

*Osher Lifelong Learning Institute, Winter 2020*  
**What Economists Know About Important  
 Policy Issues**

# Lecture 1: The U.S. Economy

January 22, 2020

**Jon Haveman, Ph.D.**  
 National Economic Education Delegation



1

1

## 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.



2

2

# Who Are We?

- **Honorary Board: 46 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: 484 members**

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

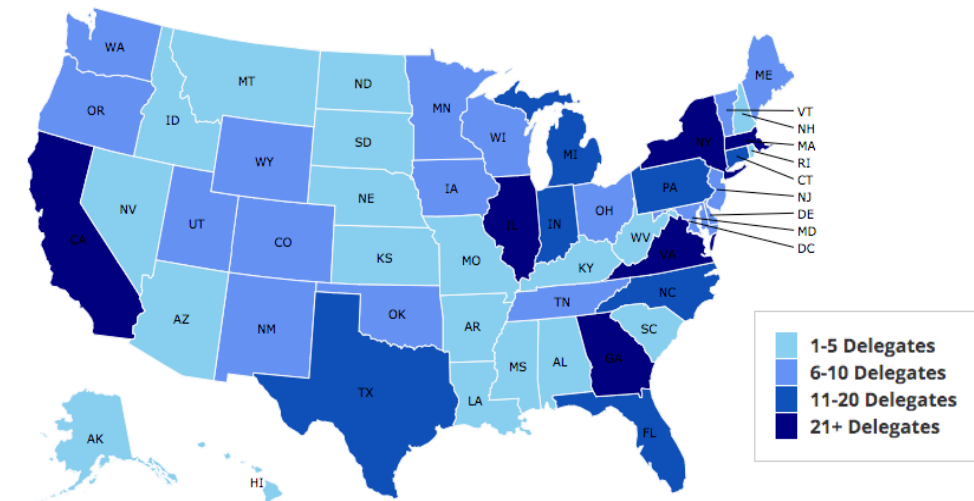
- **Global Partners: 45 Ph.D. Economists**

- Aid in slide deck development



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# Where Are We?



## Credits and Disclaimer

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5

## Course Outline

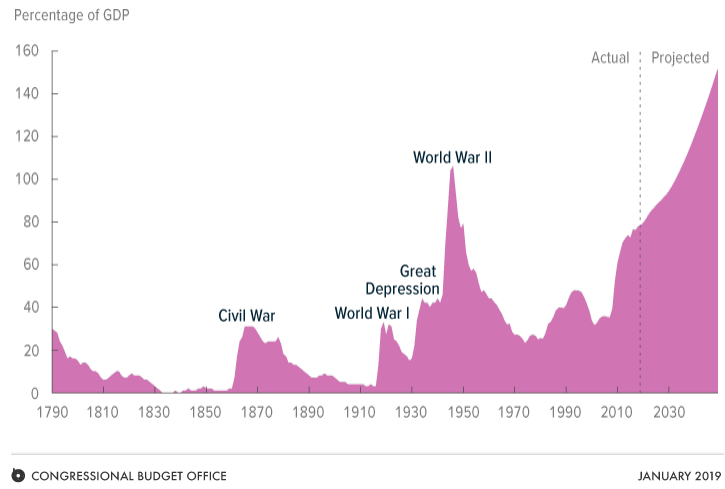
- **What Economists Know About Important Policy Issues**
  - Week 1 (1/22): US Economic Update
  - Week 2 (1/29): Government Budgets
  - Week 3 (2/5): Climate Change
  - Week 4 (2/12): Income Inequality
  - Week 5 (2/19): Trade and Globalization
  - Week 6 (2/26): Housing Policy



6

## Record Levels of Debt are Forecast

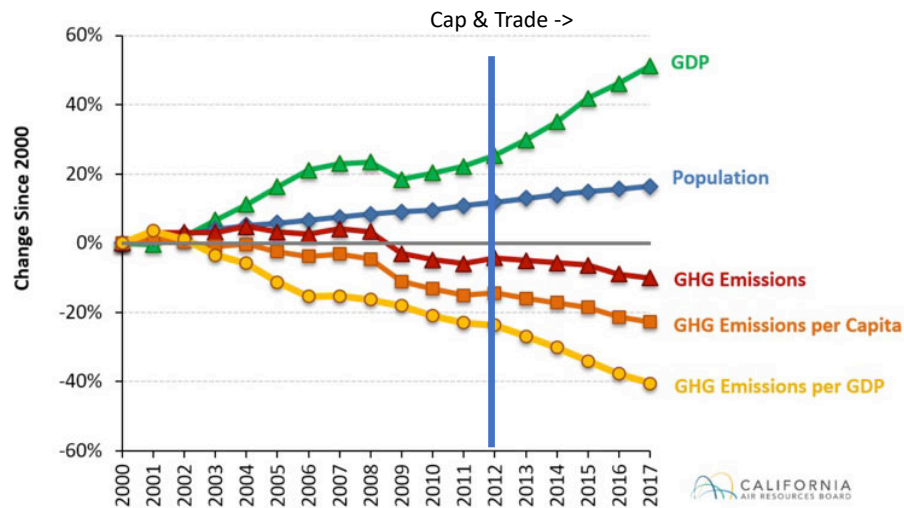
**Federal Debt Held by the Public**



Source: Congressional Budget Office, The Budget and Economic Outlook: 2019 to 2029

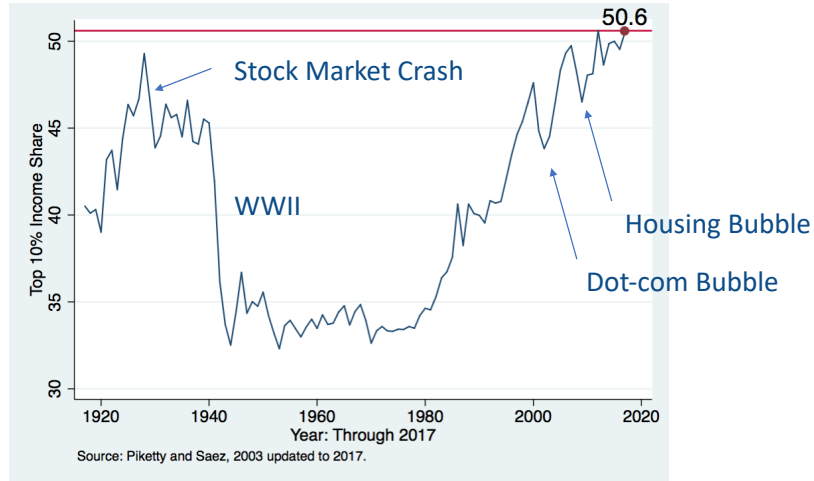
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## Change in California GDP, Population, and GHG Emissions since 2000

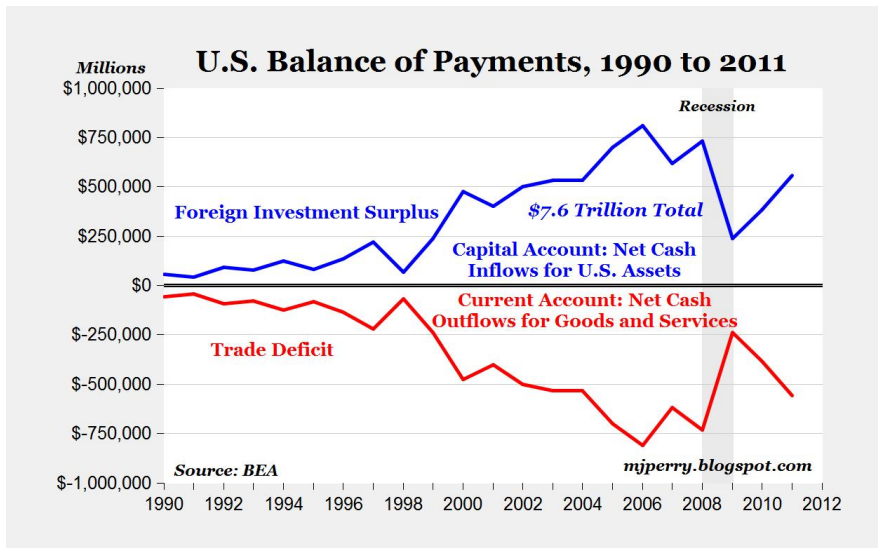


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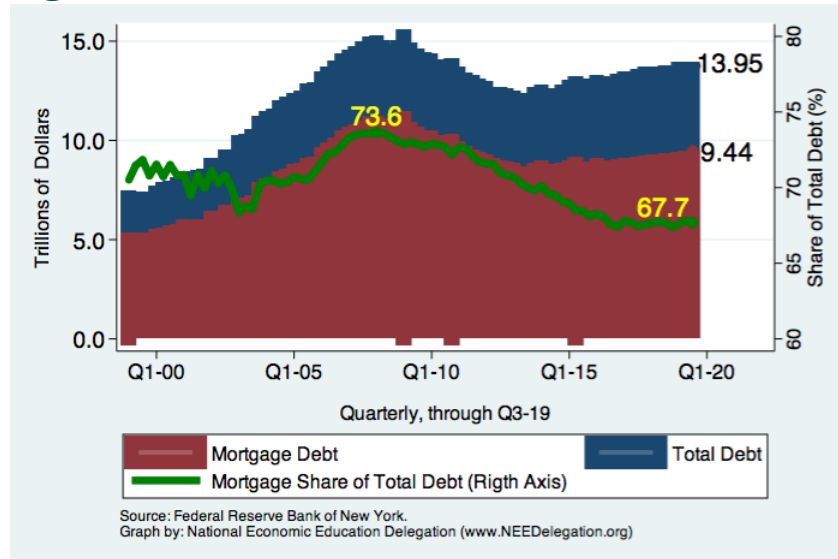
# National Income Inequality: Share of Top 10%



# I Don't Care About the Trade Deficit



# Housing Debt



11

# Outline – U.S. Economic Outlook

- Behavior of GDP
- Labor Market
- Monetary Policy/Interest Rates
- Other Indicators
- Summary

12

# Behavior of GDP

13

## U.S. Economy in Global Perspective

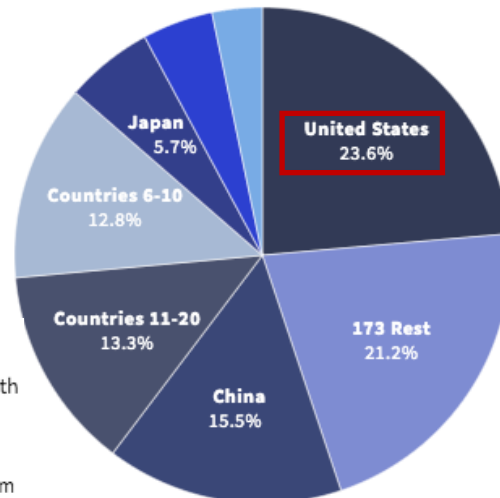
U.S. Nominal GDP:

**\$21.542 trillion** in 2019-Q3

### % Share of the Global Economy

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

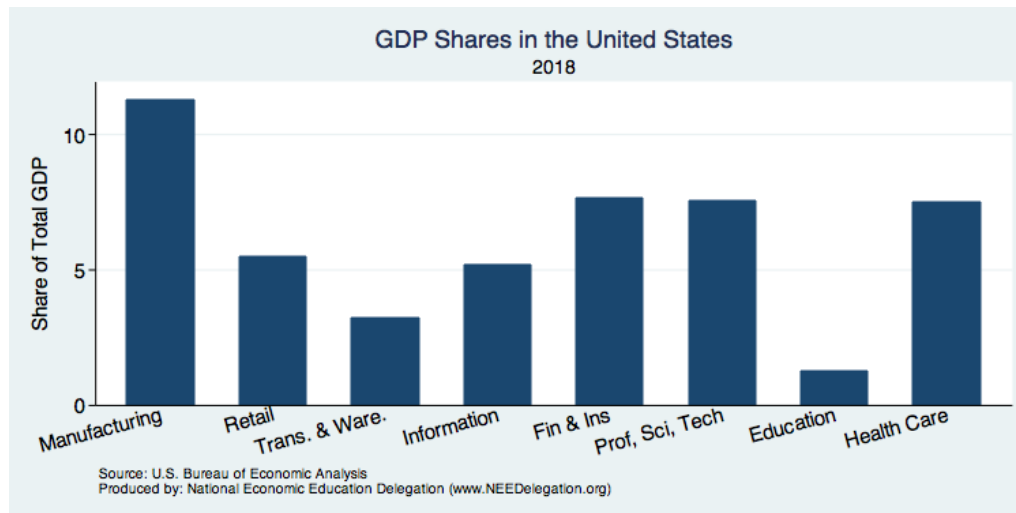
- United States
- 173 Rest
- China
- Countries 11-20
- Countries 6-10
- Japan
- Germany
- United Kingdom



Source: IMF

14

## Composition of the U.S. Economy: 2018



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15

## GDP During the Recovery

- **Real GDP** is a standard measure of production used by economists to assess the size, health, and well-being of an economy.
- **Potential GDP** is the level of production in an economy operating at full employment.
- We use potential GDP to get a sense of what production should be in an economy.



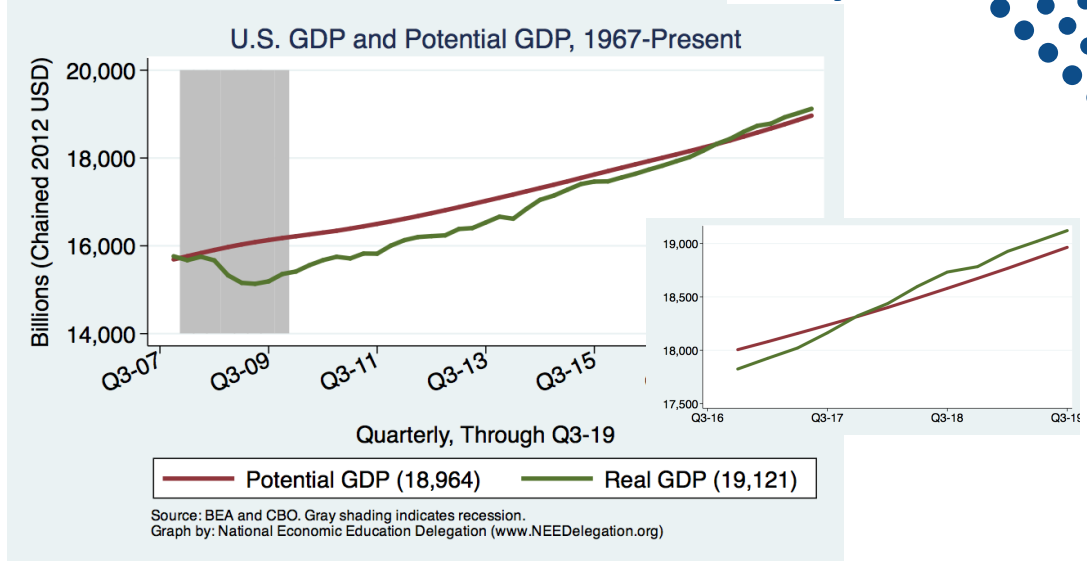
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16

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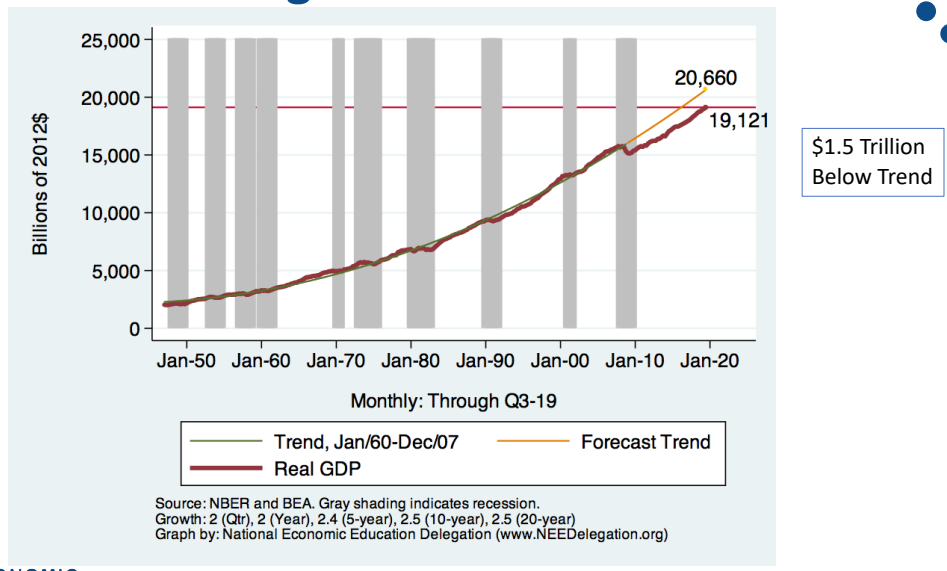


# GDP Trajectory During Economic Recovery



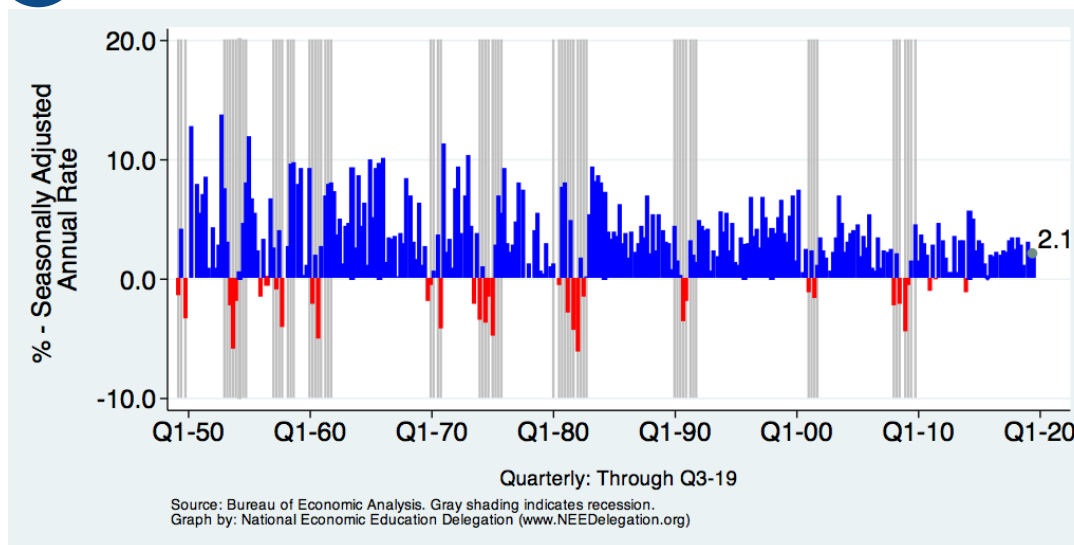
17

# GDP Relative to Long-Term Trends



18

## GDP Growth During Economic Recovery



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19

19

## What Is “Accounting” for the Slow Recovery?

- **Expenditures drive GDP growth.**

- GDP is the sum of four categories of spending:

- Consumption
- Investment
- Government spending
- Net Exports: Exports – Imports

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{X} - \text{M}$$

- Exports add to GDP
- Imports are subtracted because they are included in the other categories

- **Production also matters and supports GDP growth.**

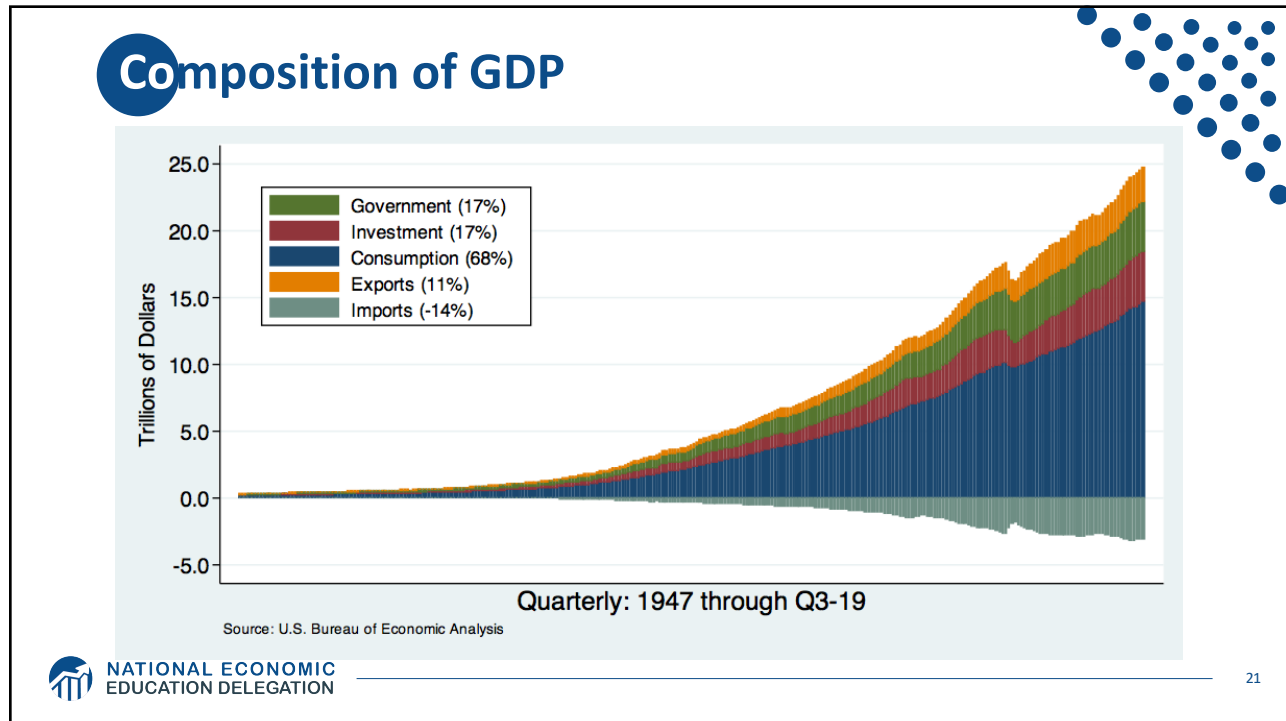
- Employment
- Productivity



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20

20



21

## Composition of GDP

- **Slow growth in any of these categories will slow overall GDP growth.**
- **How does each component contribute to GDP growth pre- vs. post-recession?**
- **What explains current trends in each component?**

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22

22

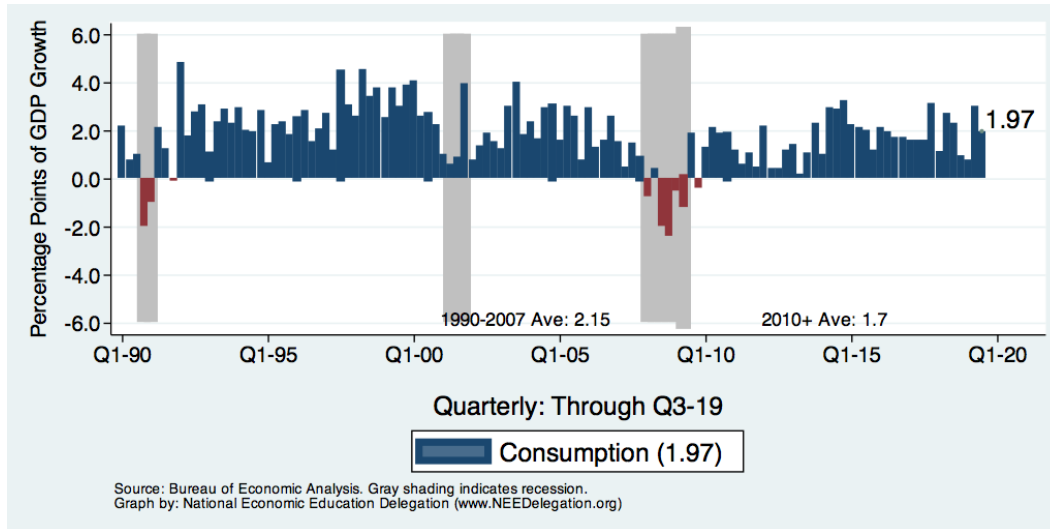
# Understanding Contributions to GDP Growth

- **GDP Growth is a combination of the growth in its components:**
  - Consumption, Investment, Government, and Net Exports
  - It's a weighted average of these components
  
- **For example: Consumption**
  - If consumption accounts for **2/3** of the economy,
  - If consumption grew by **3%**,
  - It would cause GDP growth to be **2 percentage points** higher than it would otherwise be

$$2\% = \frac{2}{3} * 3\%$$

23

# Contribution to GDP Growth: Consumption



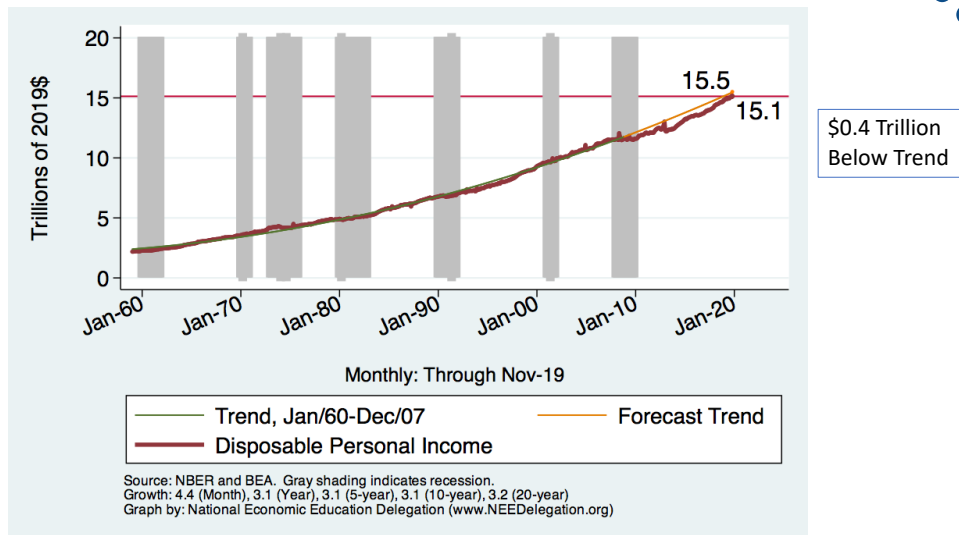
24

# Personal Consumption Expenditures

- **Consumption has been slow to recover.**
  - Pre-crisis average contribution of consumption expenditures was 2.15 percentage points.
  - Post-crisis contribution is 1.6 percentage points.
- **In other words, its contribution to GDP growth is down 21%.**
  - Let's explore why

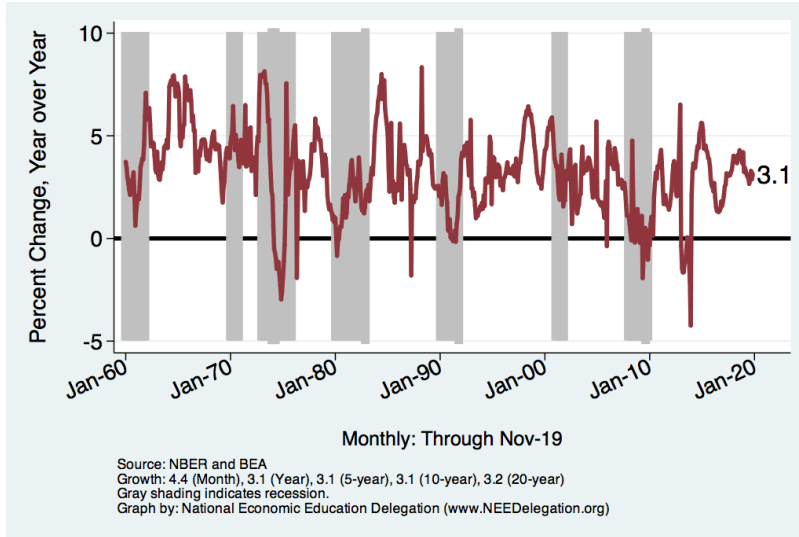
25

# Real Disposable Personal Income



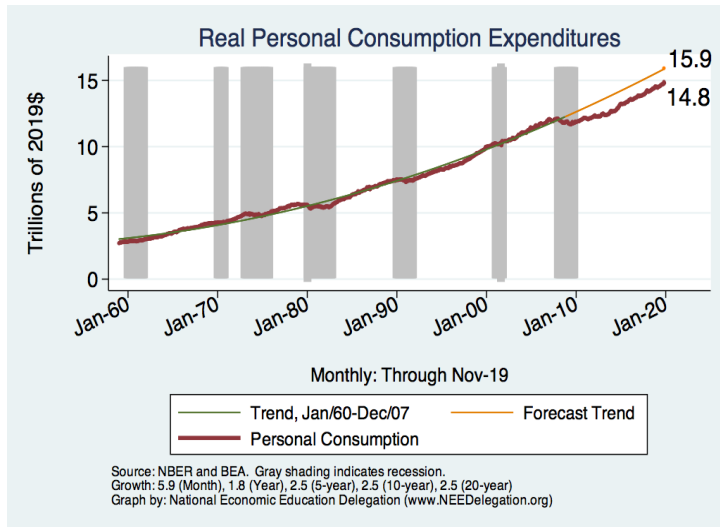
26

## Real Disposable Personal Income - Growth



27

## Personal Consumption Expenditures



\$1.1 Trillion Below Trend

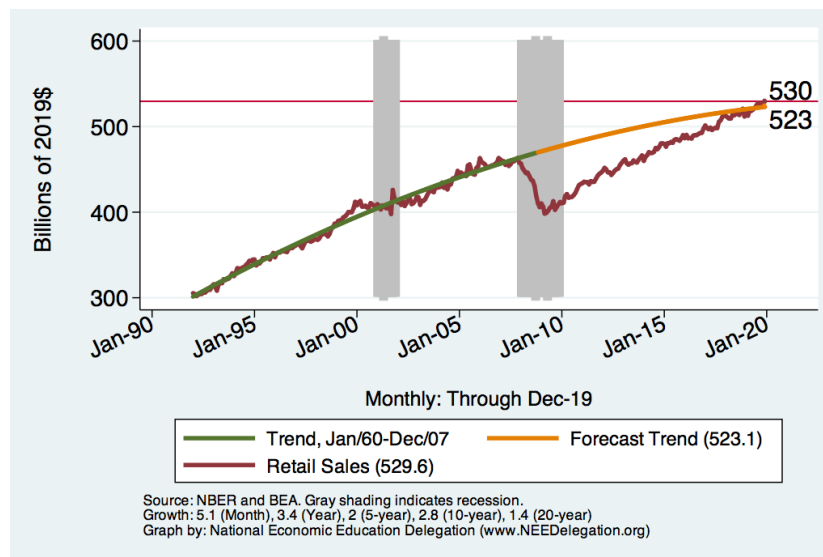
28

## Explaining Consumption Expenditures

- Retail sales, household debt, and personal savings help explain changes in consumption expenditures.
- Lower levels of retail sales and household debt and higher savings should be correlated with lower levels of consumption expenditure.

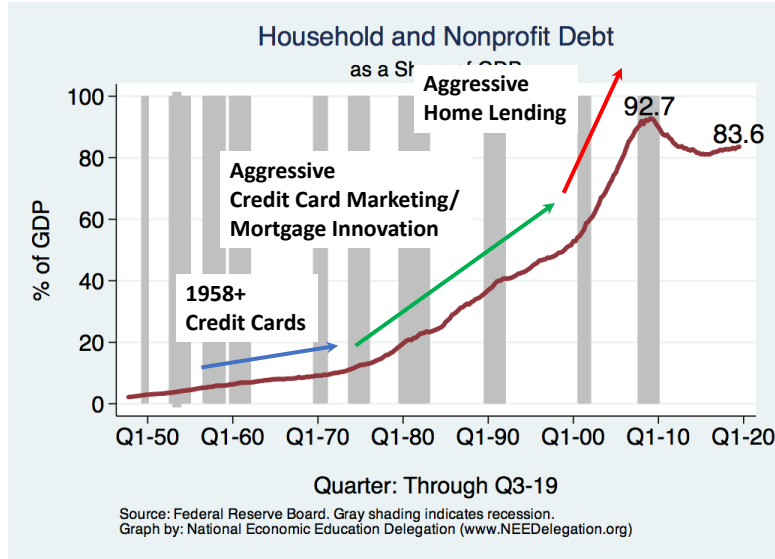
29

## Retail Sales



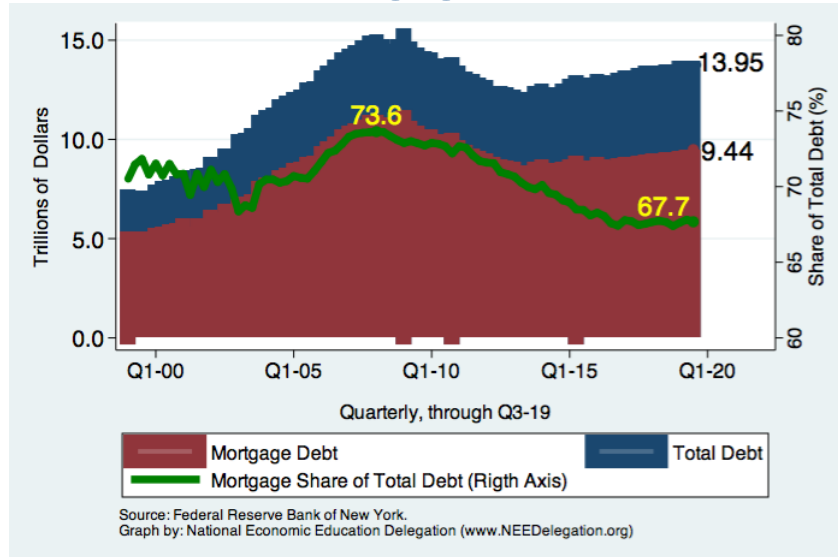
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# Household Debt as a Share of GDP



31

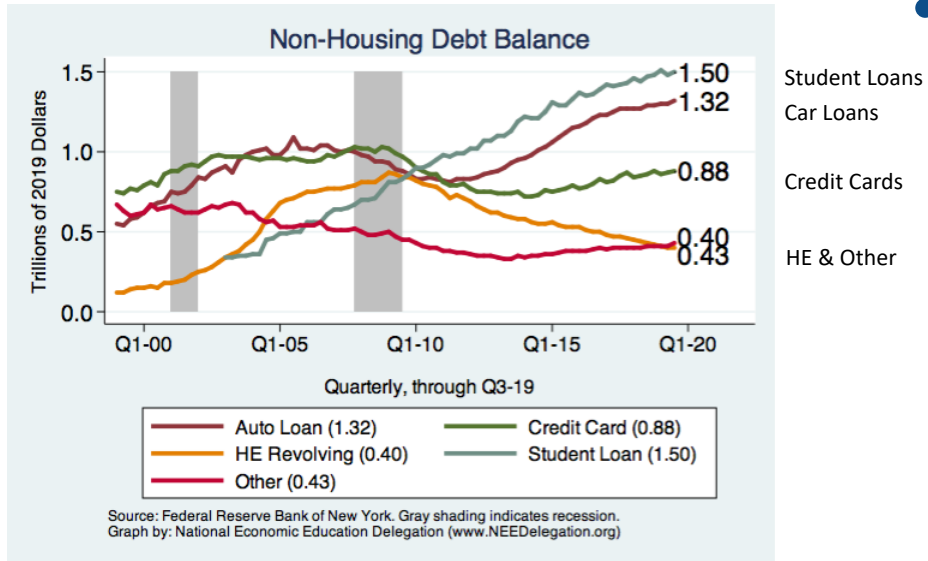
# Household Debt: Mortgages



32

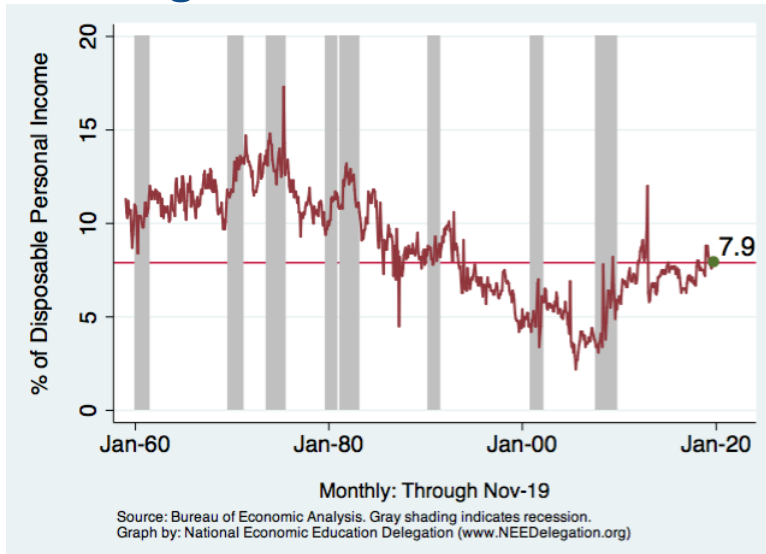


# Household Debt: Other Sources



33

# Personal Savings



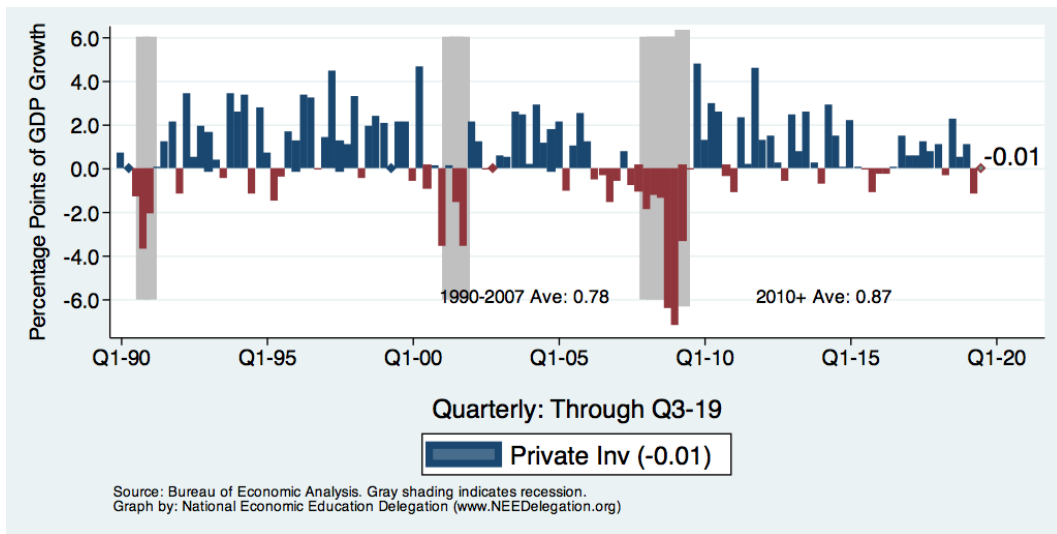
34

# Investment Expenditures

- Investment expenditures are composed of residential and non-residential spending.
- Residential spending refers to home construction, including remodeling.
- Non-residential spending refers to capital purchases and new inventory accumulation.
  - Tools, machinery, new factories, commercial real estate.

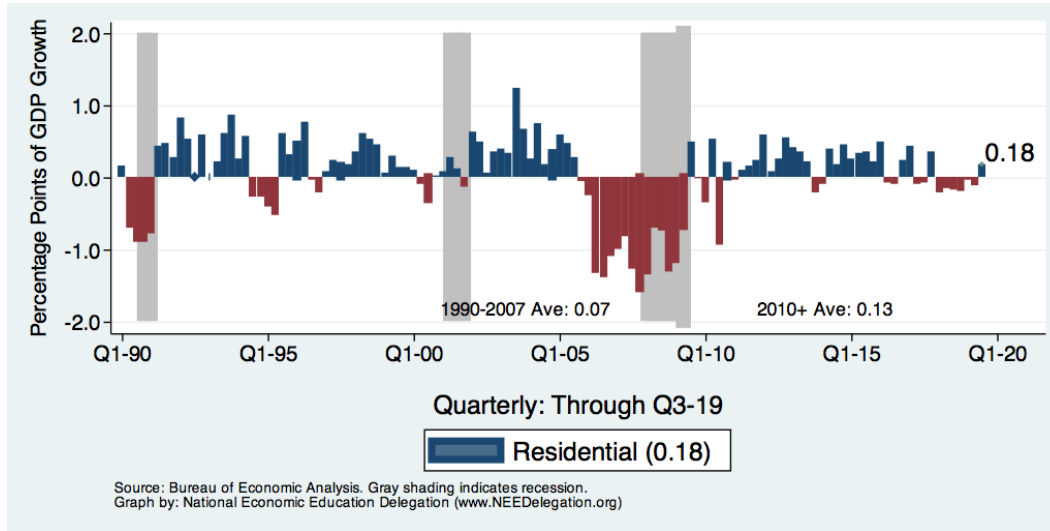
35

# Contributions to GDP: Private Investment



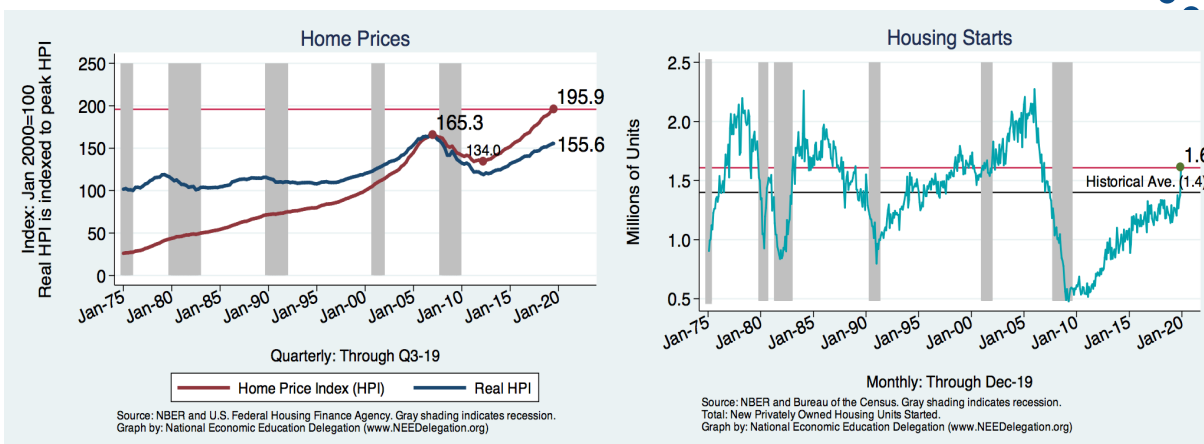
36

# Contributions to GDP: Residential Investment



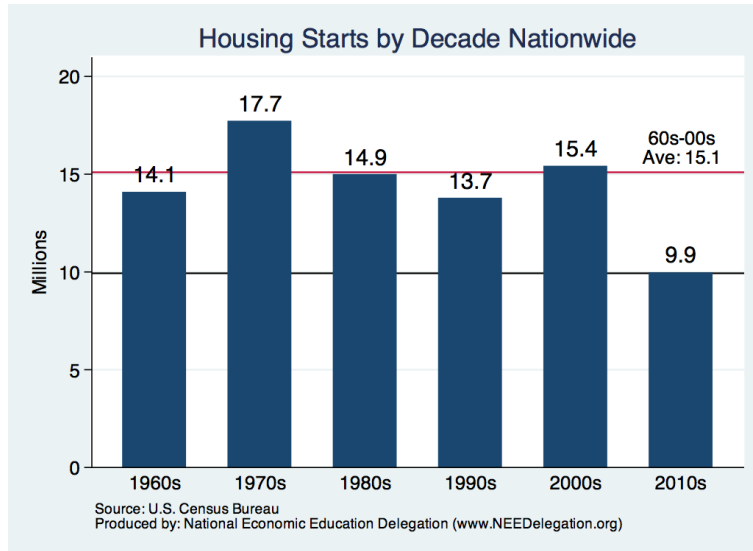
37

# Home Prices and Housing Starts



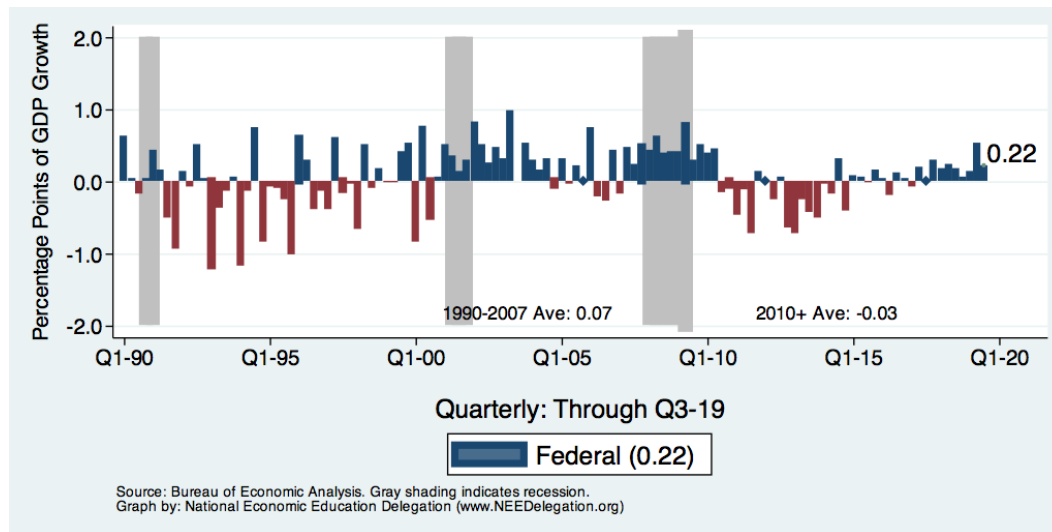
38

## Recent Housing Growth Has Been Slow



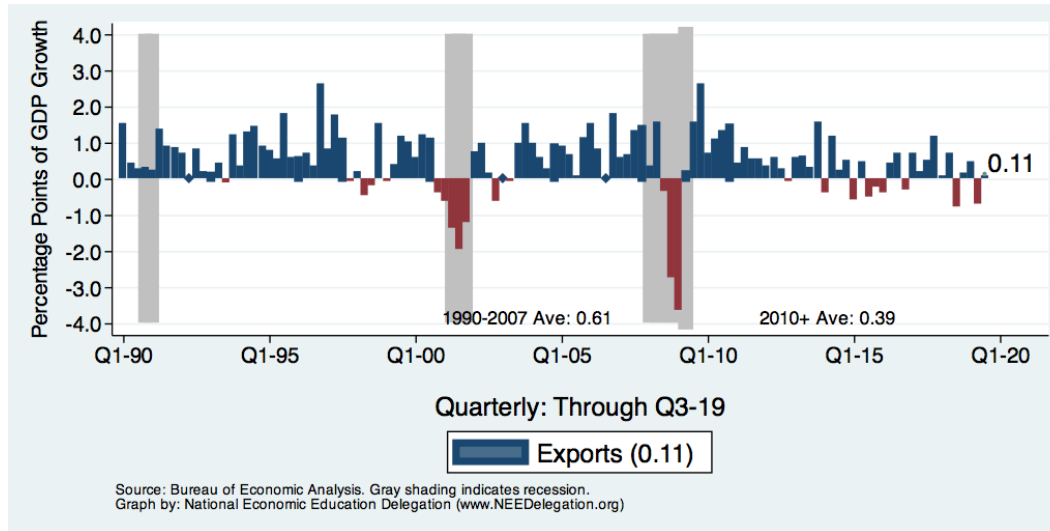
39

## Contributions to GDP: Government



40

## Trade's Contribution to GDP: Exports



41

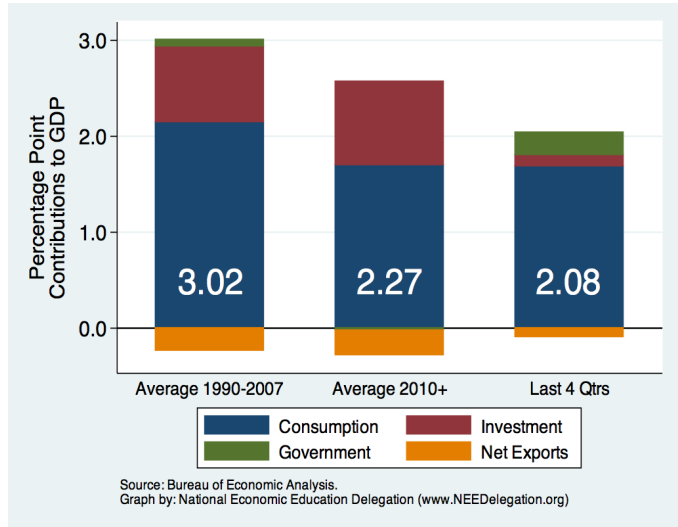
## Expenditure Summary

- **Post-recession consumption is down:**
  - Retail sales have returning to trend;
  - Household debt down, but climbing;
  - Personal savings is up.
- **Investment expenditures are contributing more to GDP growth.**
  - But have recently slowed:
- **Post-recession government spending is down:**
  - But starting to pick up.
- **Net exports are relatively unchanged.**



42

# Expenditure Summary



# Labor Market

## Productivity and Employment

- **The labor market is an important indicator of the health of the U.S. economy.**
- **We'll focus on employment and productivity.**
  - Trends in employment and labor force participation.
  - Trends in labor productivity.

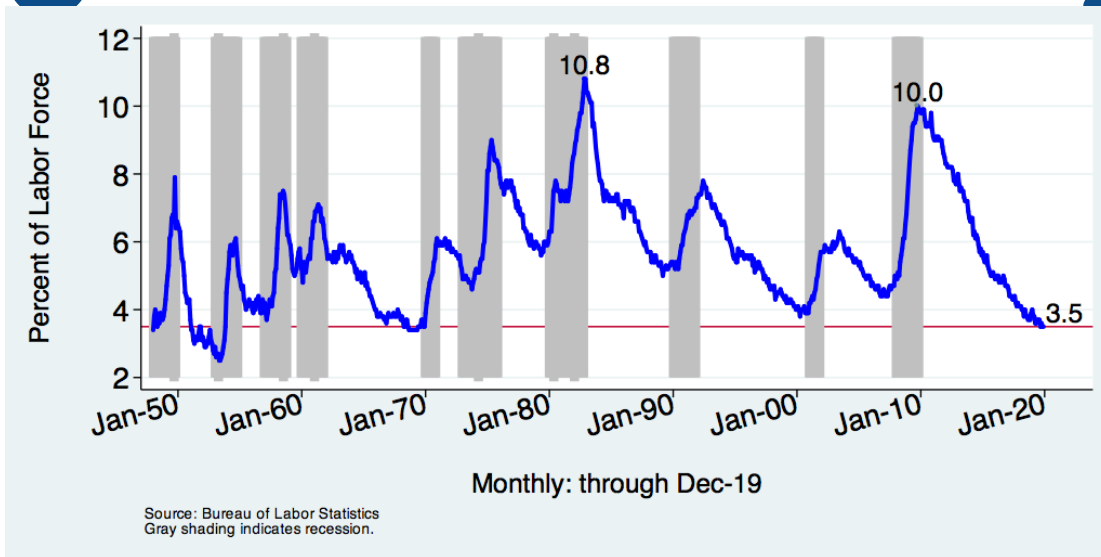


## Labor Market Conditions

- **Unemployment rate is low, 3.5%, a level not seen since the 1960s.**
- **Natural rate of unemployment is estimated to be 4.5% - 5.5%.**
- **Monthly employment gains have averaged 189,000 jobs over the last six months.**
  - This measure has been declining throughout 2019.
- **Recent Labor Market Concerns:**
  - Low employment-to-population ratio
  - Falling labor force participation
  - Slow wage growth



## Unemployment Rate



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47

47

## How is the Unemployment Rate Calculated?

- It is not a simple thing: 
$$UR = \frac{\# \text{ Unemployed}}{\text{Labor Force}} * 100$$
- Why is that not simple?
  - Because it can go up or down for a variety of reasons:
    - If employment shrinks – UR goes up
    - If the labor force grows – UR could go up
  - Not all employment is created equally.
- Not a good indicator of the overall well being of the US economy



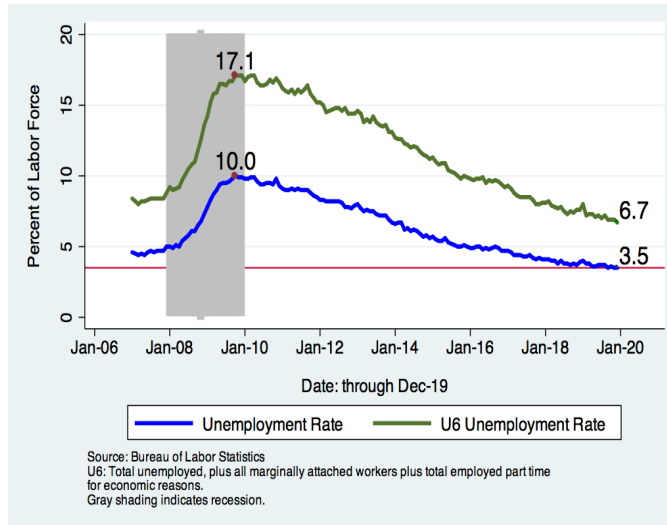
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48

48

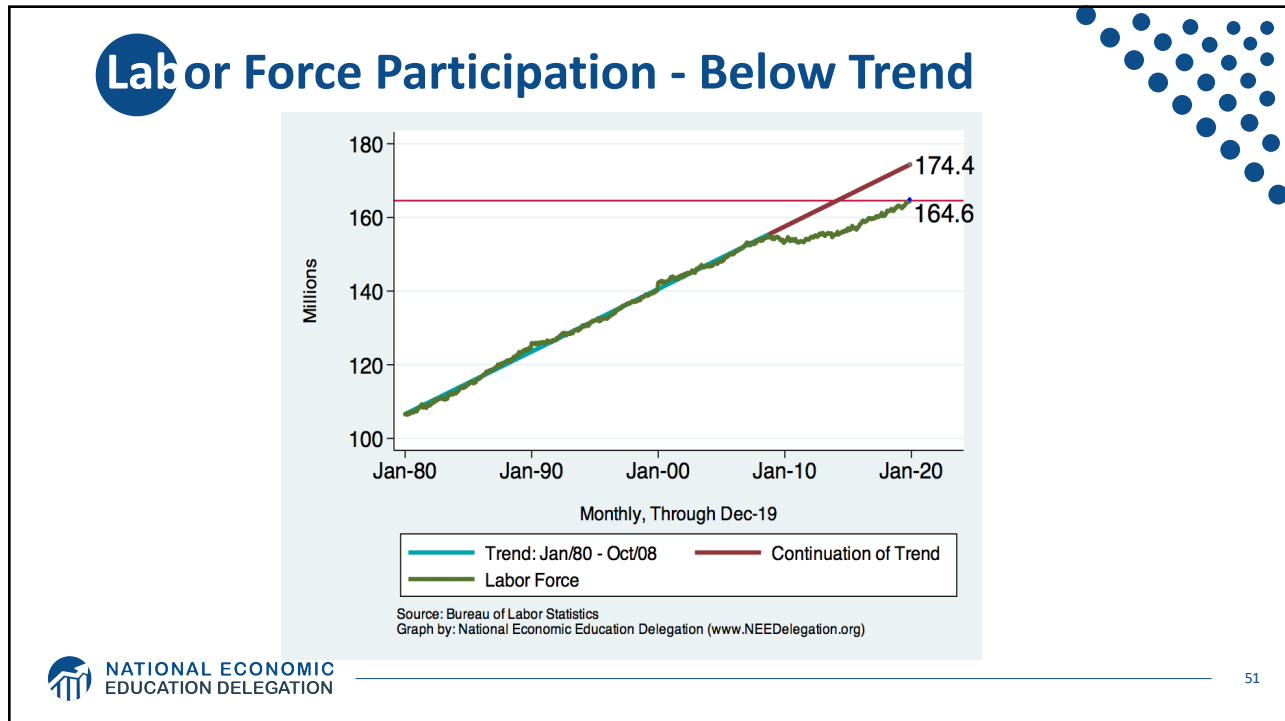


# Unemployment Rate

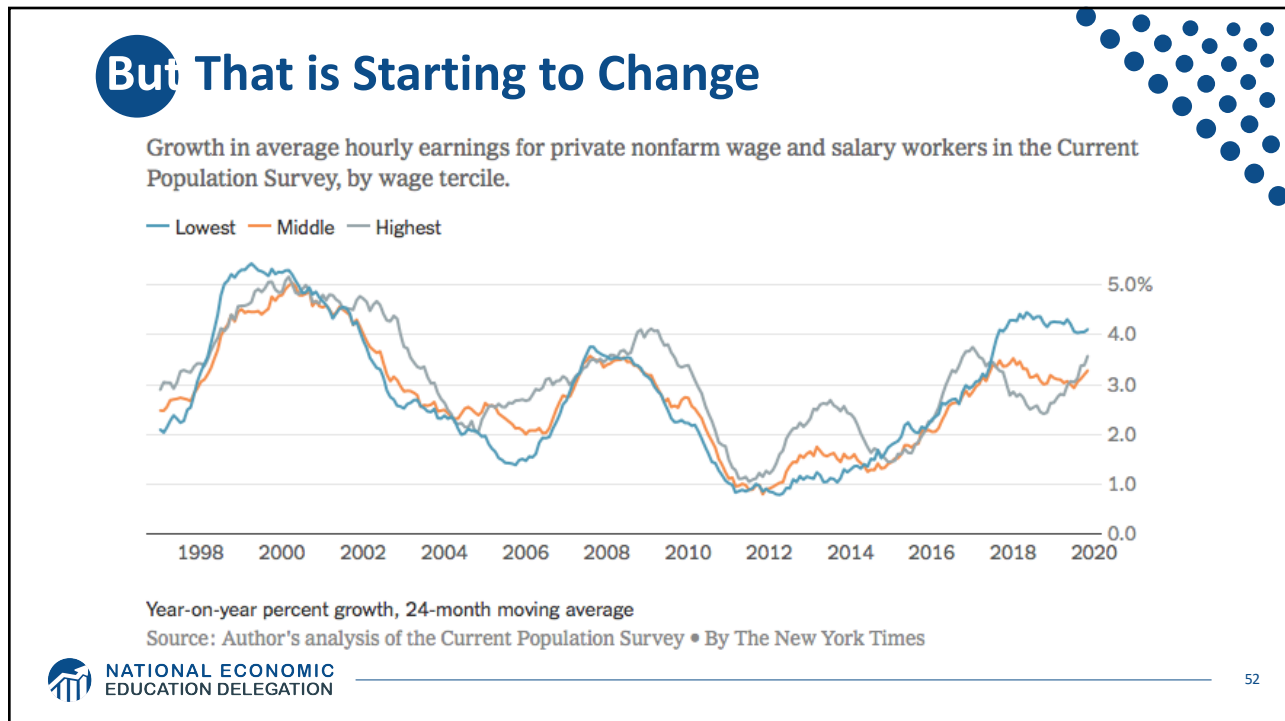


# Low Unemployment: But Jobs Don't Pay

**M**ore than 53 million people—44% of all workers aged 18-64—are low-wage workers by our criteria. They earn median hourly wages of \$10.22 and median annual earnings of \$17,950.

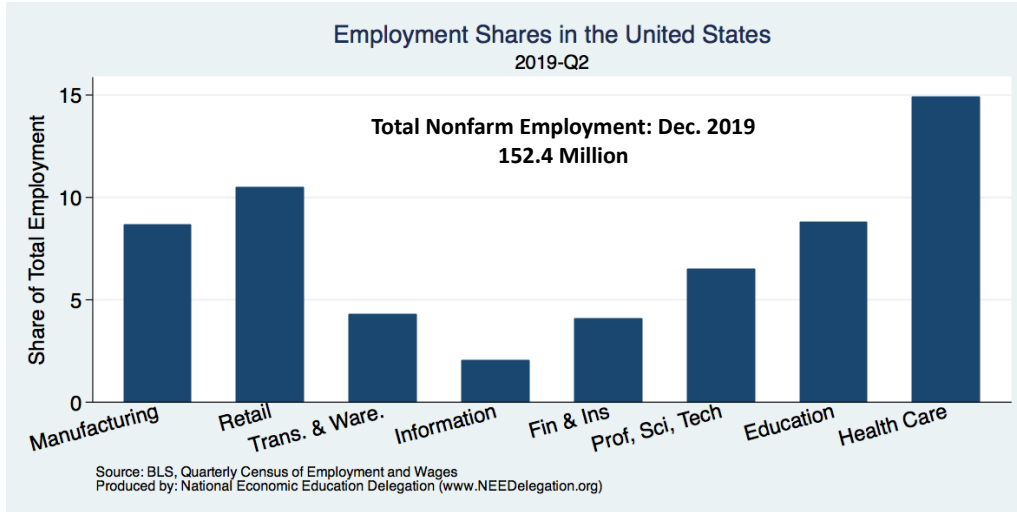


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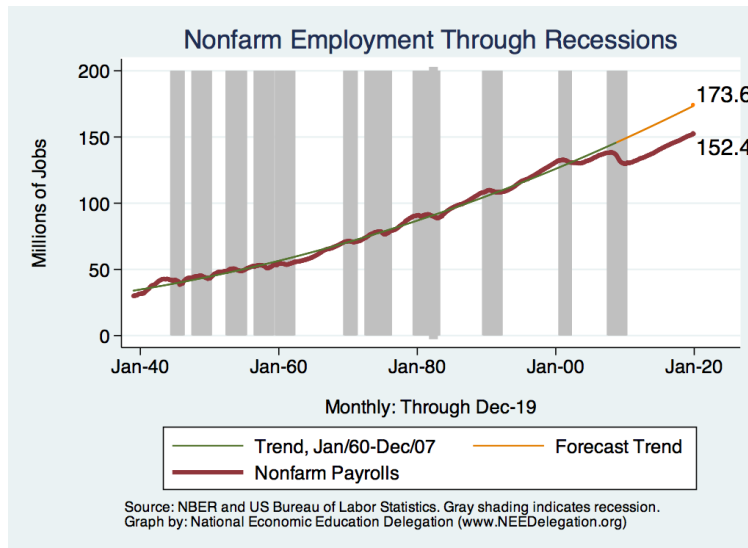


52

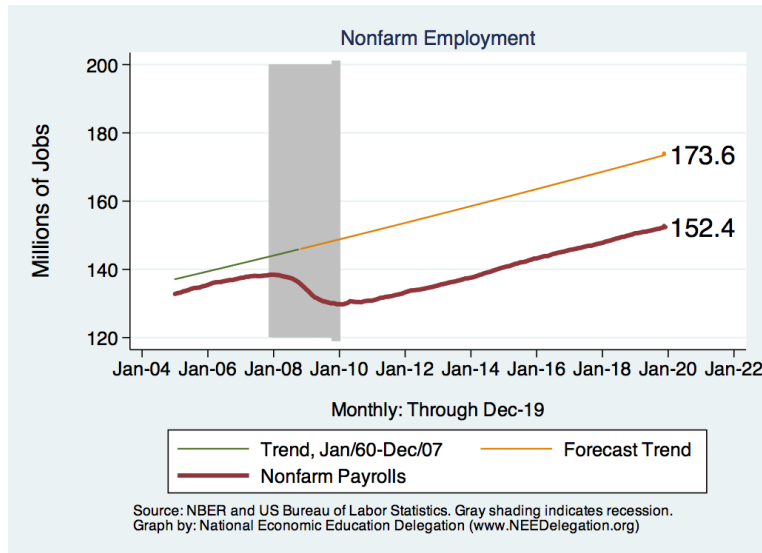
# U.S. Employment



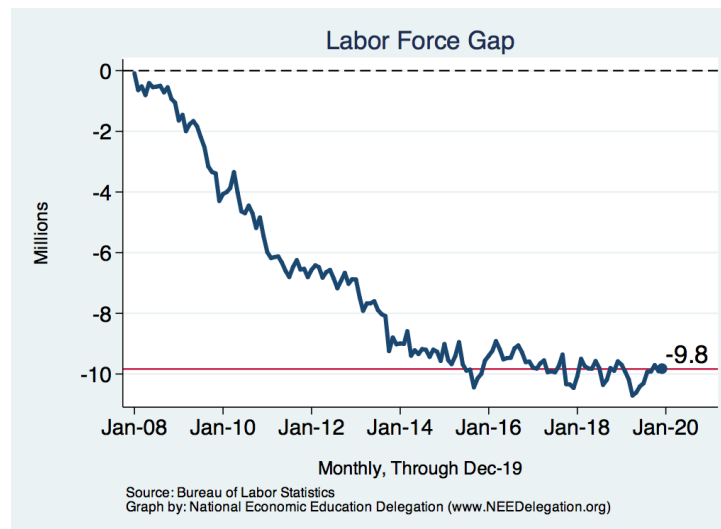
# Employment Growth



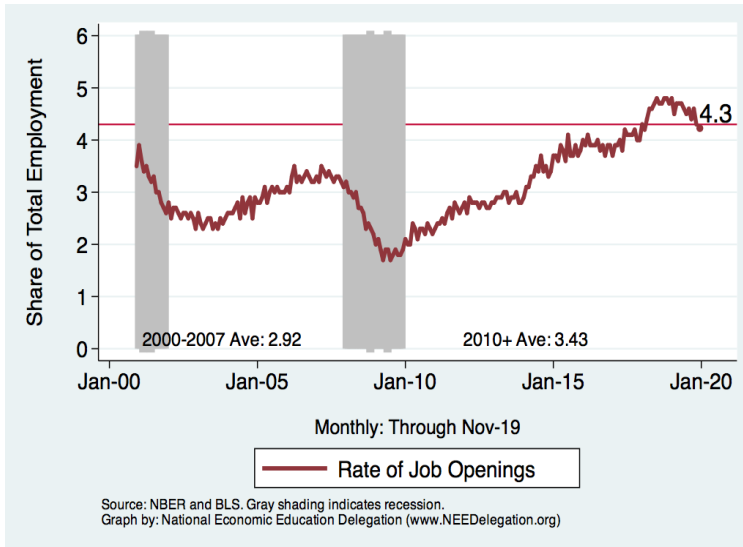
## Employment Gap: Up Close



## There is a Persistent Labor Force Gap

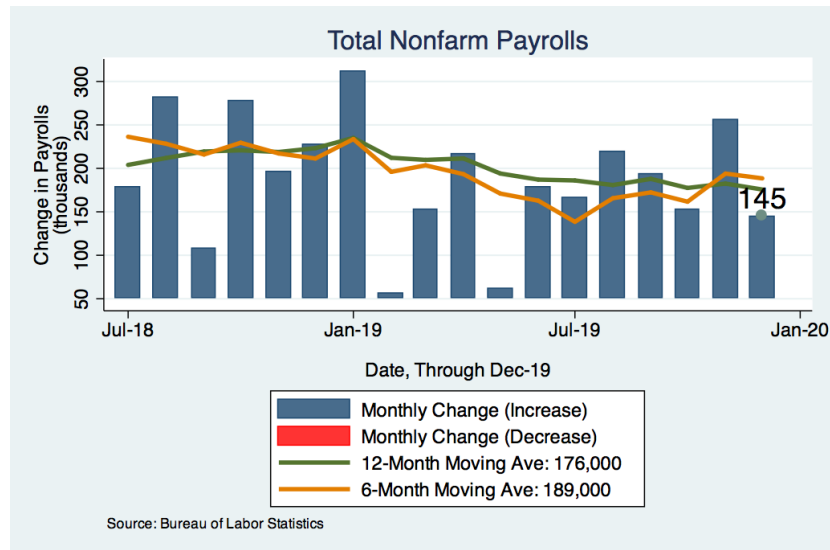


## Job Openings: Share of Total Employment



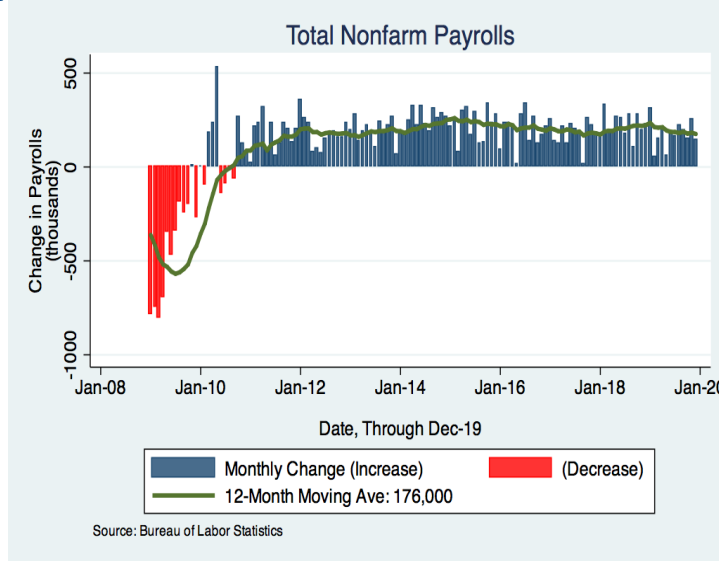
57

## Monthly Changes in Nonfarm Employment



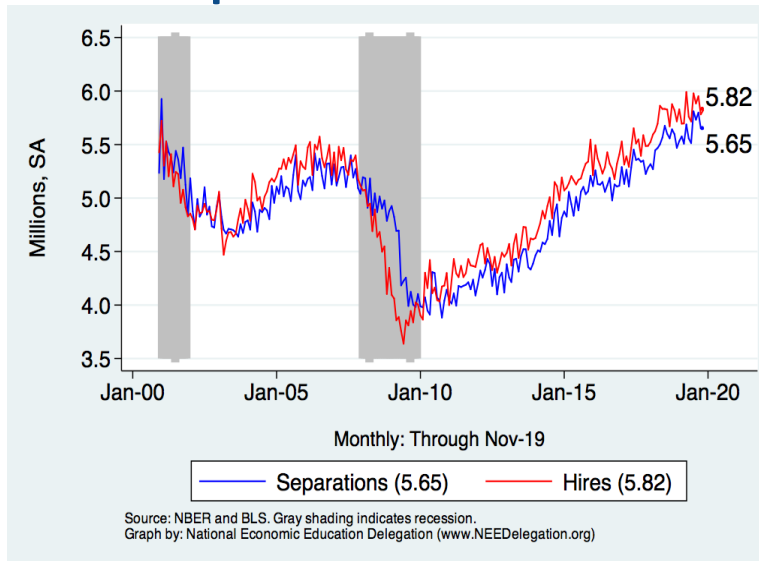
58

# Monthly Changes in Nonfarm Employment



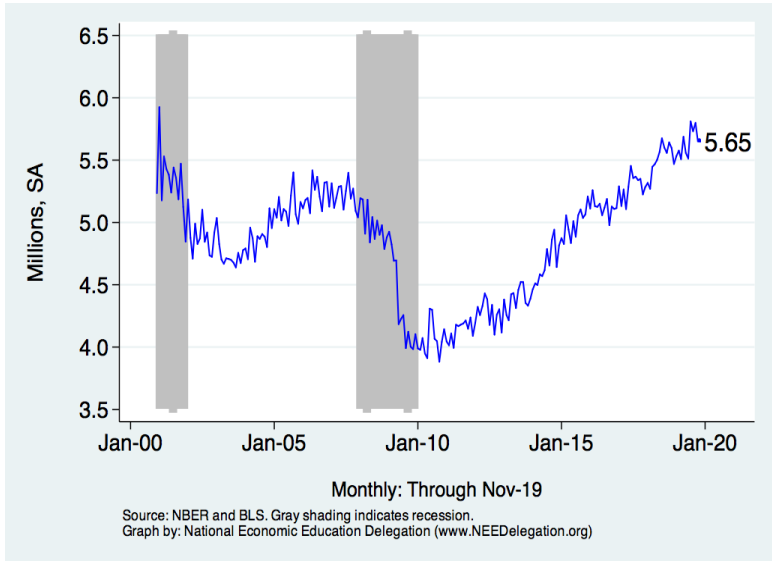
59

# Job Hires and Separations

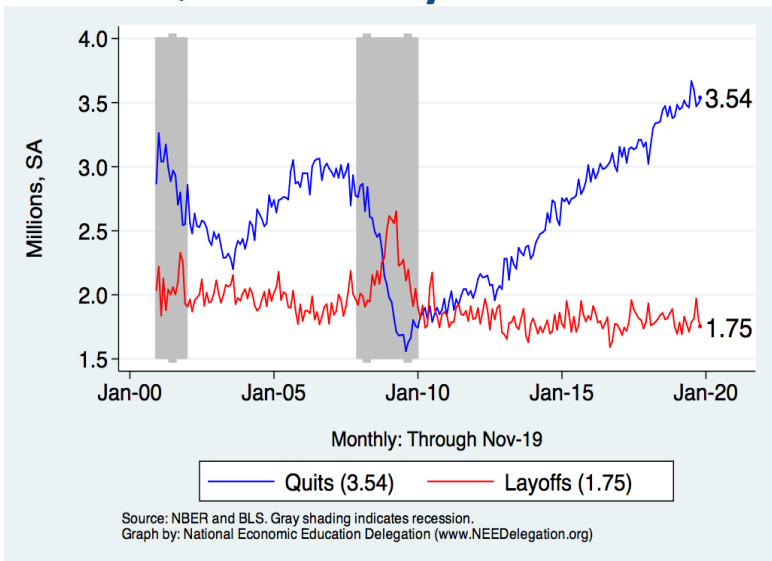


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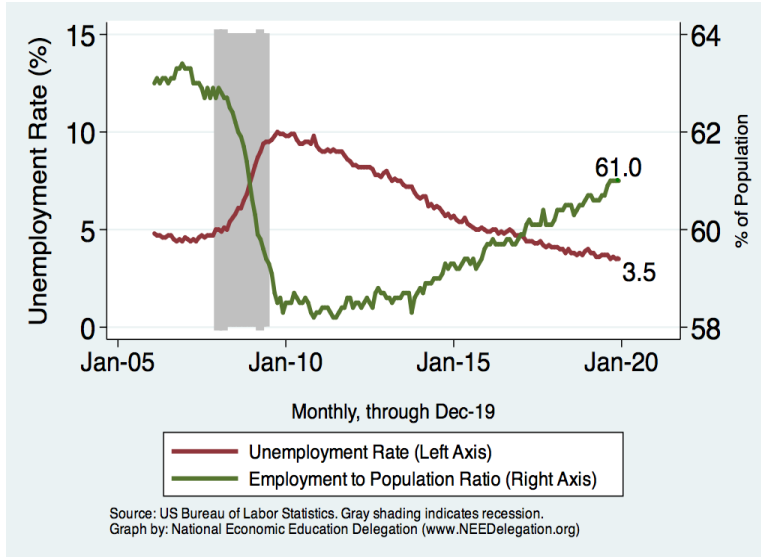
# Job Separations



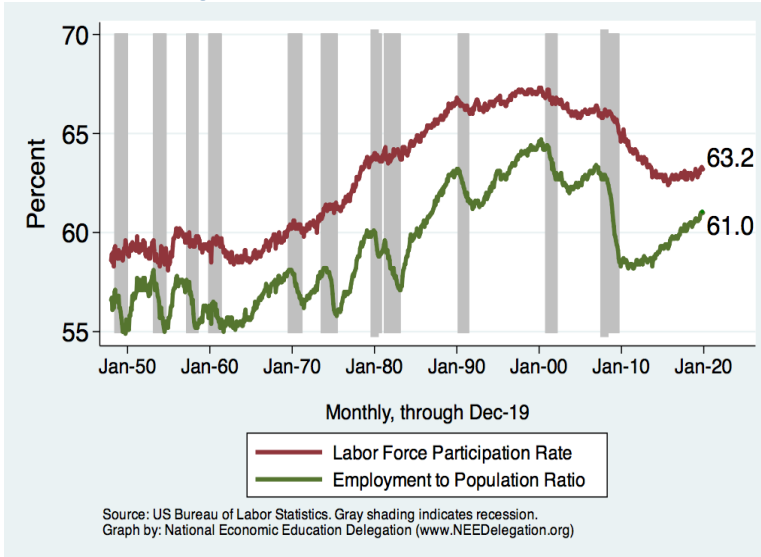
# Separations: Quits and Layoffs



## Slow Employment Recovery

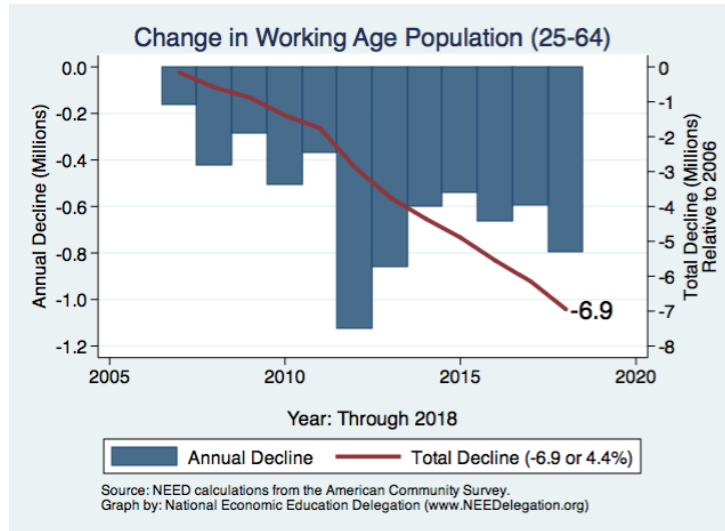


## Labor Force Dropouts



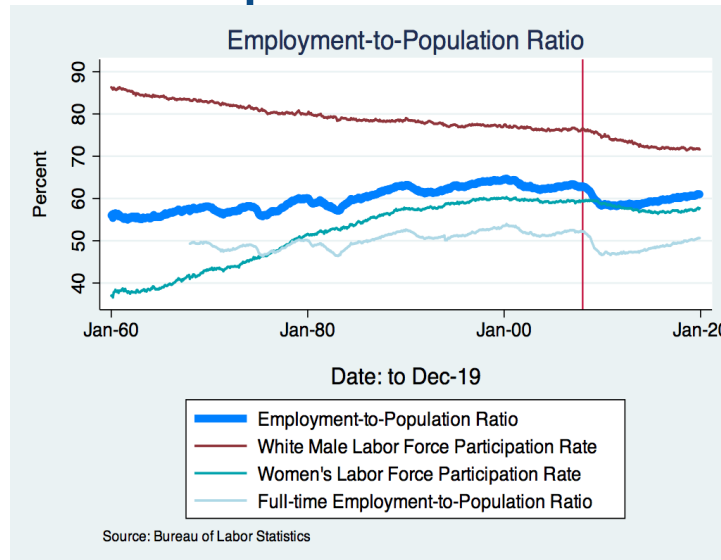


# Baby Boomers Are Retiring!



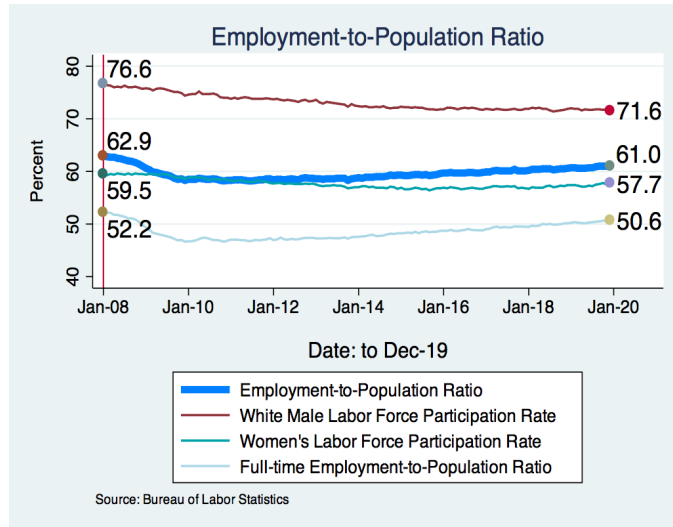
65

# Employment-to-Population Ratios



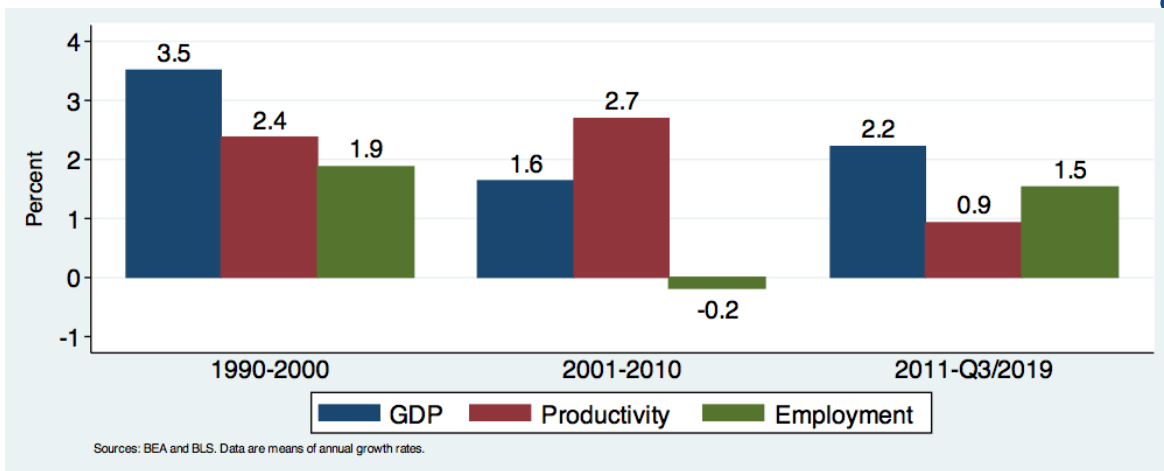
66

## Employment to Population Ratios – Recent



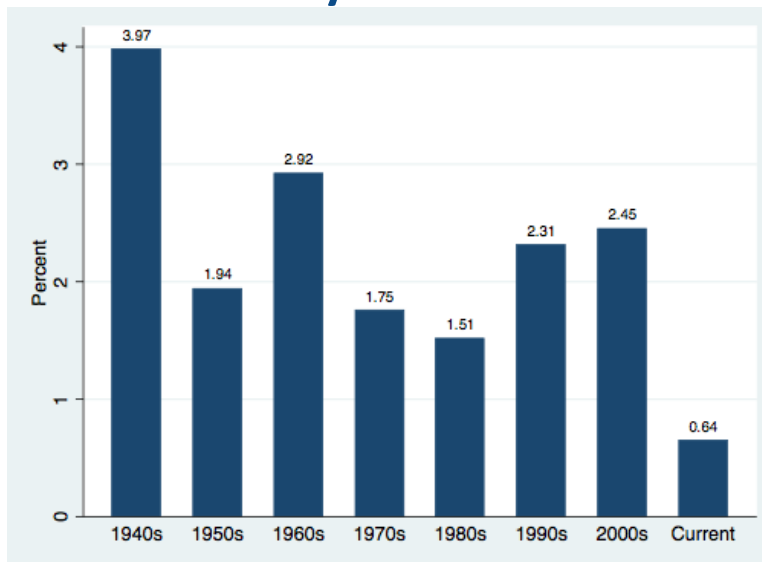
67

## GDP Growth, Productivity, and Employment



68

## History of Productivity Growth



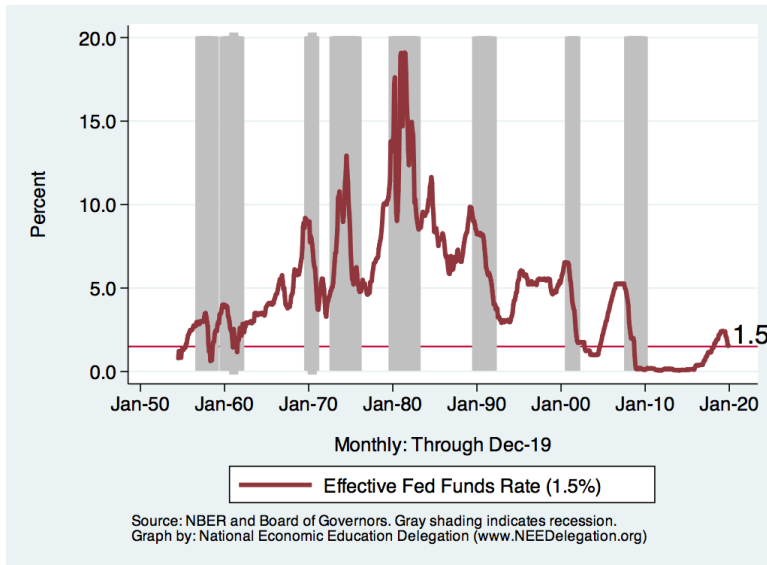
## Summary

- **GDP growth is primarily fueled by increases in demand for output.**
- **This growth is supported by growth in employment and productivity of the labor force.**
- **Recent years have seen relatively tepid increases in demand for output.**
  - In particular, consumption and government spending have been slow relative to other periods.
- **This tepid growth has lead to slow increases in employment.**
  - As labor markets have tightened, wages have started to grow.
- **Productivity growth has played little role in growing GDP.**
  - Why this is so is not immediately clear.

# Monetary Policy

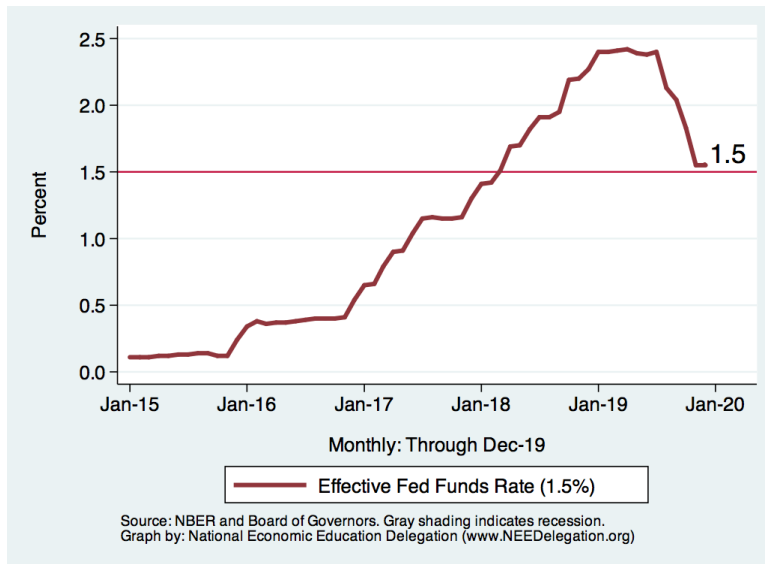
71

## Federal Funds Rate



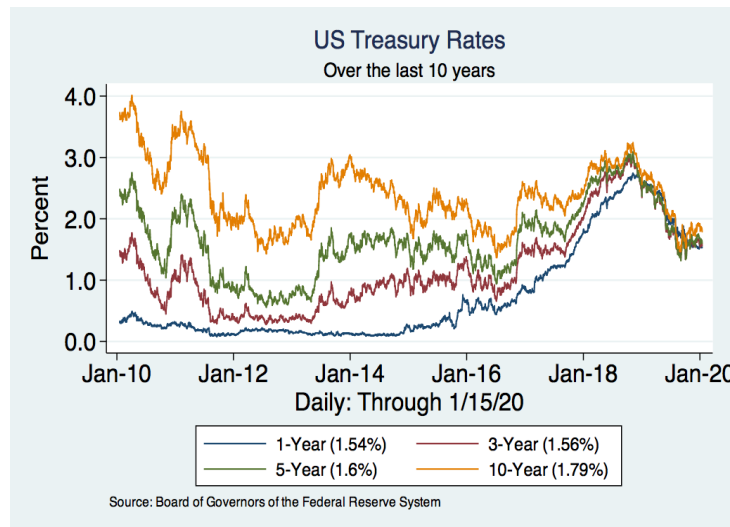
72

## Federal Funds Rate – Last 5 Years



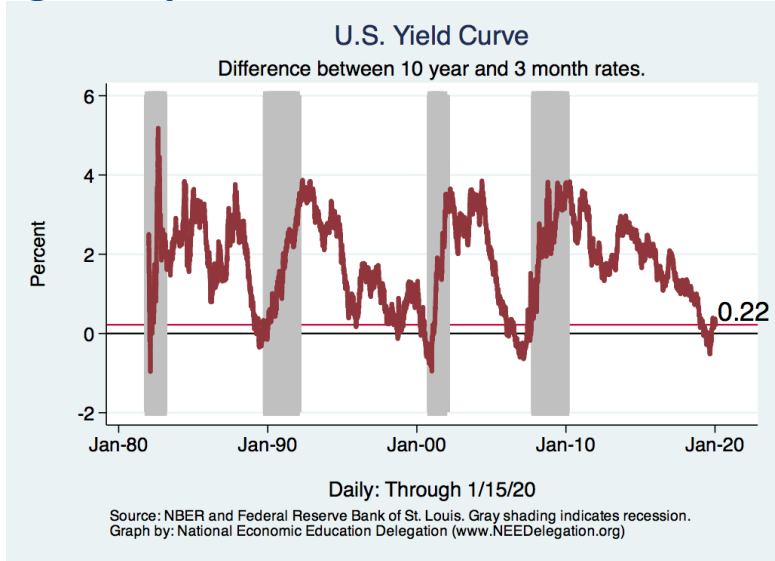
73

## Treasuries



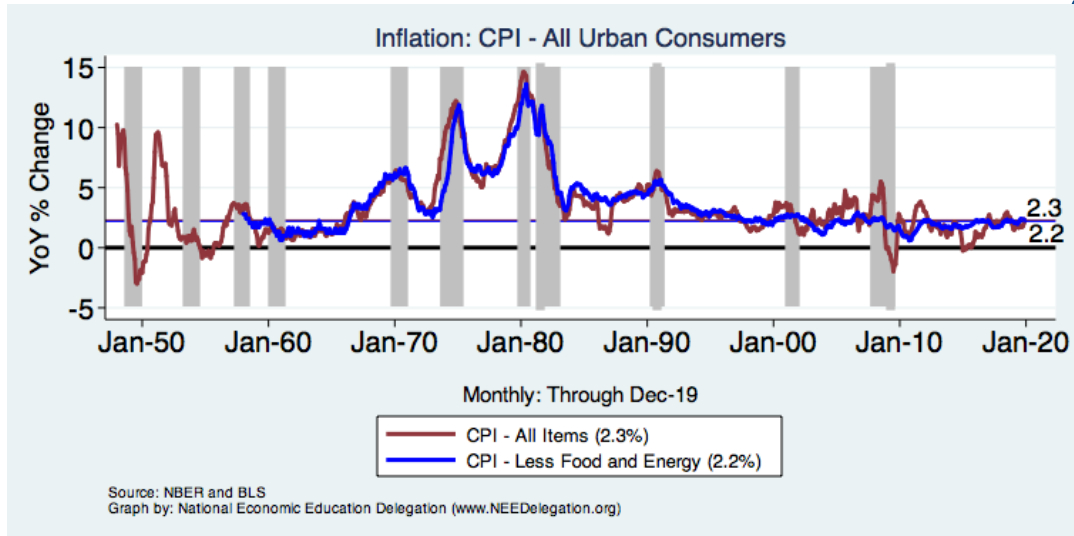
74

# Alarming Compression of Interest Rates



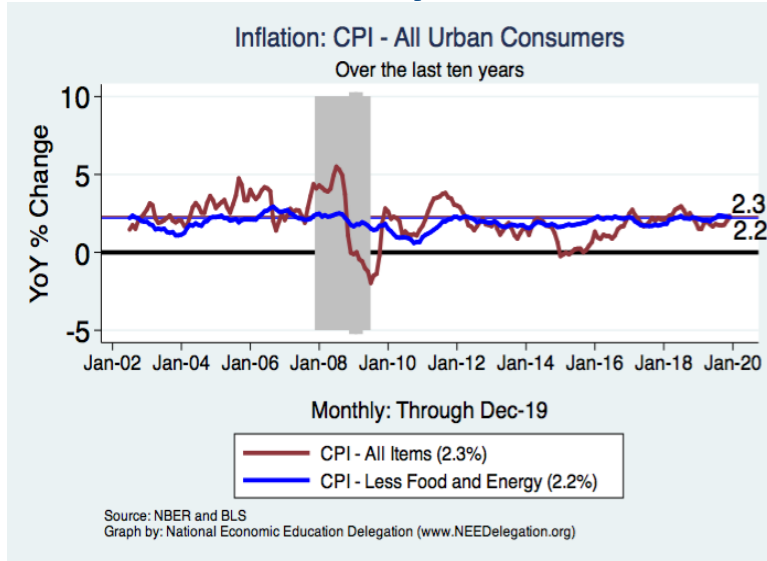
75

# Inflation



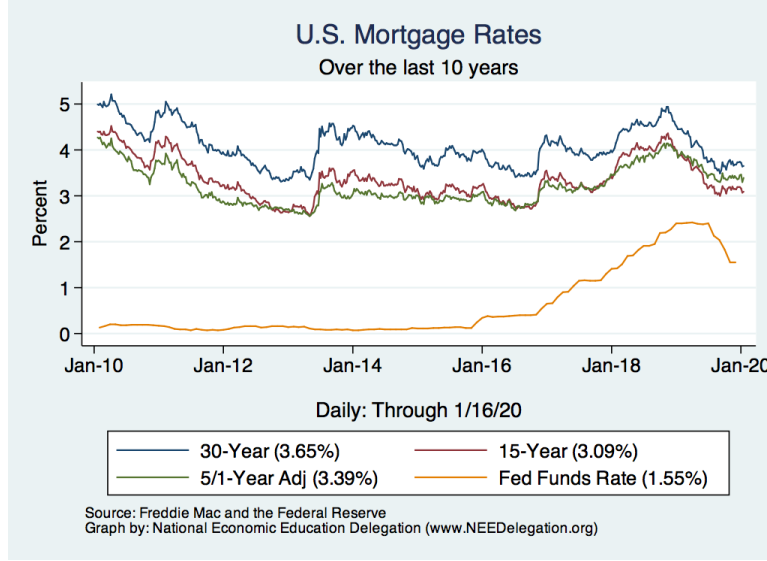
76

# Inflation – Recent Stability



77

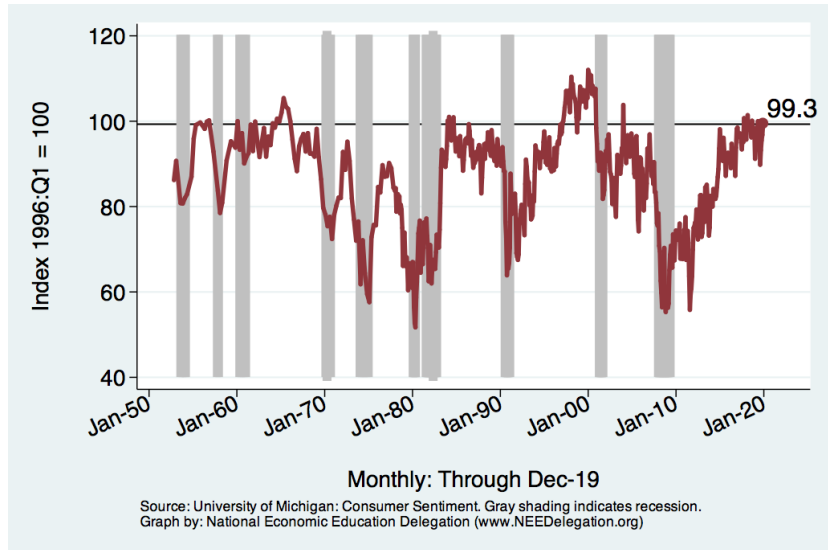
# Mortgage Rates



78

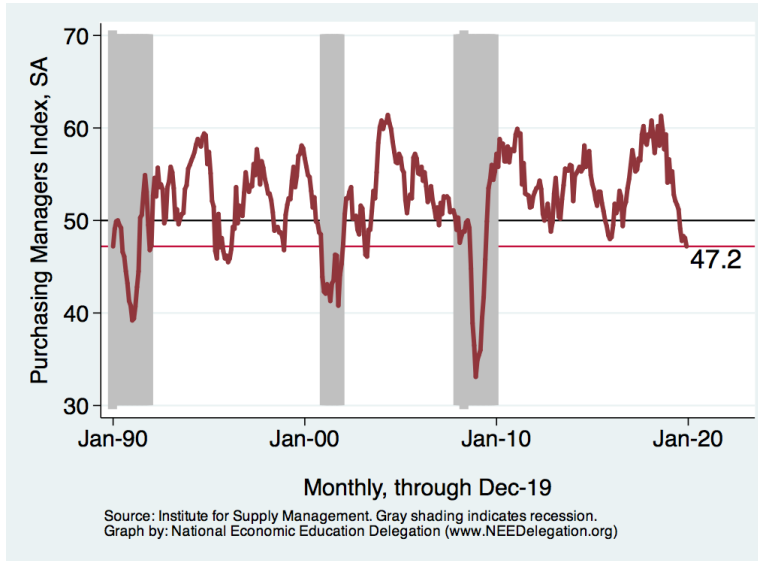
# Other Indicators

## Consumer Confidence: Waning?

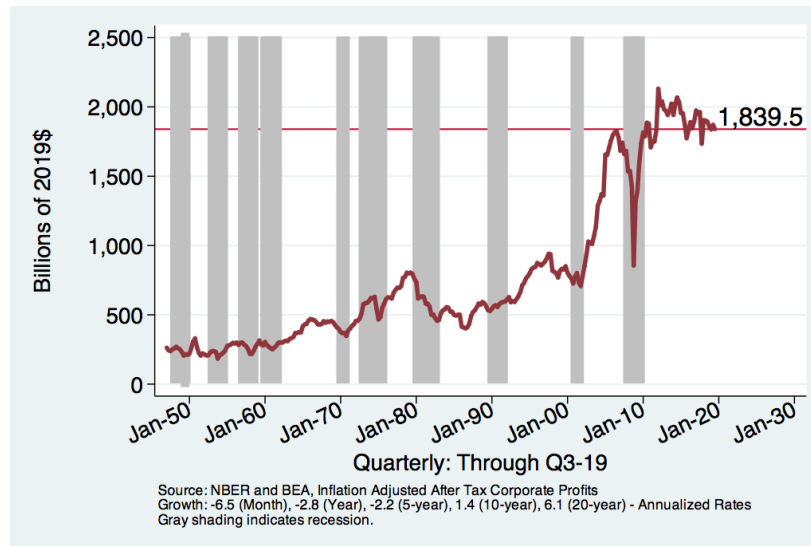




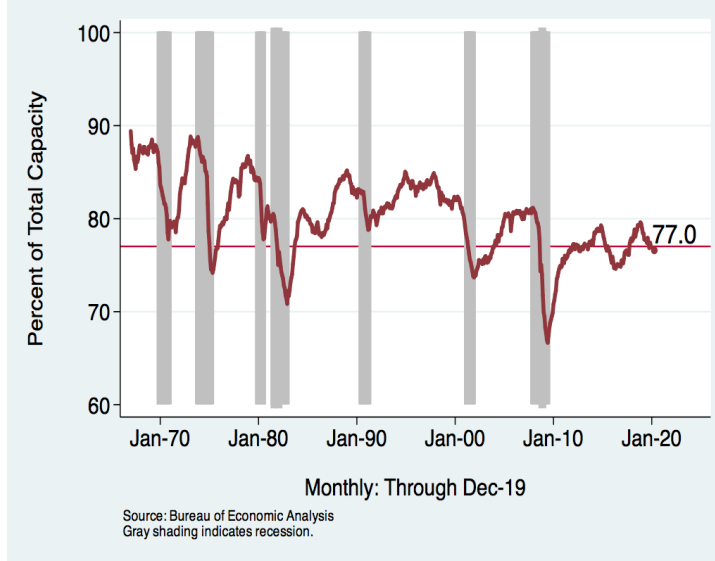
## Producer Confidence: Not What it Used to be!



## Corporate Profits – Inflation Adjusted

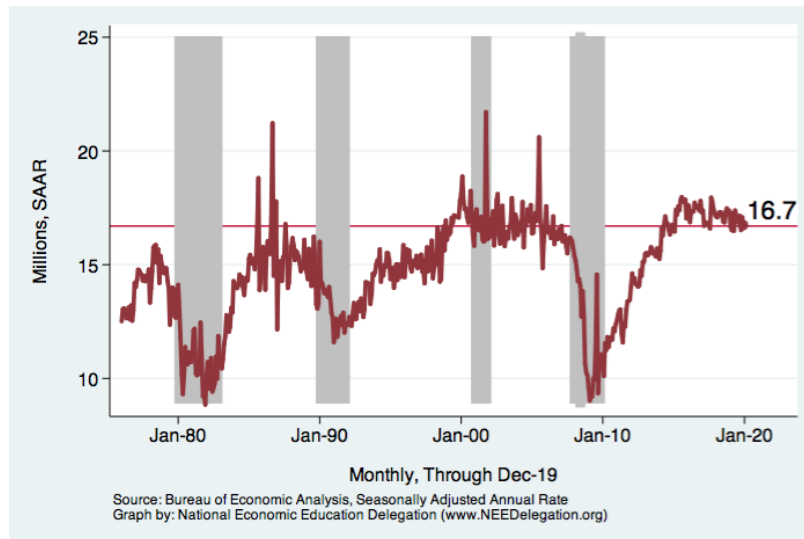


## Capacity Utilization



83

## Automobile and Light Truck Sales



84

## Summary of GDP, Labor Markets and Monetary Policy

- **Behavior of GDP**

- Behavior of expenditure components matter.
- On average, post-recession consumption, government, and export expenditures are contributing less to GDP therefore slowing the recovery.
- In contrast, investment expenditures are contributing more.

- **Labor Market**

- Unemployment is low, labor force participation is stagnant
- Real wages may be starting to grow.

- **Monetary Policy**

- Interest rates are rising.
- Policy normalization is underway.



## Things to Be Worried About

- **Stock Markets**

- **Yield Curve**

- **Government Debt**

- **Declining Labor Force**

- **Income and Wealth Inequality**

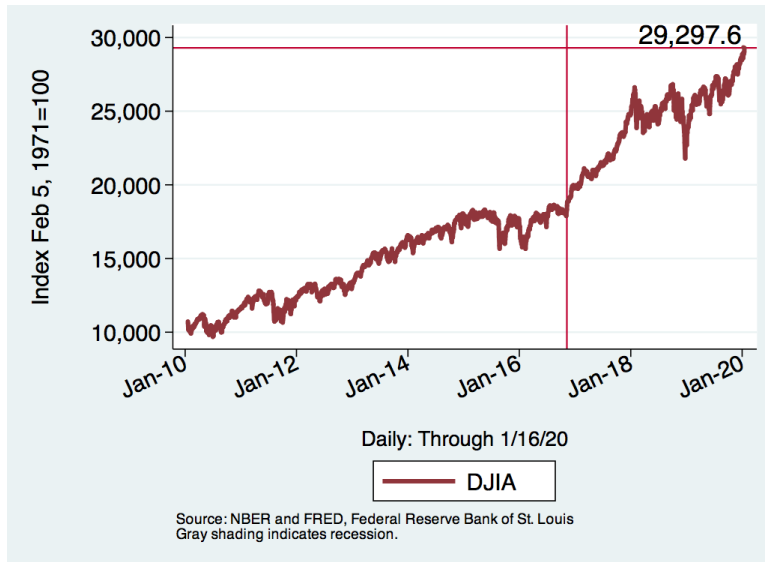
- **Policy Uncertainty**

- Trade and immigration policy, especially

- **Lack of ammunition to fight a recession**

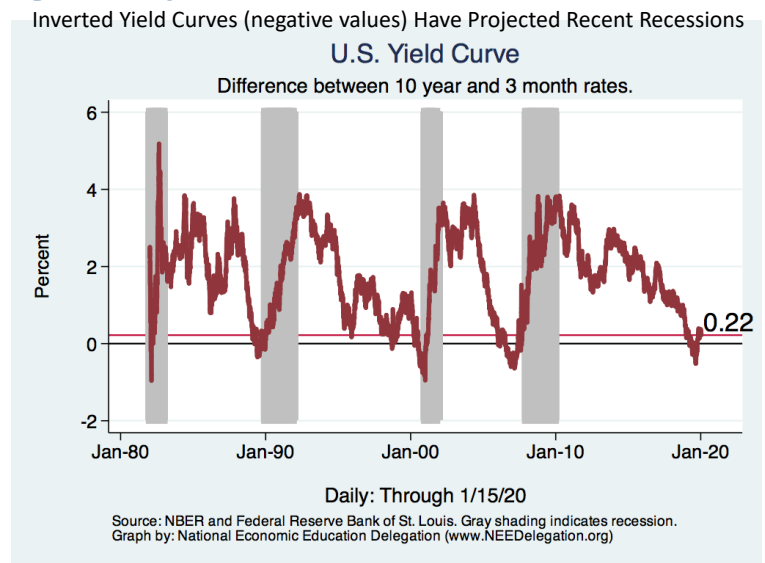


## Dow Jones



87

## Alarming Compression of Interest Rates

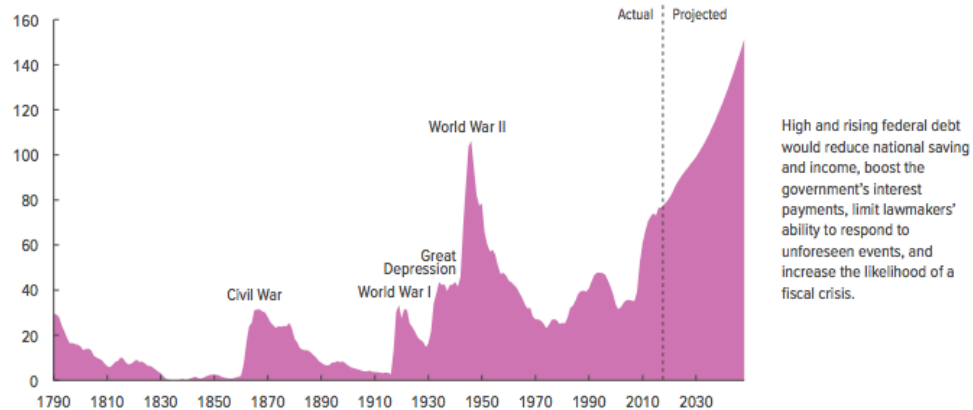


88

## Federal Government Debt Projections

### Federal Debt Held by the Public

Percentage of Gross Domestic Product



High and rising federal debt would reduce national saving and income, boost the government's interest payments, limit lawmakers' ability to respond to unforeseen events, and increase the likelihood of a fiscal crisis.

Source: Congressional Budget Office.



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89

89

## Overall Summary

- **Tailwinds and headwinds both exist**
  - Economic forecasts for near term are favorable.
  - Later 2020 and 2021 forecasts are less sanguine.
- **There remains room for the economy to grow**
  - Labor force growth is available.
  - Consumption has room to grow, but there is evidence of slowing.
  - Business investment may be slowing.
  - Return to productivity growth? But how? What's the next big idea?
- **Long term concerns unaddressed**
  - Demographics, climate change
  - Federal government debt
  - International trade policy



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90

90

## Teasers: Upcoming Lectures

- Government Budgets
- Climate Change
- Income Inequality
- Trade and Globalization
- Housing Policy

91

## Thank you!

### Any Questions?

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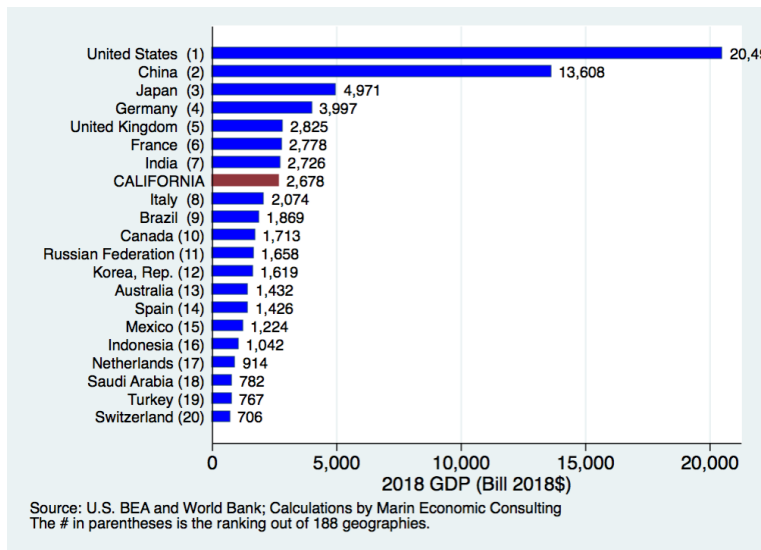
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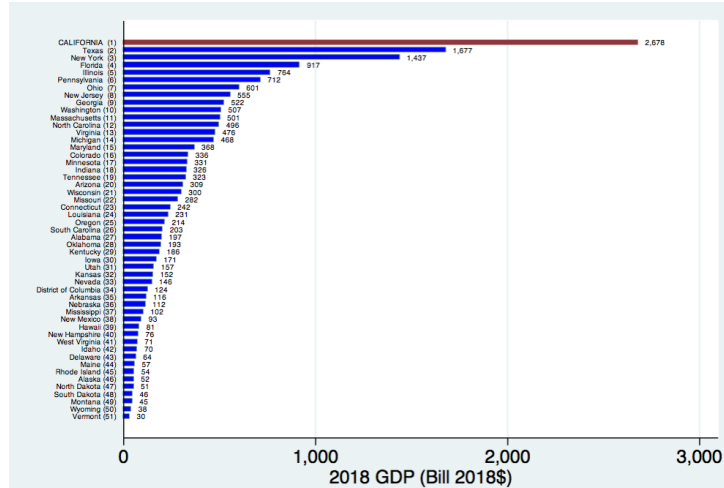
92

# The Local Economy

## If California Were A Country...

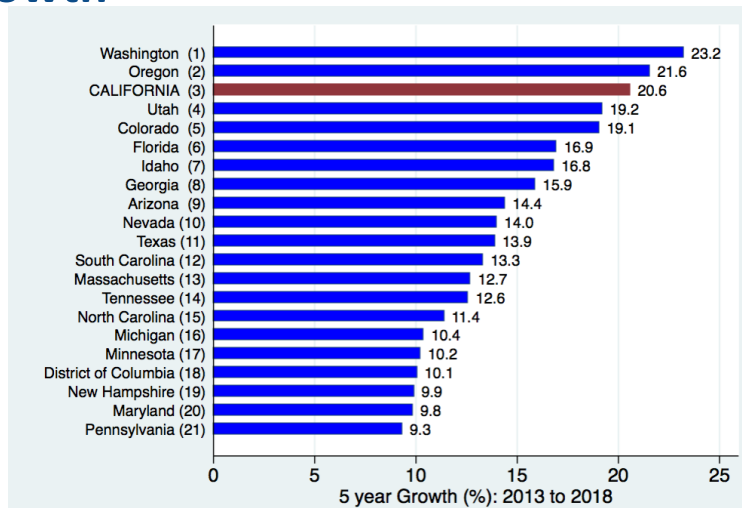


# CA is the Largest State, by Far



Source: Bureau of Economic Analysis, Calculations by Marin Economic Consulting

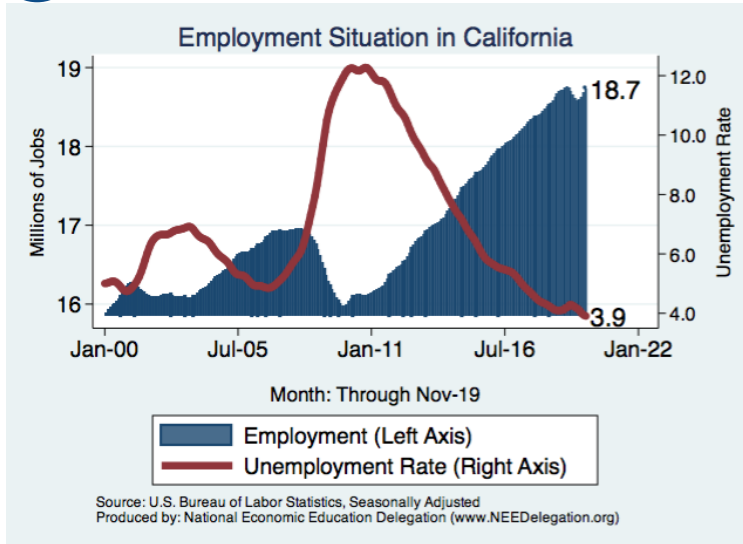
# GSP Growth



Source: U.S. BEA; Calculations by Marin Economic Consulting



## CA Employment Growth is Slowing



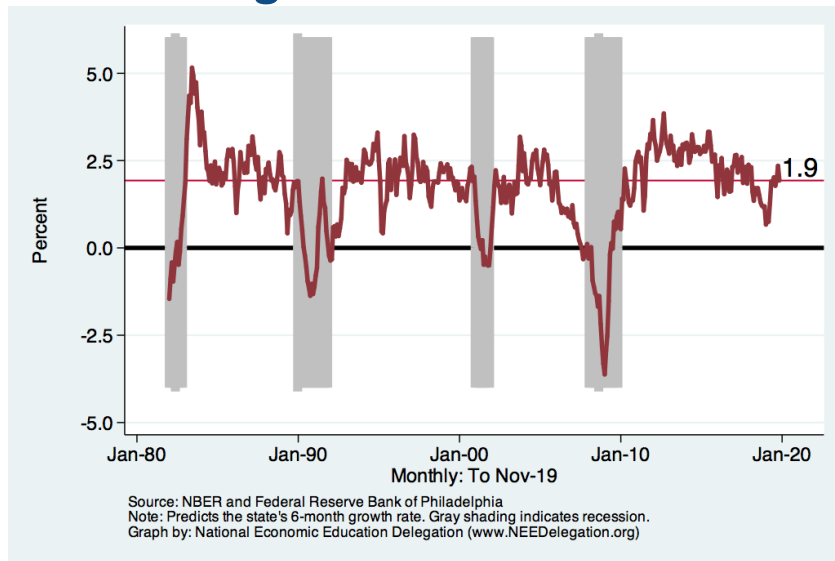
**Growth Rate:**

- Last Month: 0.2%
- Last Year: 1.4%
- Last 3 Years: 2.0%
- Last 5 Years: 2.5%



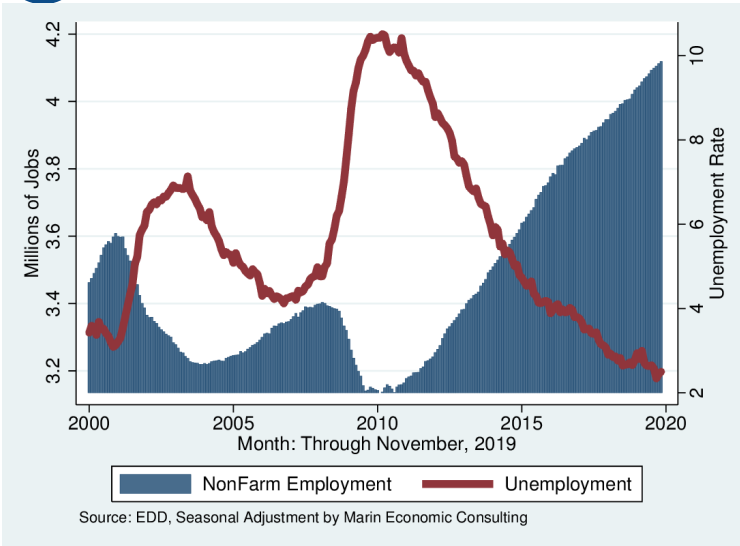
97

## California Leading Index



98

## Bay Area is Growing Well: Employment



**Growth Rate:**

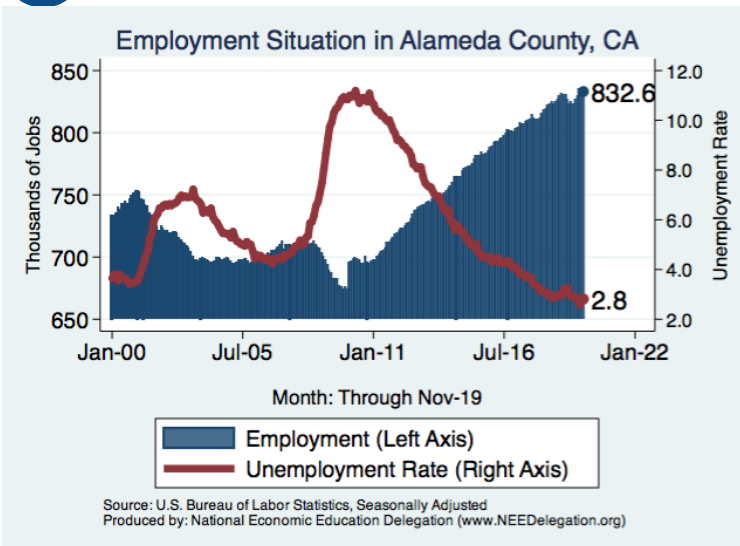
Last Month: 1.9%

Last Year: 2.4%

Last 3 Years: 2.2%

Last 5 Years: 2.8%

## Employment Situation: Alameda County



**Growth Rate:**

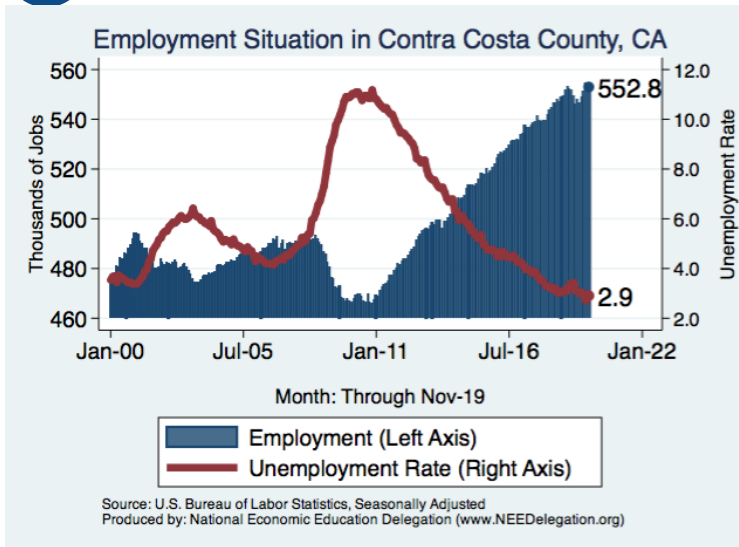
Last Month: 0.4%

Last Year: 1.6%

Last 3 Years: 2.0%

Last 5 Years: 2.6%

## Employment Situation: Contra Costa County

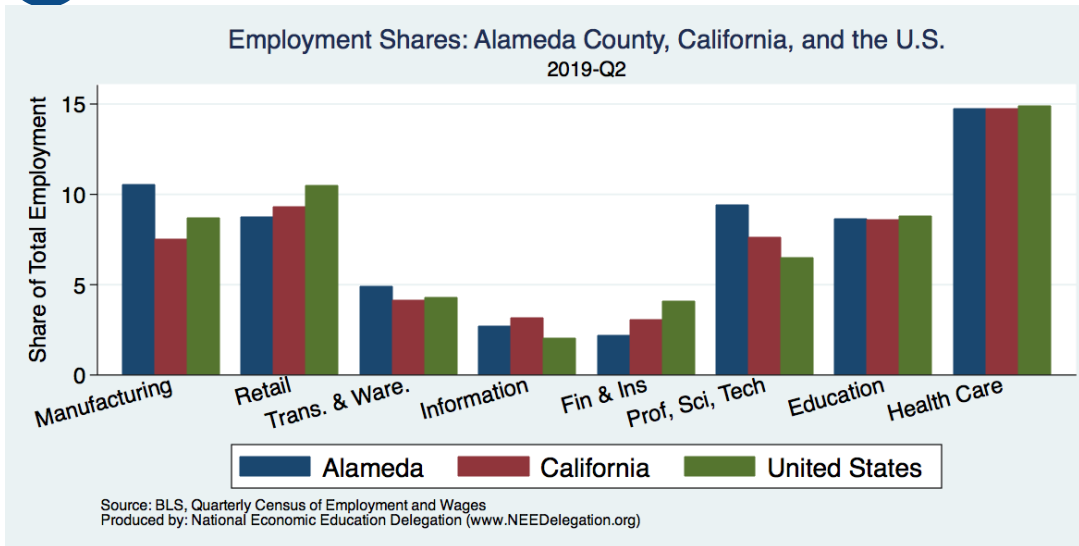


**Growth Rate:**

- Last Month: 0.4%
- Last Year: 1.7%
- Last 3 Years: 1.2%
- Last 5 Years: 2.1%

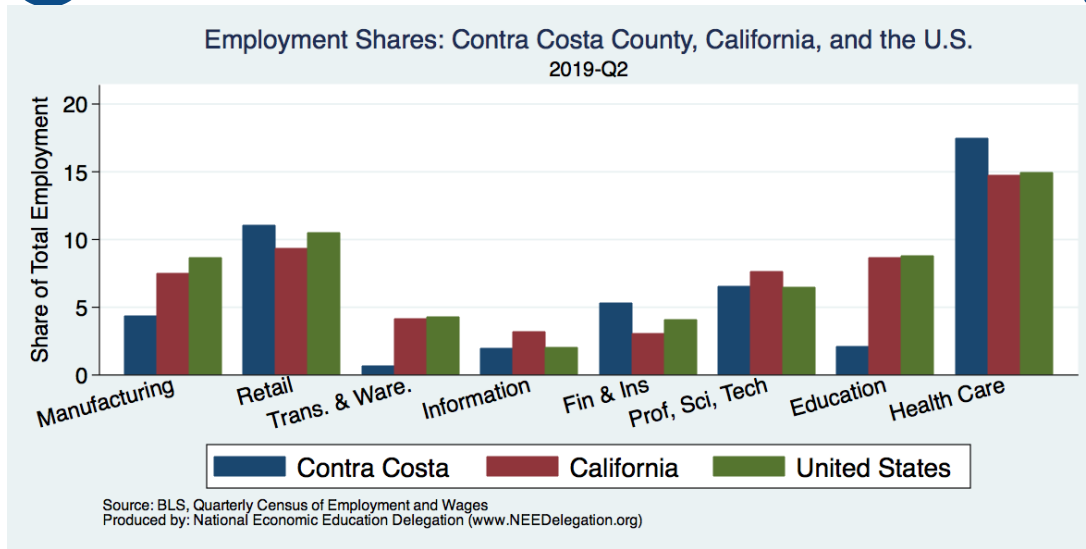
101

## Alameda Employment Shares



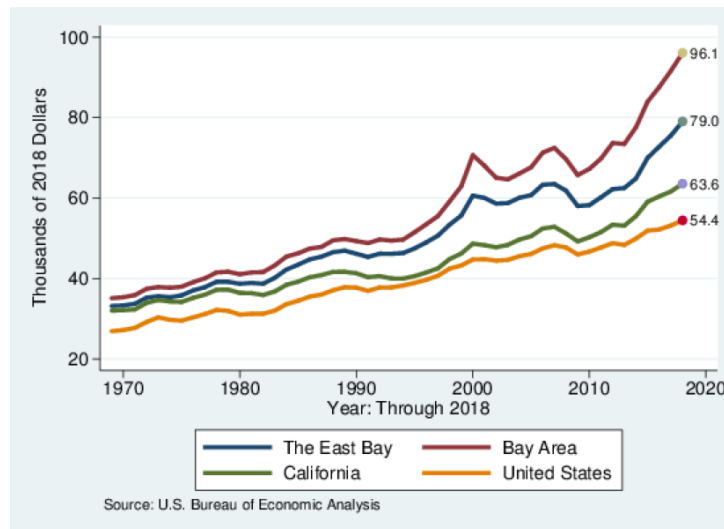
102

## Contra Costa Employment Shares



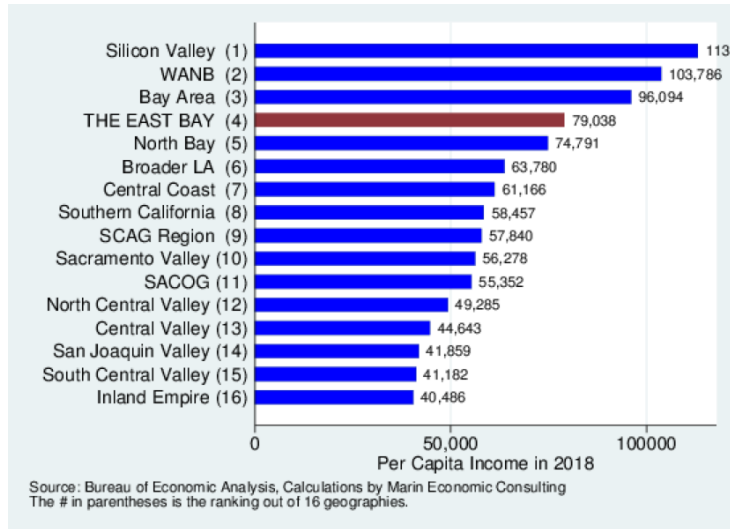
103

## East Bay Per Capita Income



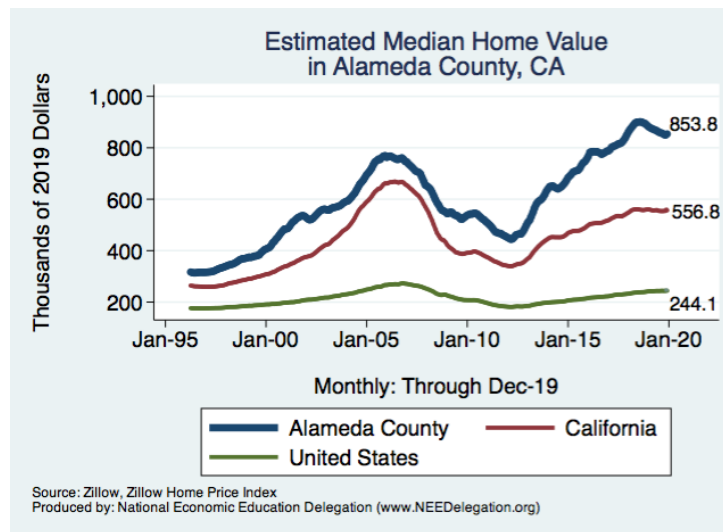
104

## East Bay in Statewide Perspective



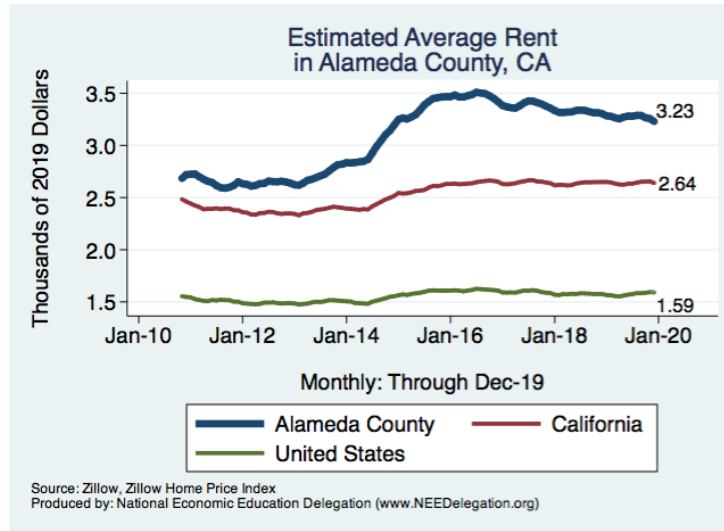
105

## Alameda Home Prices

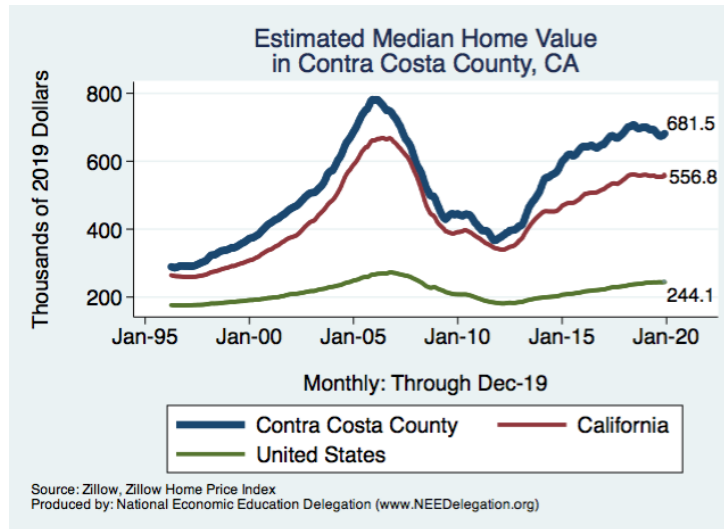


106

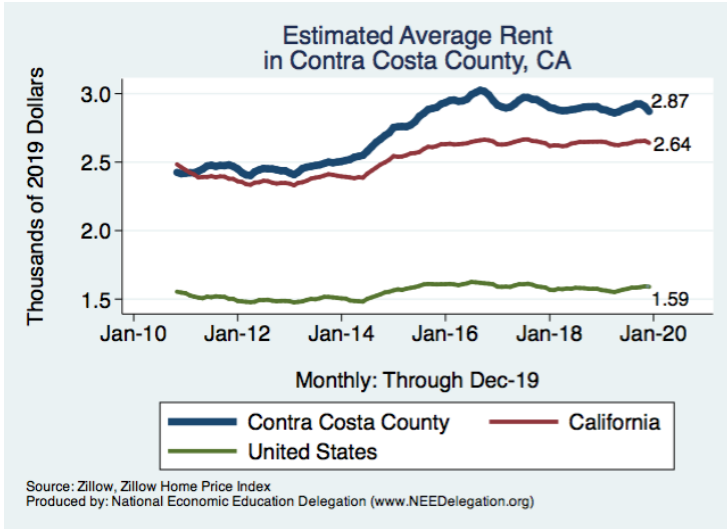
# Alameda Rents



# Contra Costa County Home Prices



# Contra Costa County Rents



Source: Zillow, Zillow Home Price Index  
Produced by: National Economic Education Delegation ([www.NEEDelegation.org](http://www.NEEDelegation.org))