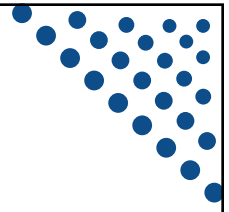
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Oh, and...

- **40% of the world's PALLADIUM comes from Russia.**
 - Used in catalytic converters.
- **70% of the world's NEON comes from Ukraine.**
 - Used in production of semiconductors.
- **Fertilizer: Russia is the world's largest supplier.**
 - Prices are 3-4x their 2020 levels.
- **Therefore: more supply chain issues, more inflation, food insecurity.**

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For every state and county in the United States.
Detailed graphs on employment, housing, moves, and other statistics.

