

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

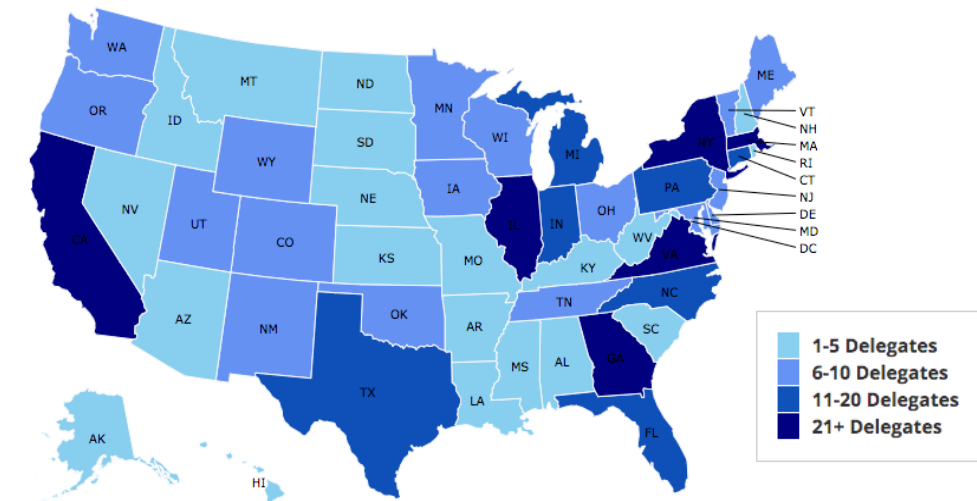


NATIONAL ECONOMIC
EDUCATION DELEGATION

3

3

Where Are We?



NATIONAL ECONOMIC
EDUCATION DELEGATION

4

4

Credits and Disclaimer

- **This slide deck was authored by:**
 - Jon Haveman, Executive Director of NEED
 - Allison Roehling, DePauw University
- **This slide deck was reviewed by:**
 - Jeffrey Frankel, Harvard University
 - Scott Baier, Clemson University
 - Rob Eyster, Sonoma State University
- **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).



5

Course Outline

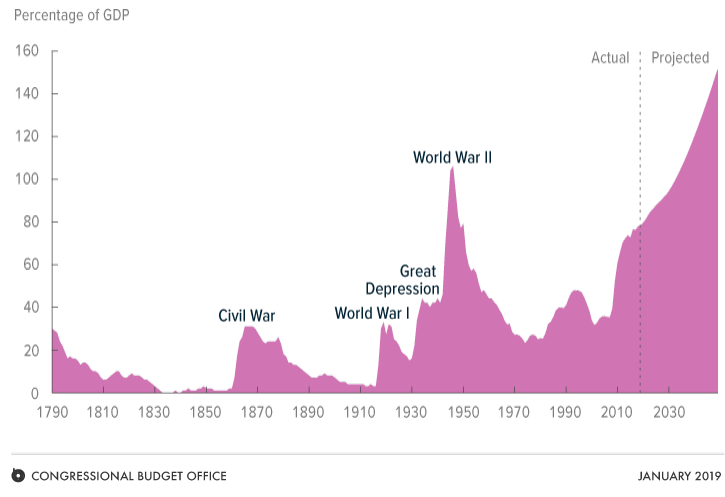
- **What Economists Know About Important Policy Issues**
 - Week 1 (1/22): US Economic Update
 - Week 2 (1/29): Government Budgets
 - Week 3 (2/5): Climate Change
 - Week 4 (2/19): Trade and Globalization
 - Week 5 (2/26): Income Inequality



6

Record Levels of Debt are Forecast

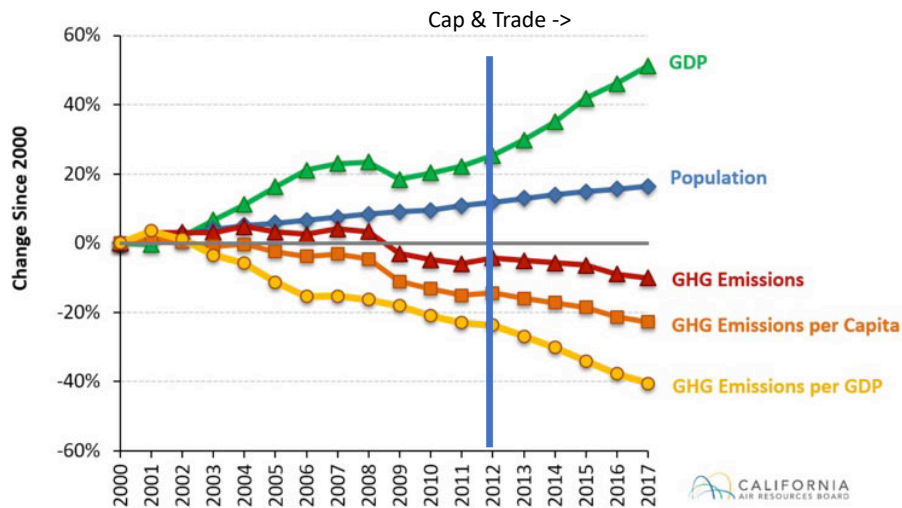
Federal Debt Held by the Public



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

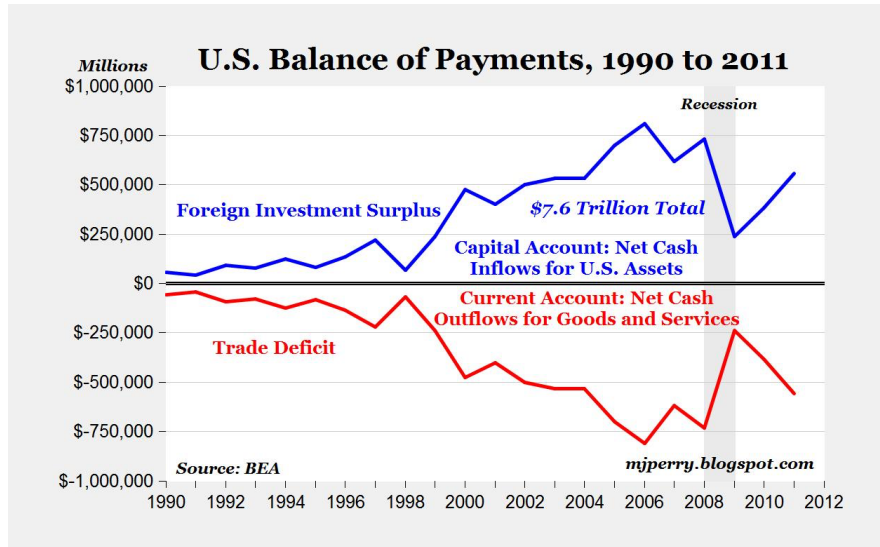
7

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

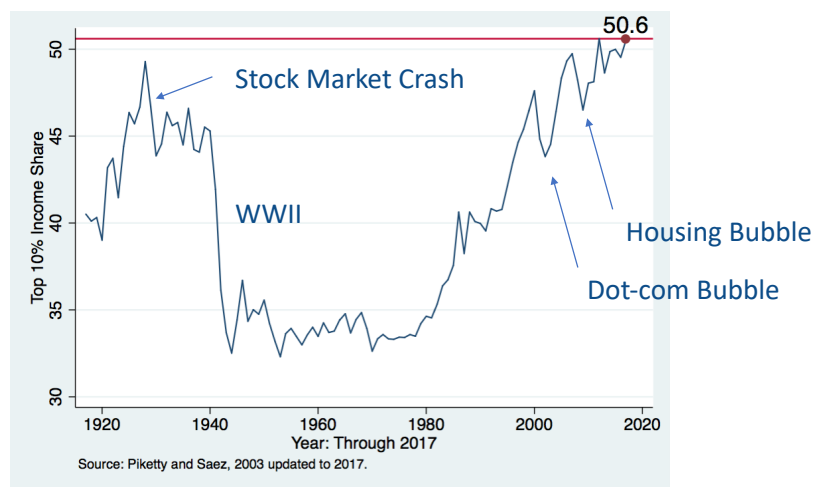


8

I Don't Care About the Trade Deficit



National Income Inequality: Share of Top 10%



Outline – U.S. Economic Outlook

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

11

Behavior of GDP

12

U.S. Economy in Global Perspective

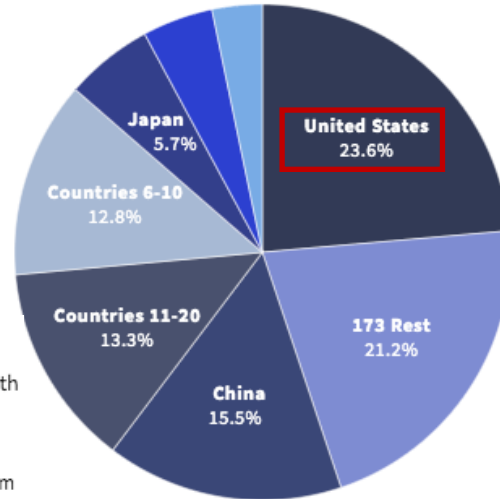
U.S. Nominal GDP:

\$21.542 trillion in 2019-Q3

% Share of the Global Economy

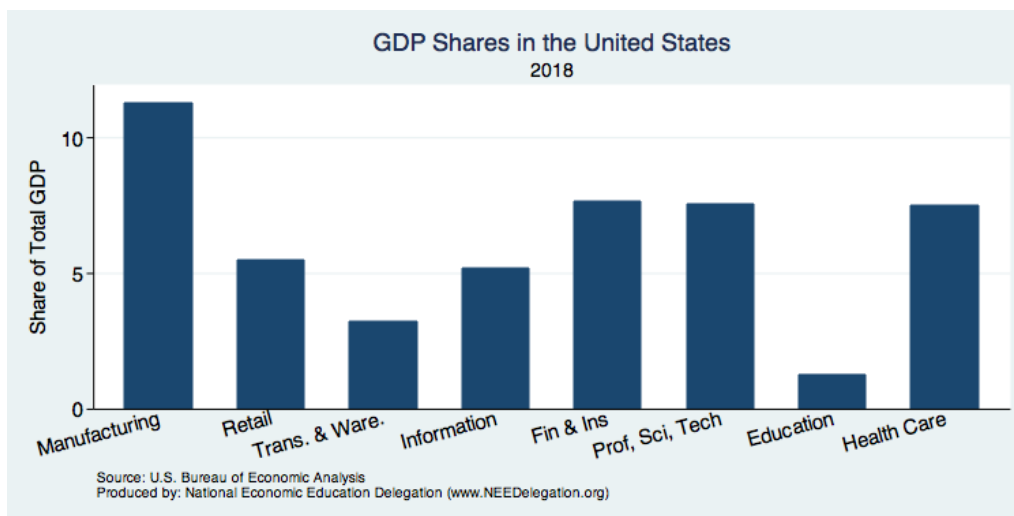
The 173 countries outside the top 20 make up less than a fourth of the total global economy.

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



13

Composition of the U.S. Economy: 2018



Source: U.S. Bureau of Economic Analysis
Produced by: National Economic Education Delegation (www.NEEDelegation.org)

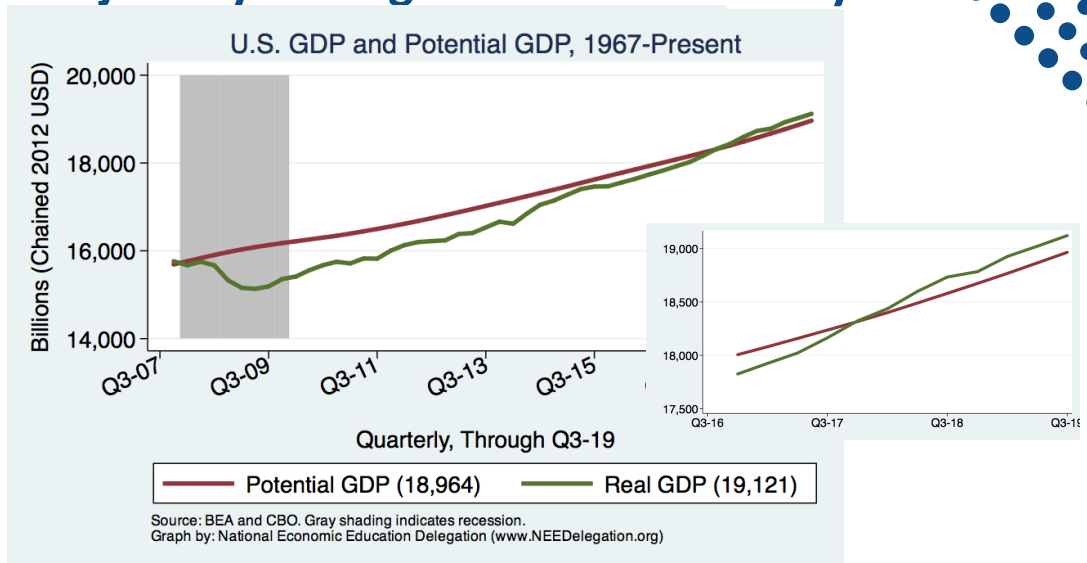
14

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.

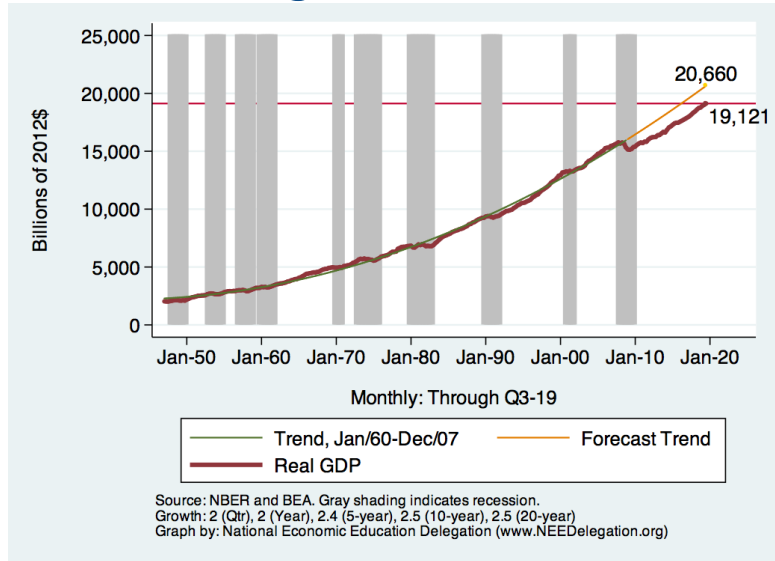
15

GDP Trajectory During Economic Recovery



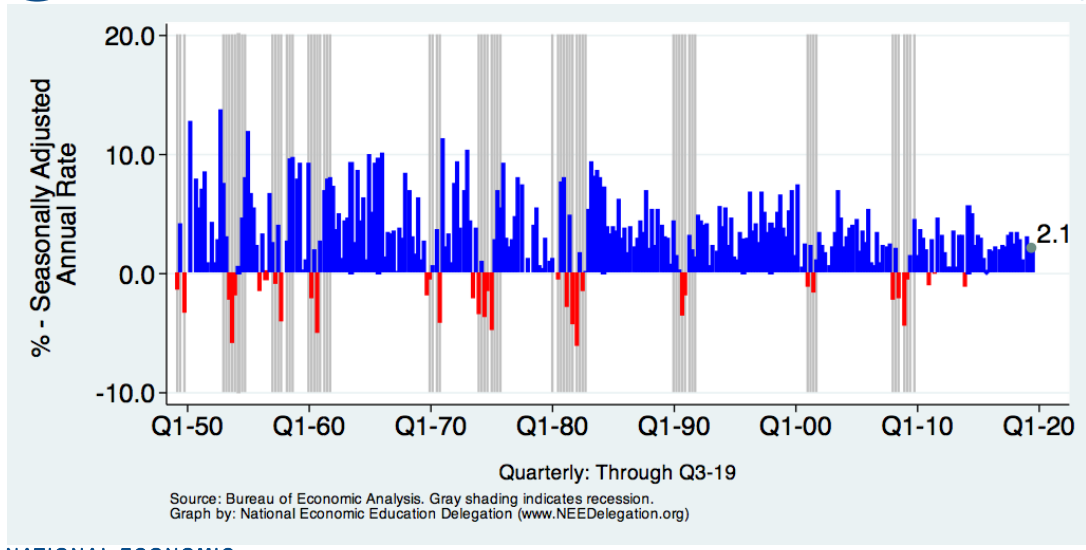
16

GDP Relative to Long-Term Trends



17

GDP Growth During Economic Recovery



18

What Is “Accounting” for the Slow Recovery?

- **Expenditures drive GDP growth.**

- GDP is the sum of four categories of spending:

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

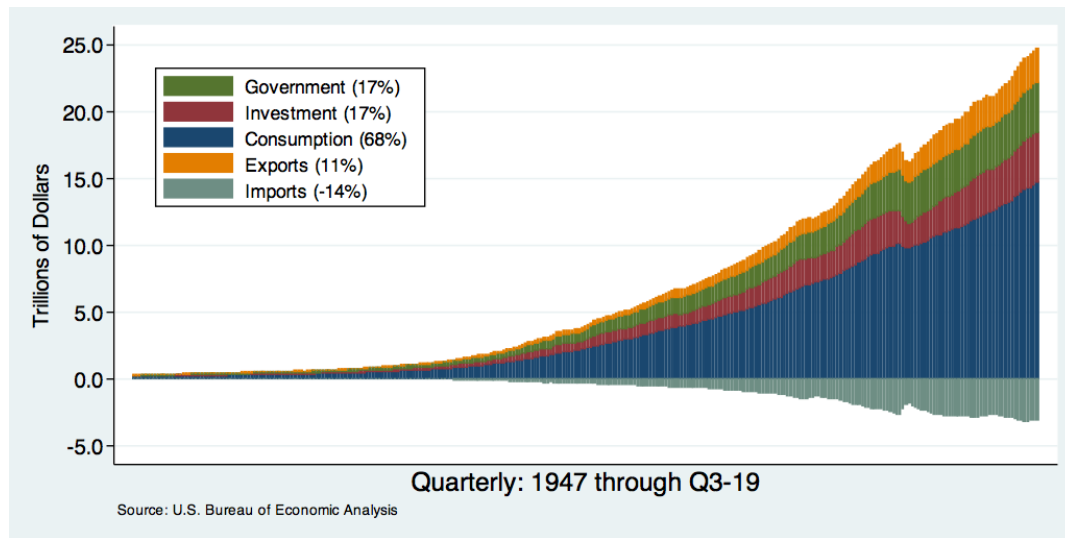
$$GDP = C + I + G + X - M$$

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

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

- Employment
- Productivity

Composition of GDP



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?



21

Understanding Contributions to GDP Growth

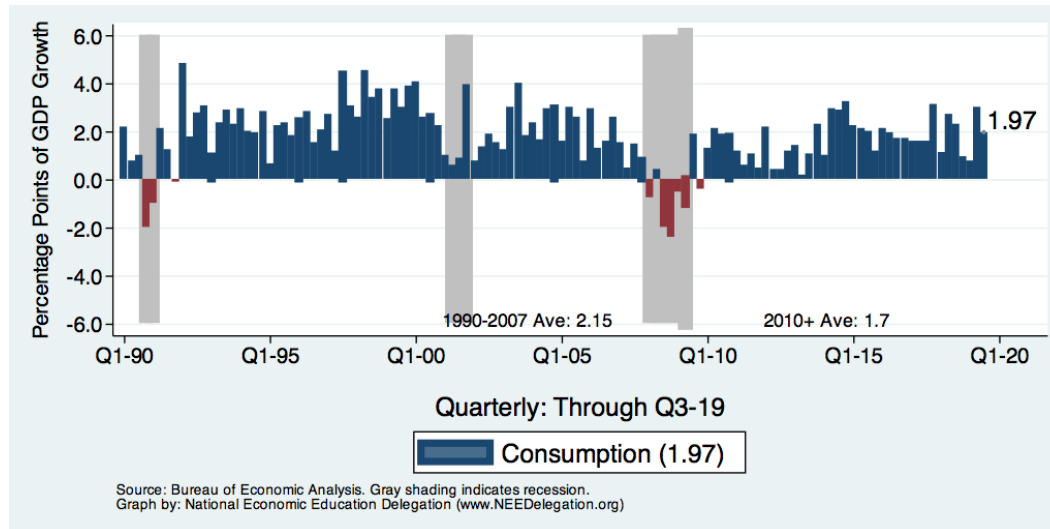
- **GDP Growth is a combination of the growth in its components:**
 - Consumption, Investment, Government, and Net Exports
 - It's a weighted average of these components
- **For example: Consumption**
 - If consumption accounts for **2/3** of the economy,
 - If consumption grew by **3%**,
 - It would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

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



22

Contribution to GDP Growth: Consumption



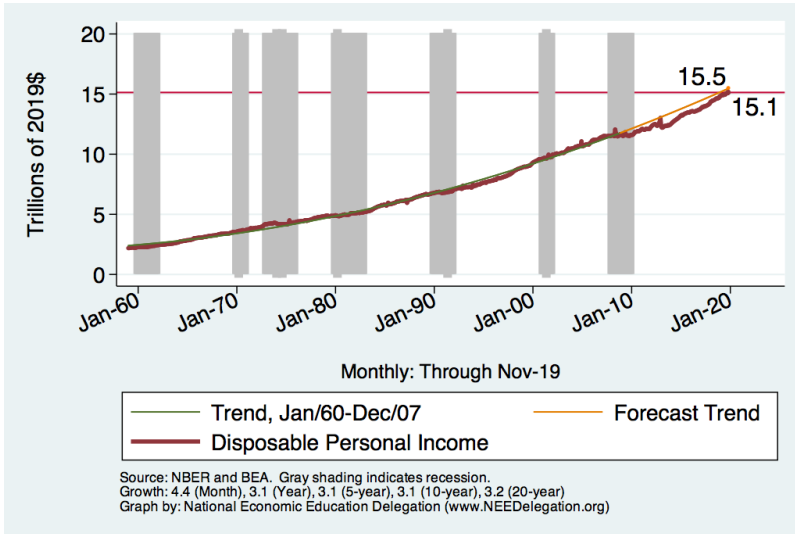
23

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

24

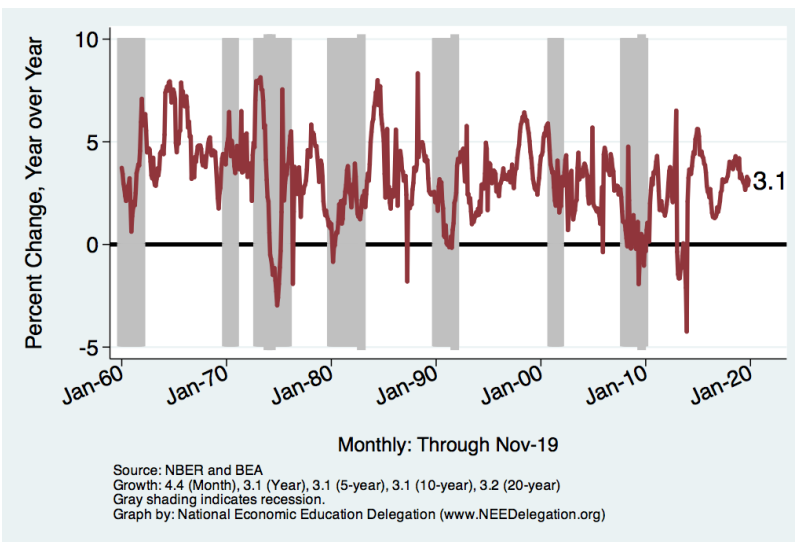
Real Disposable Personal Income



\$0.4 Trillion Below Trend

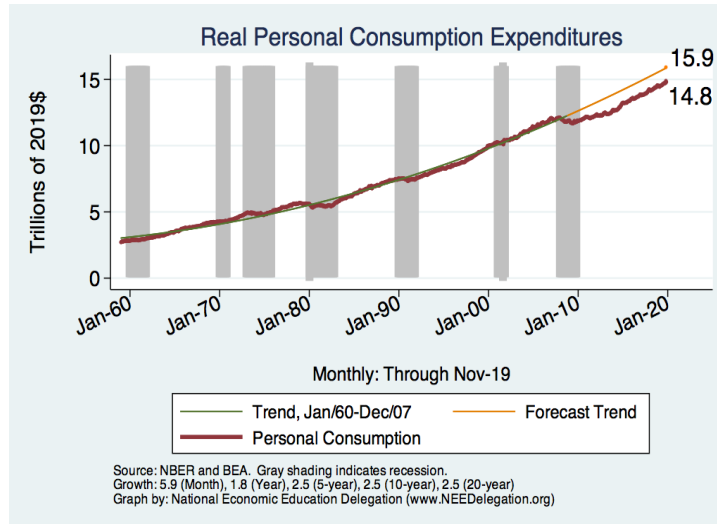
25

Real Disposable Personal Income - Growth



26

Personal Consumption Expenditures



\$1.1 Trillion
Below Trend



NATIONAL ECONOMIC
EDUCATION DELEGATION

27

27

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.

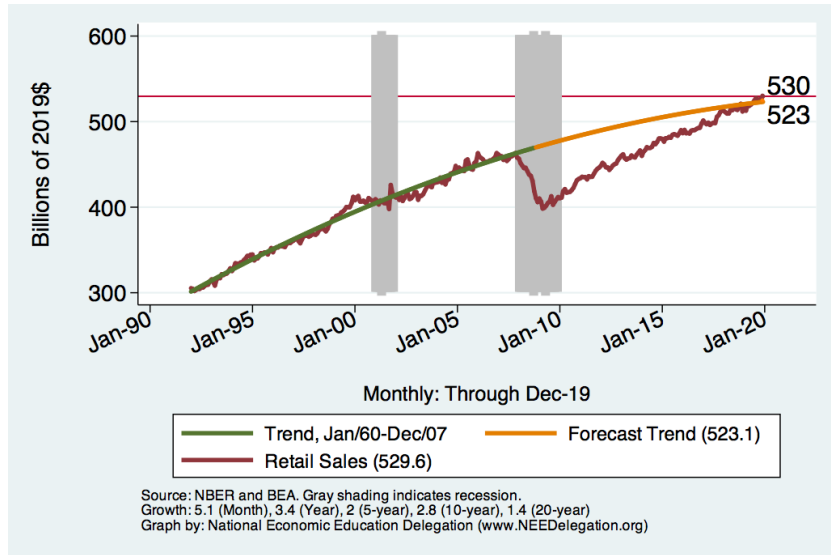


NATIONAL ECONOMIC
EDUCATION DELEGATION

28

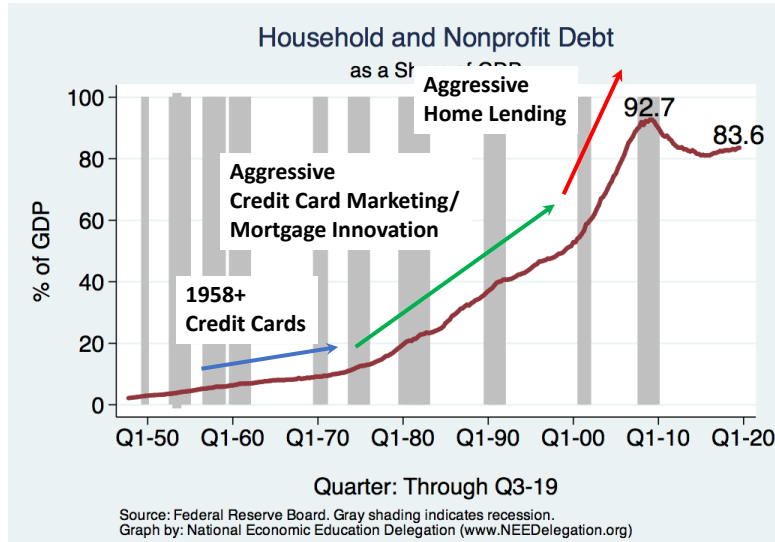
28

Retail Sales



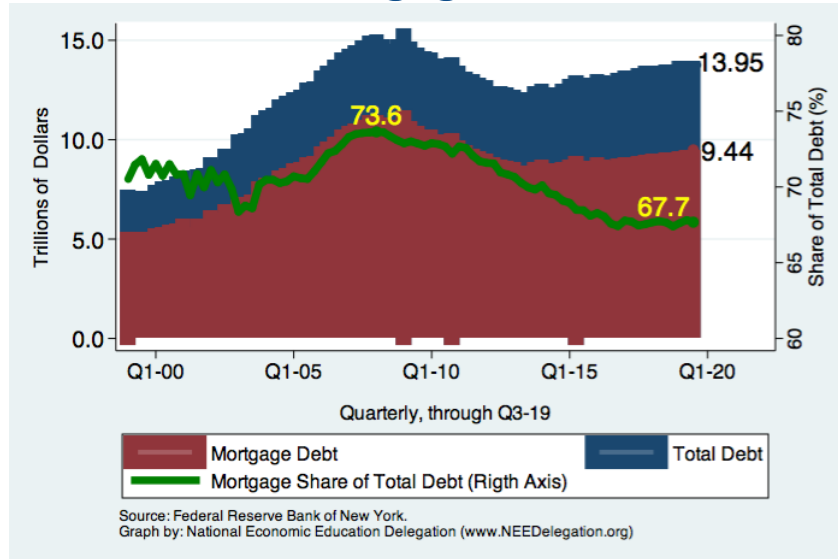
29

Household Debt as a Share of GDP



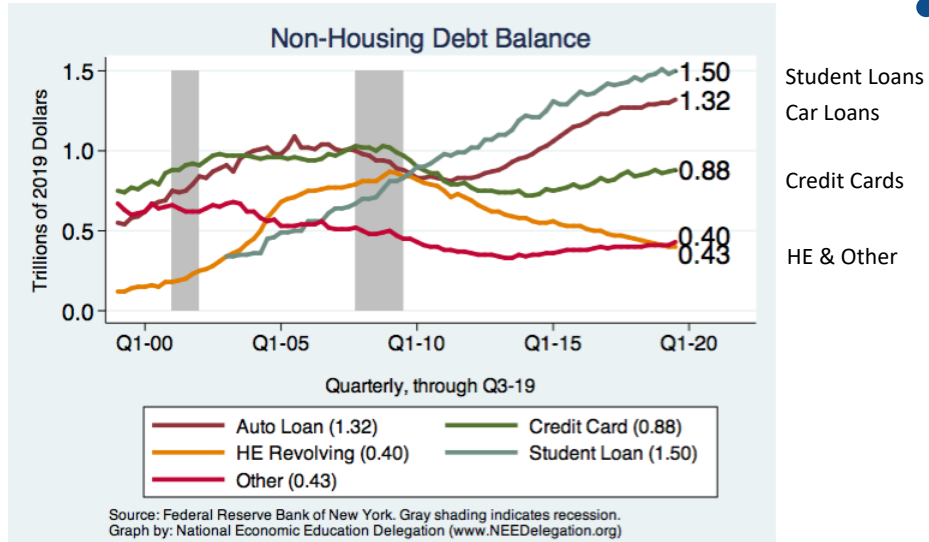
30

Household Debt: Mortgages



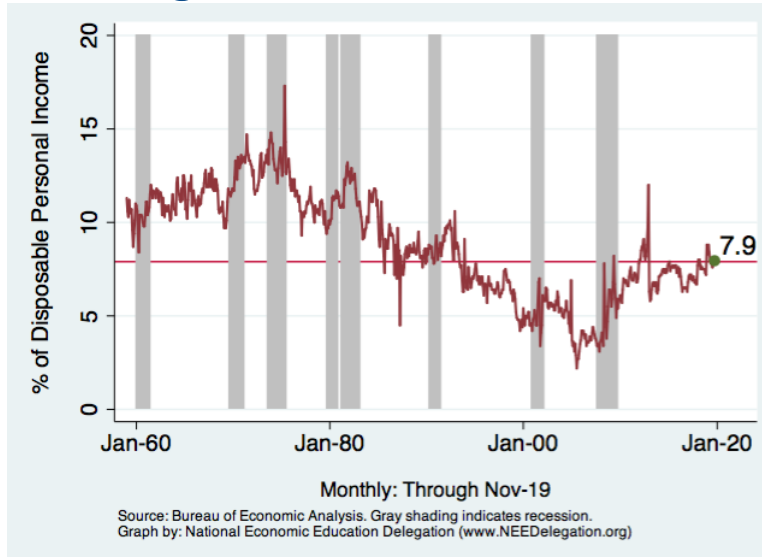
31

Household Debt: Other Sources



32

Personal Savings



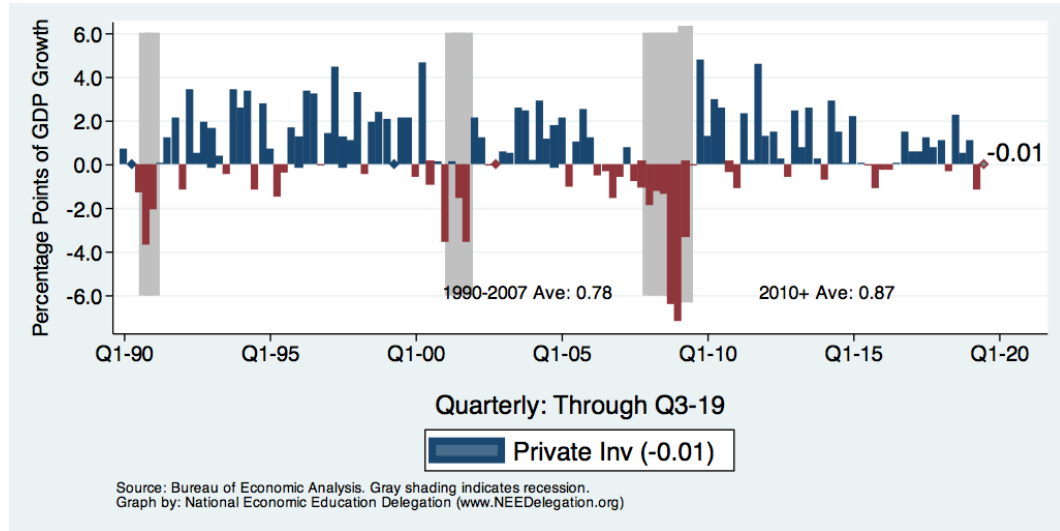
33

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.

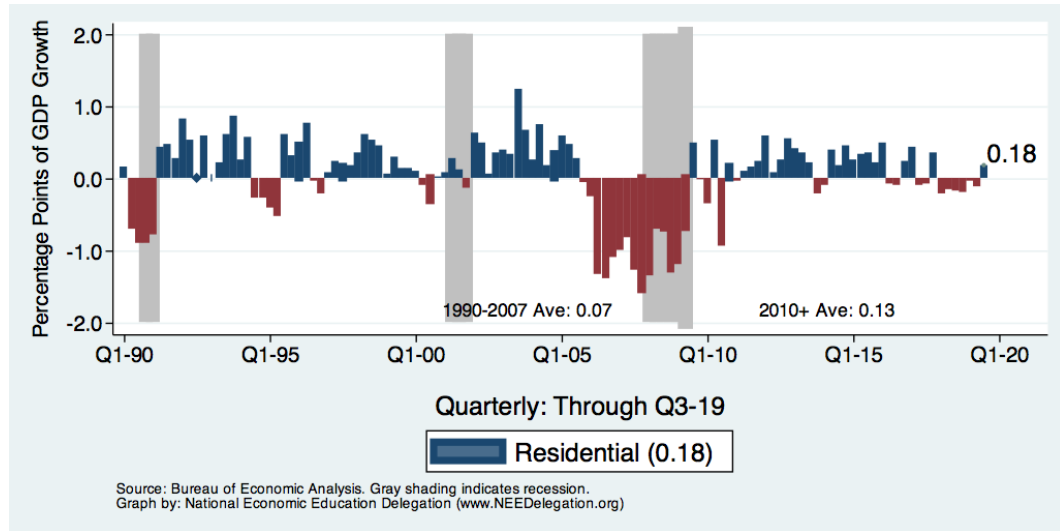
34

Contributions to GDP: Private Investment



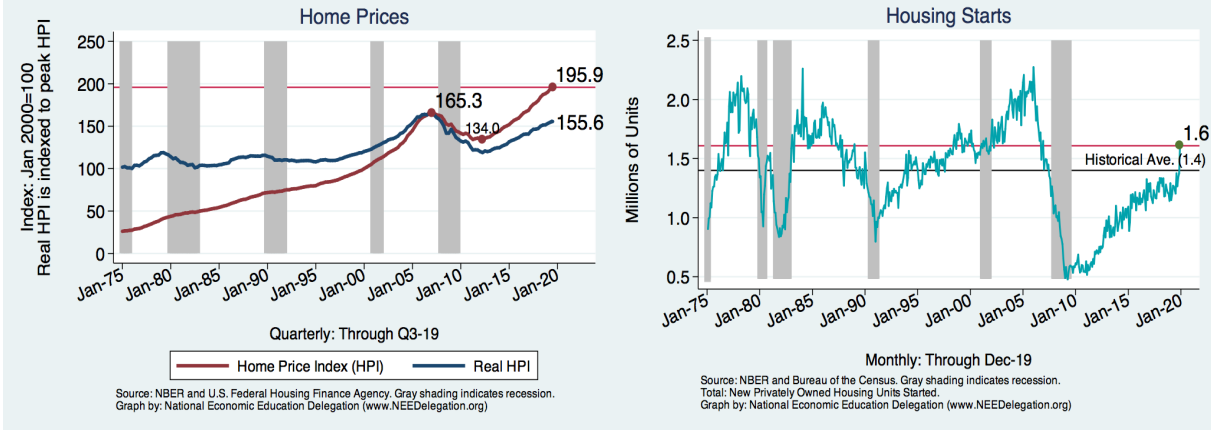
35

Contributions to GDP: Residential Investment



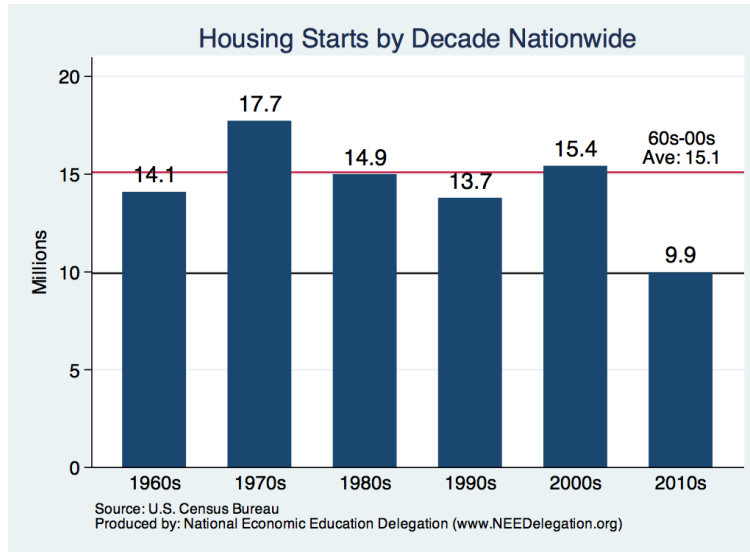
36

Home Prices and Housing Starts



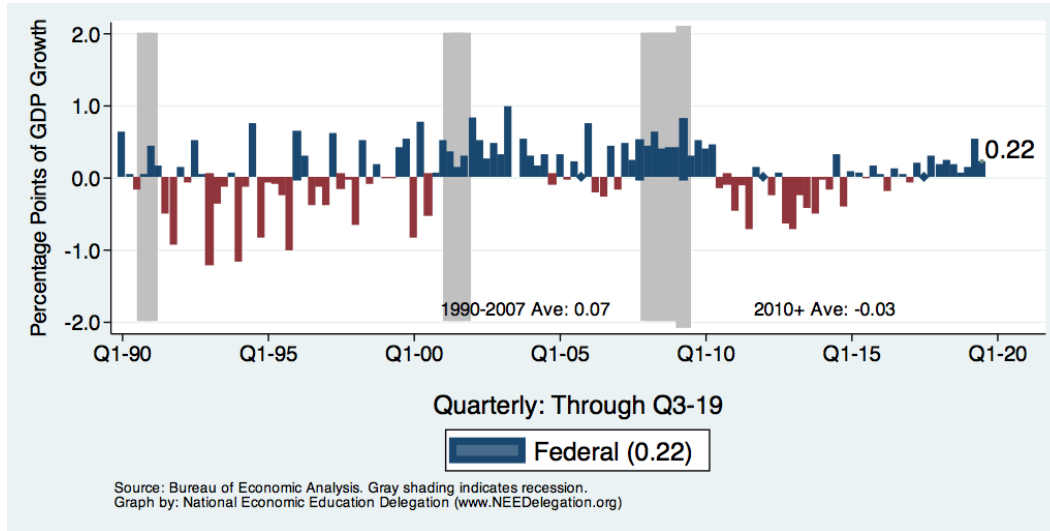
37

Recent Housing Growth Has Been Slow



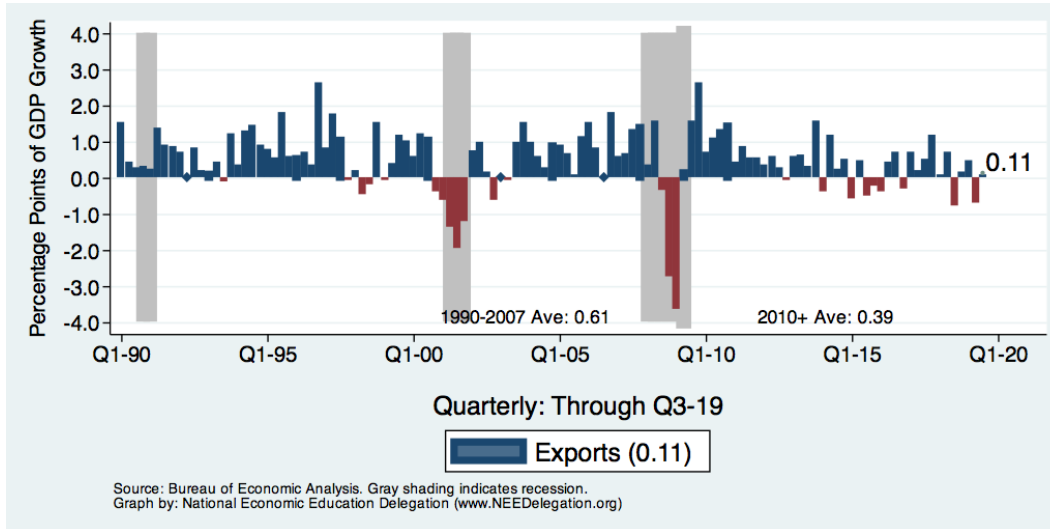
38

Contributions to GDP: Government



39

Trade's Contribution to GDP: Exports



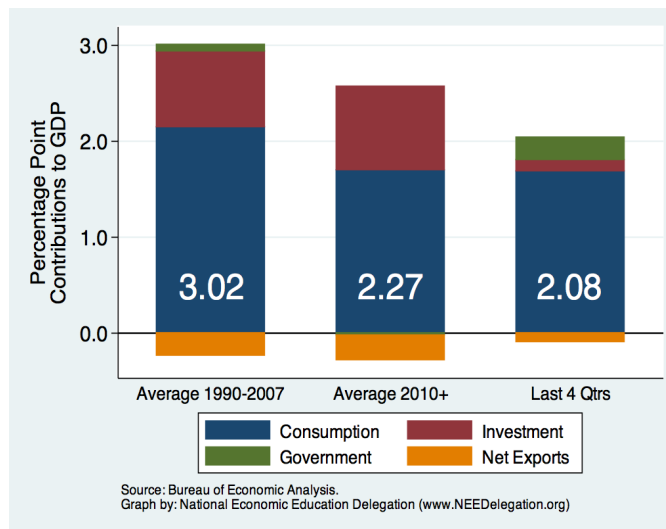
40

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.**

41

Expenditure Summary



42



Labor Market

 NATIONAL ECONOMIC EDUCATION DELEGATION

43

43



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.

 NATIONAL ECONOMIC EDUCATION DELEGATION

44

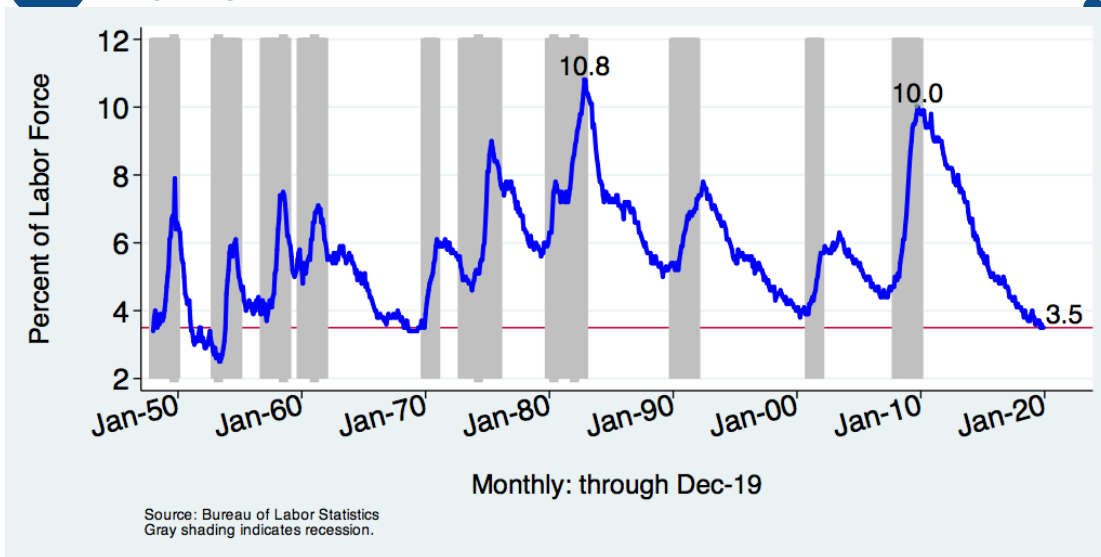
44

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

45

Unemployment Rate



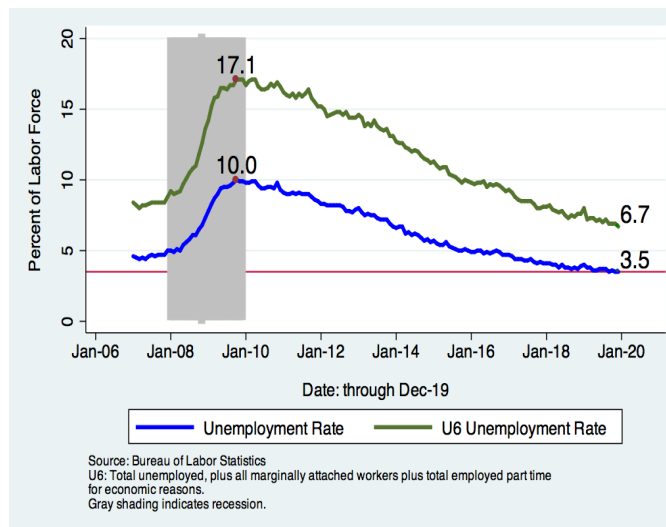
46

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

47

Unemployment Rate

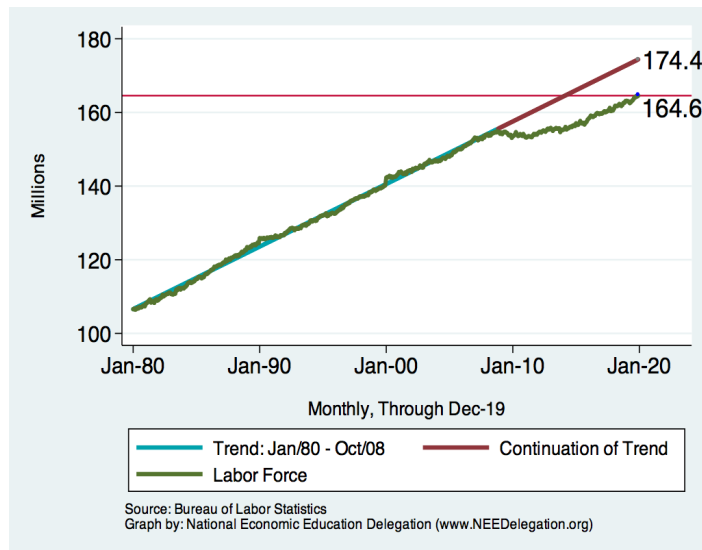


48

Low Unemployment: But Jobs Don't Pay

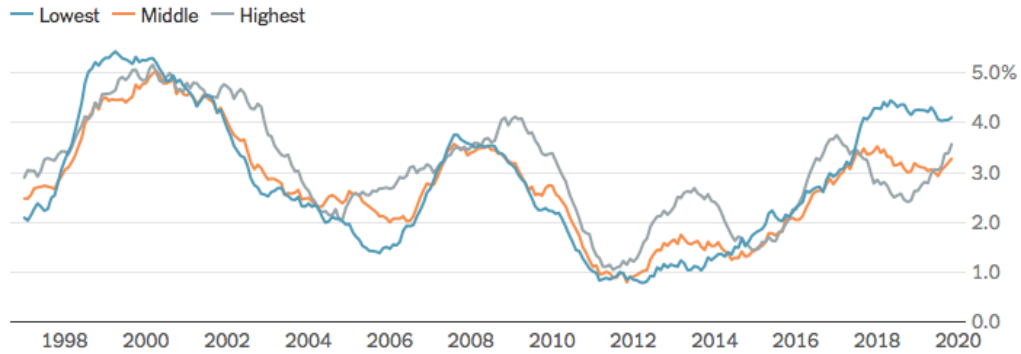
More than 53 million people—44% of all workers aged 18-64—are low-wage workers by our criteria. They earn median hourly wages of \$10.22 and median annual earnings of \$17,950.

Labor Force Participation - Below Trend



But That is Starting to Change

Growth in average hourly earnings for private nonfarm wage and salary workers in the Current Population Survey, by wage tercile.



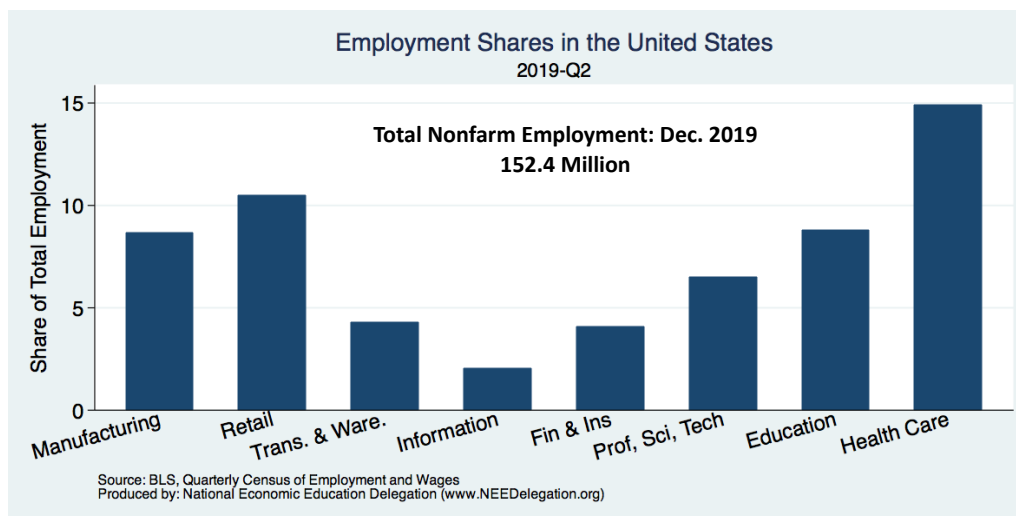
Year-on-year percent growth, 24-month moving average

Source: Author's analysis of the Current Population Survey • By The New York Times



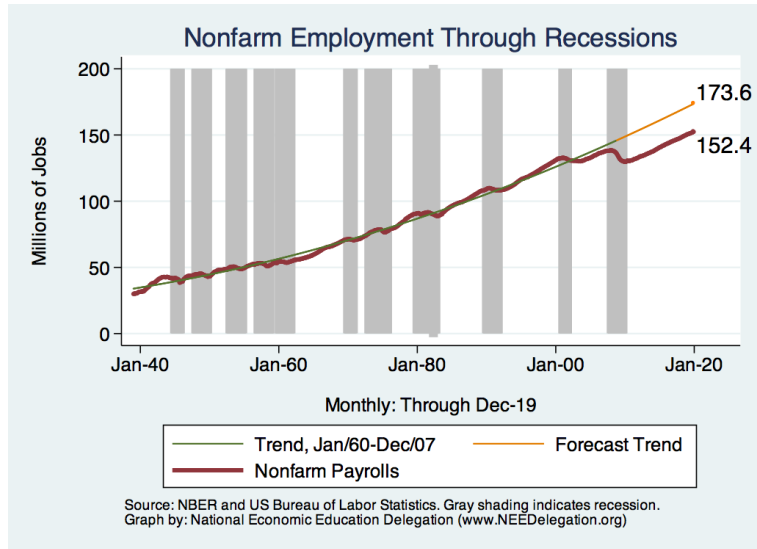
NATIONAL ECONOMIC EDUCATION DELEGATION

U.S. Employment



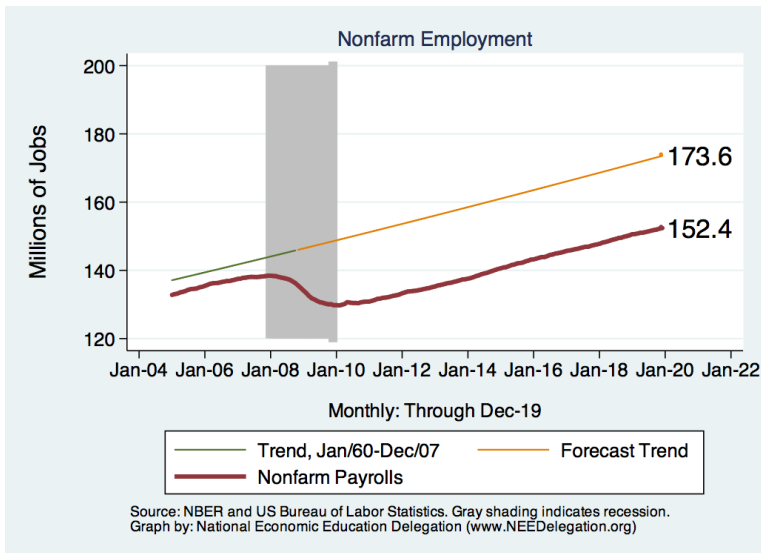
NATIONAL ECONOMIC EDUCATION DELEGATION

Employment Growth



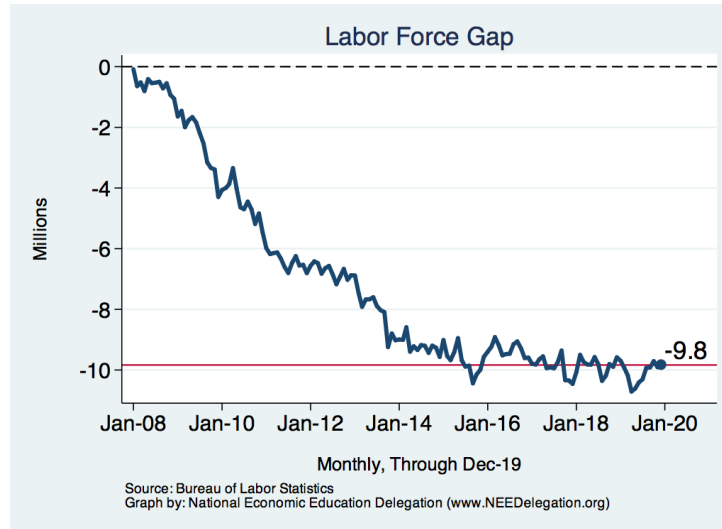
53

Employment Gap: Up Close

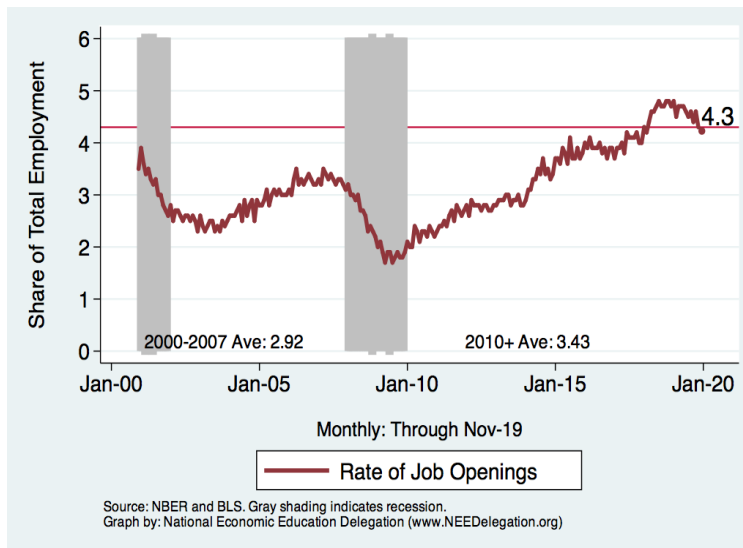


54

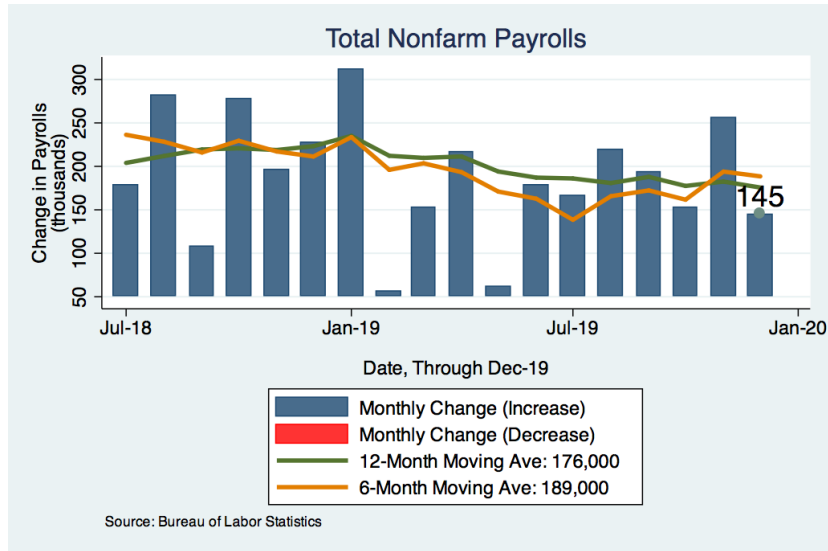
There is a Persistent Labor Force Gap



Job Openings: Share of Total Employment

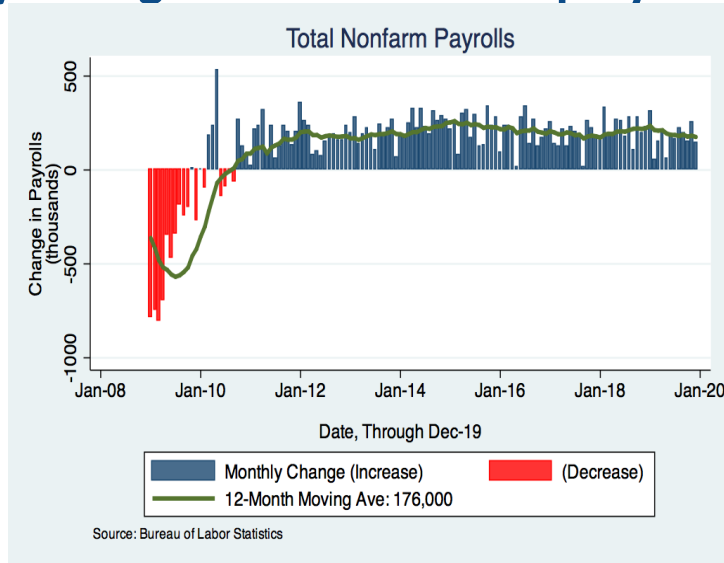


Monthly Changes in Nonfarm Employment



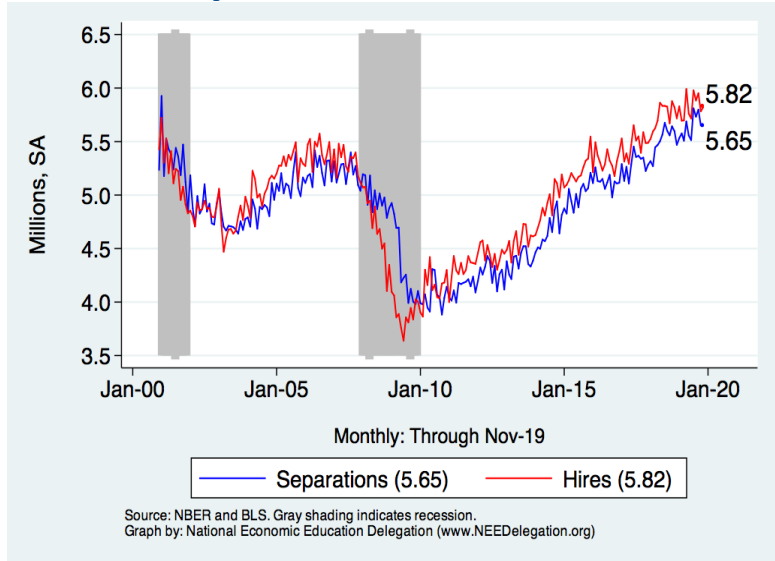
57

Monthly Changes in Nonfarm Employment

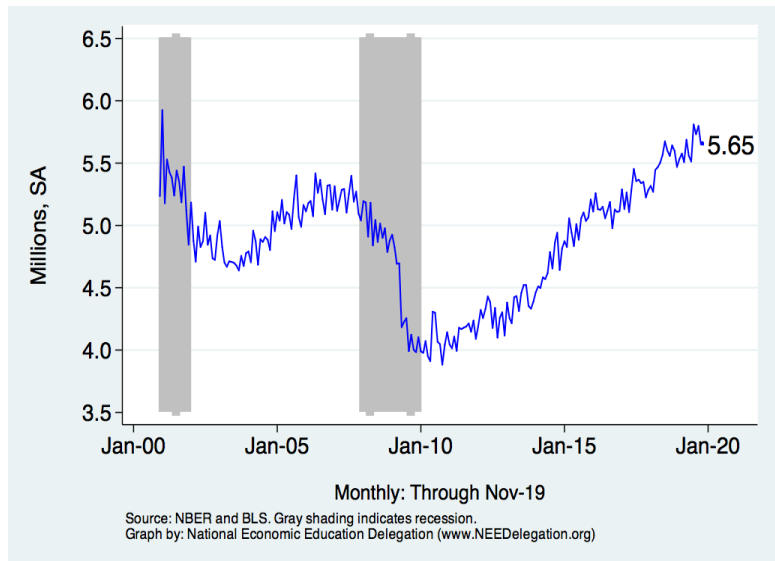


58

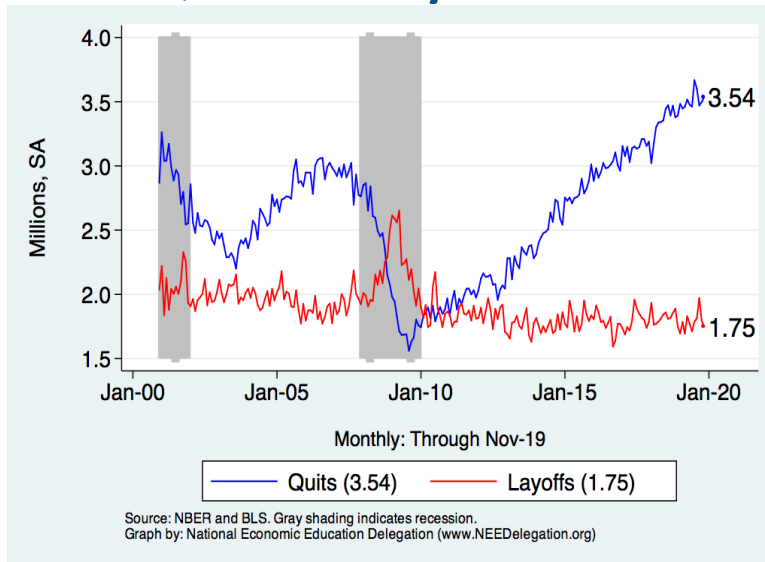
Job Hires and Separations



Job Separations

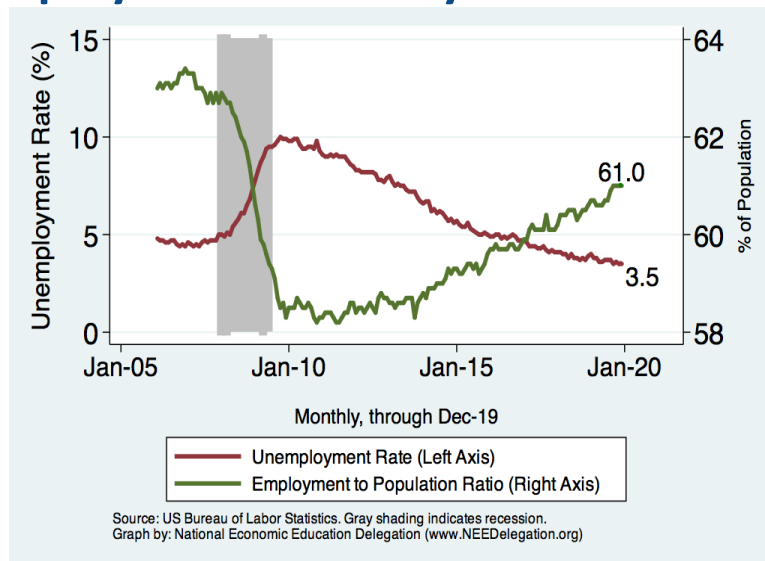


Separations: Quits and Layoffs



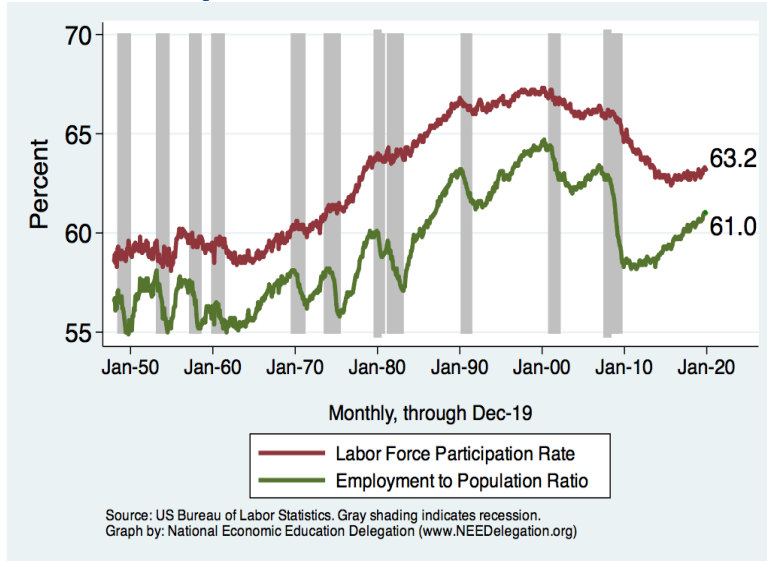
61

Slow Employment Recovery

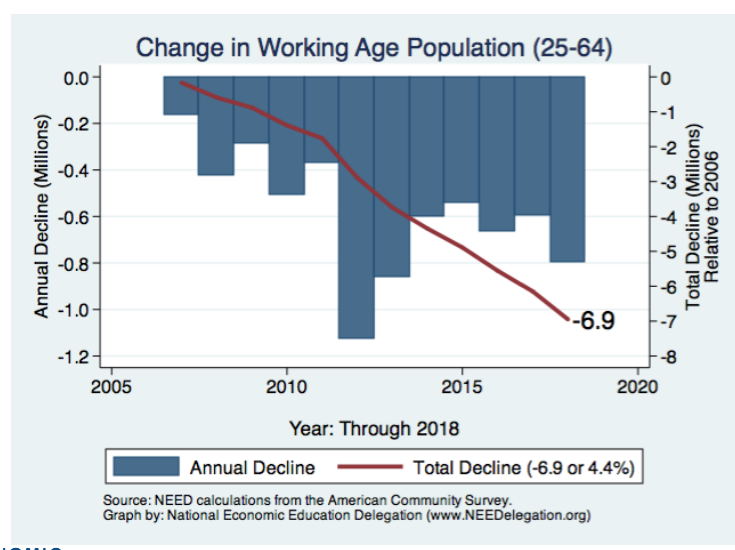


62

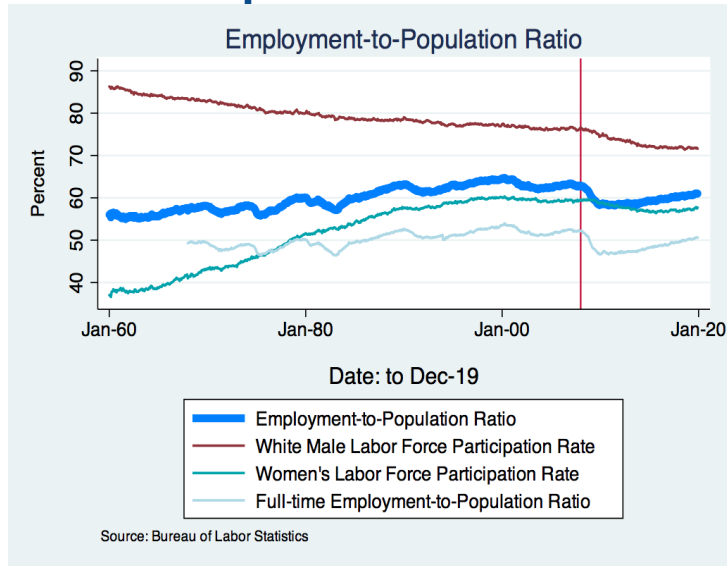
Labor Force Dropouts



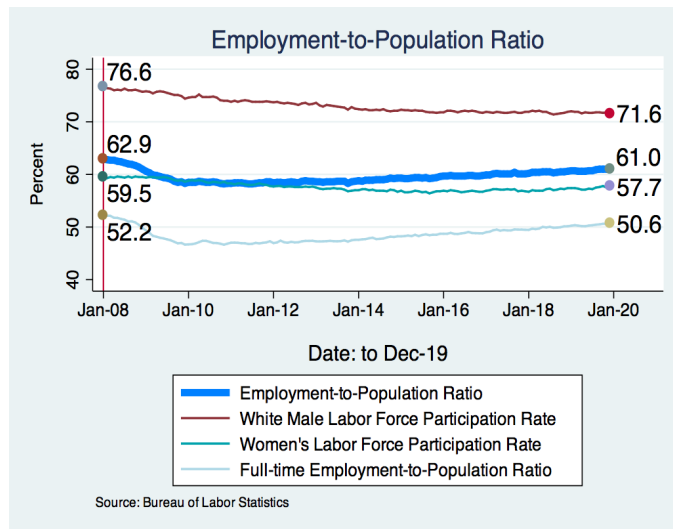
Baby Boomers Are Retiring!



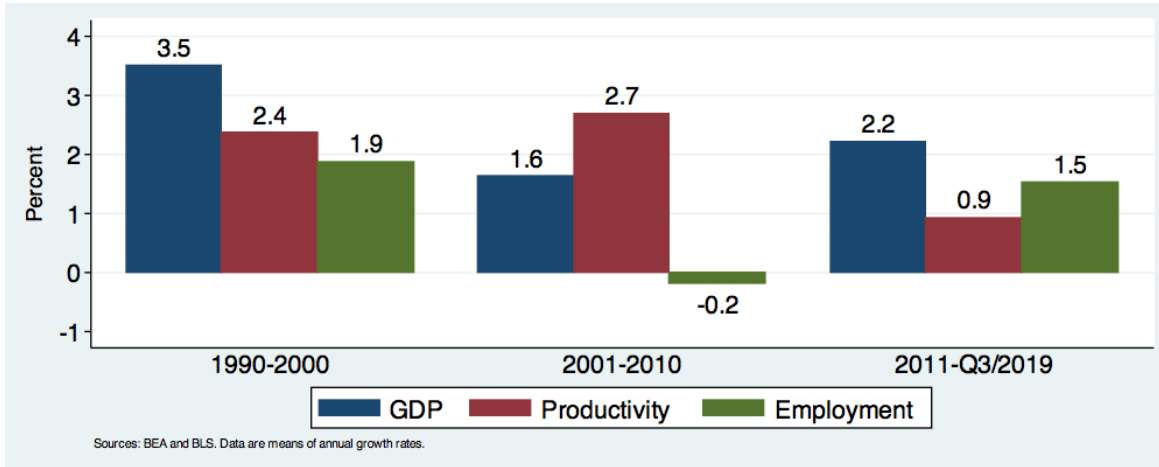
Employment-to-Population Ratios



Employment to Population Ratios – Recent

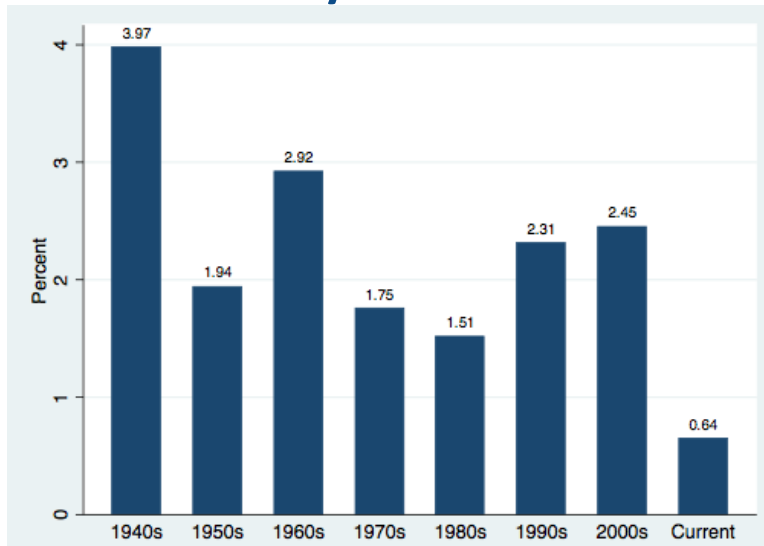


GDP Growth, Productivity, and Employment



67

History of Productivity Growth



68

Summary

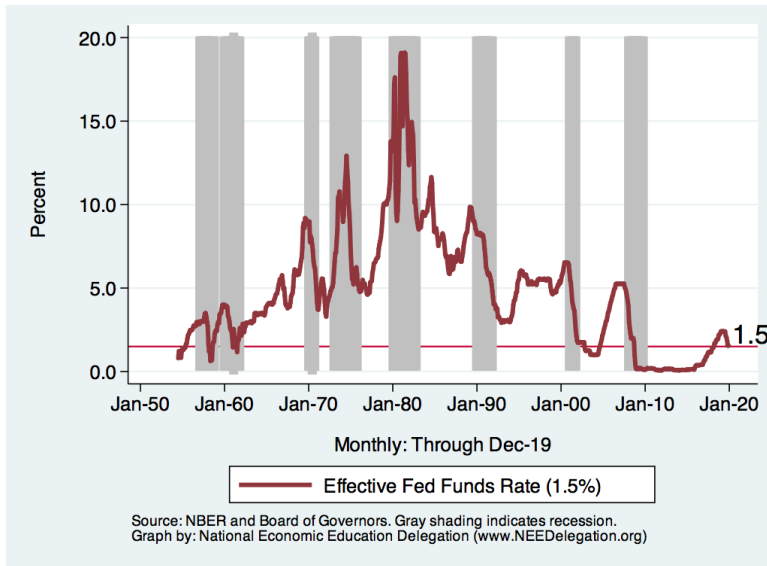
- **GDP growth is primarily fueled by increases in demand for output.**
- **This growth is supported by growth in employment and productivity of the labor force.**
- **Recent years have seen relatively tepid increases in demand for output.**
 - In particular, consumption and government spending have 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

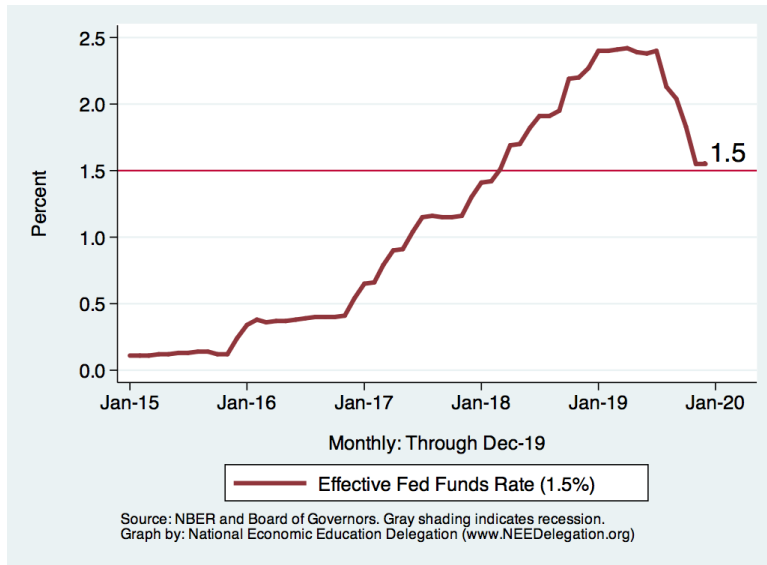


Federal Funds Rate



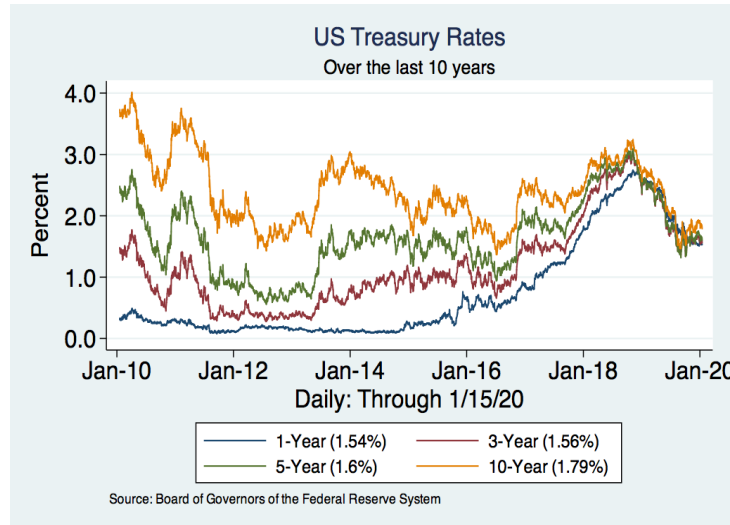
71

Federal Funds Rate – Last 5 Years



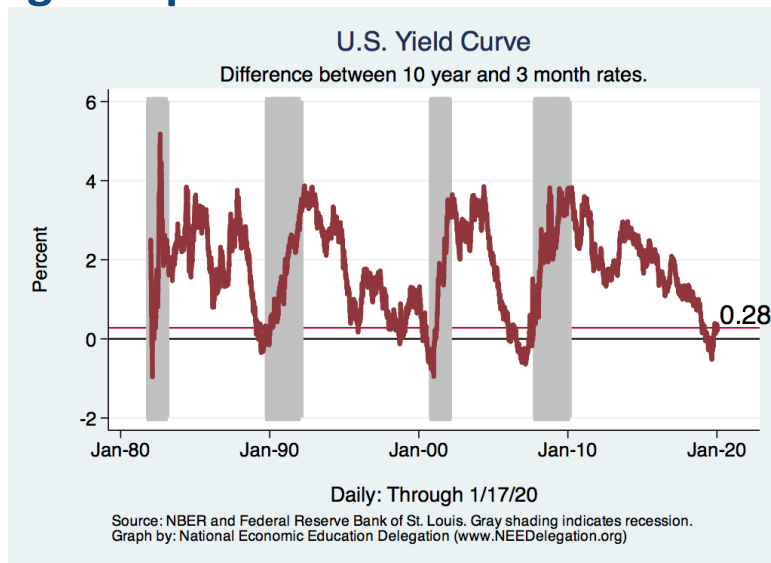
72

Treasuries



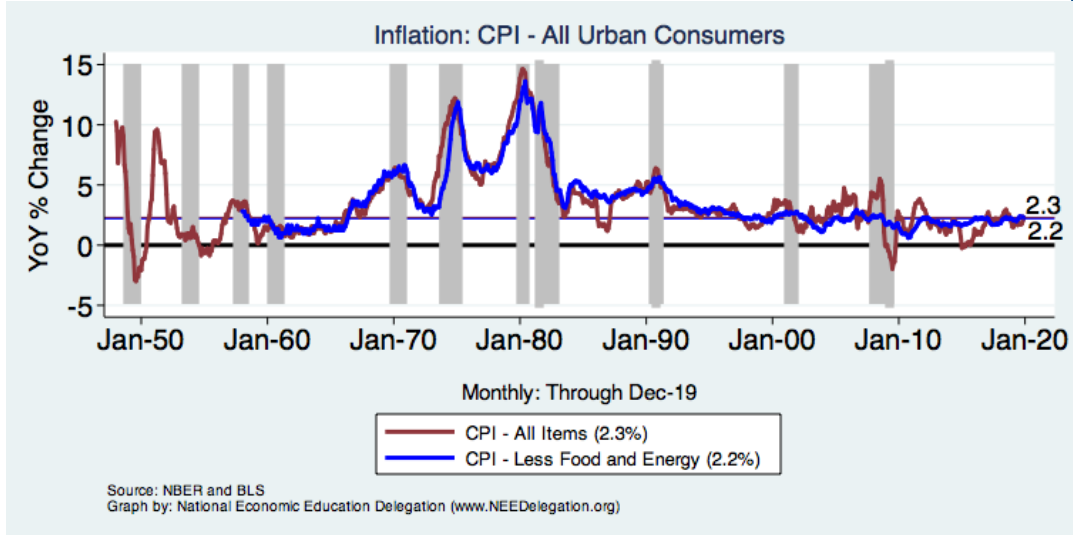
73

Alarming Compression of Interest Rates



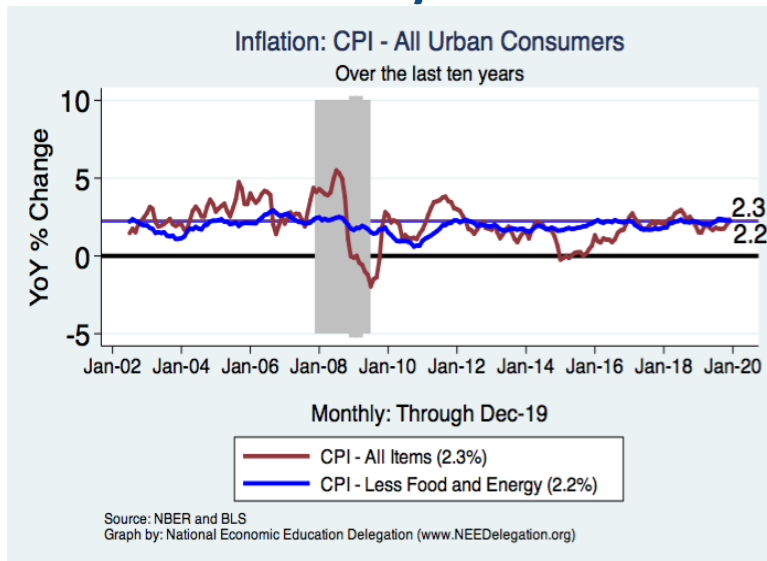
74

Inflation



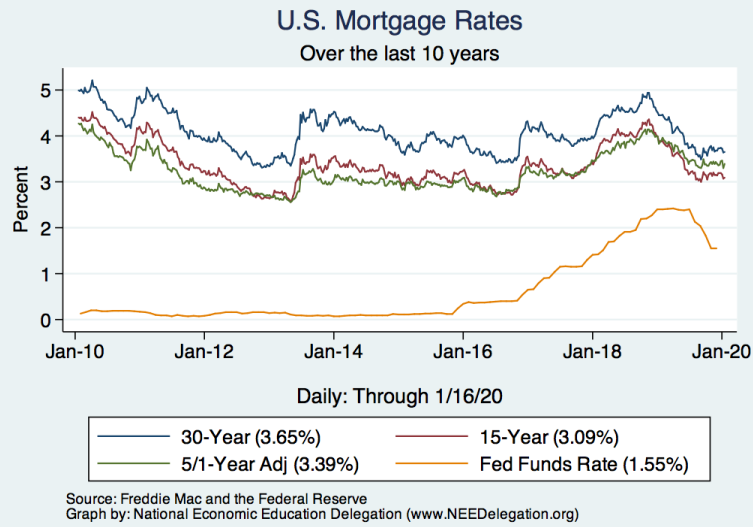
75

Inflation – Recent Stability



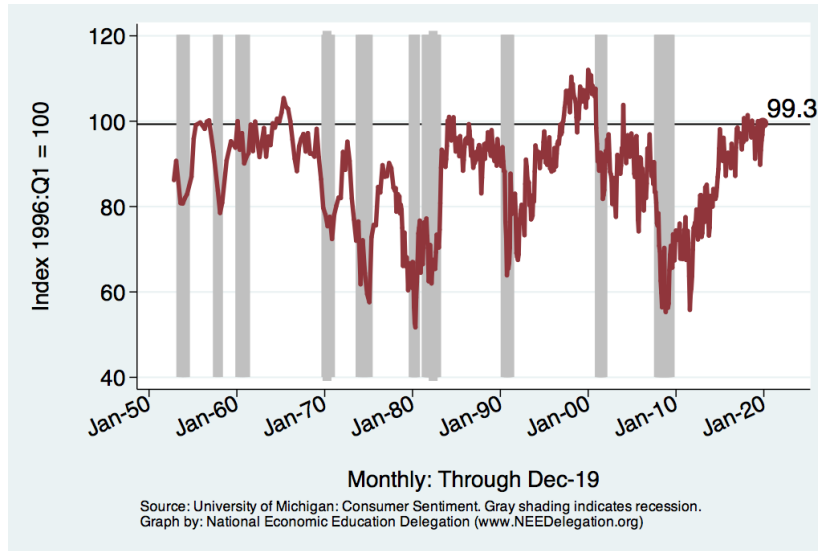
76

Mortgage Rates

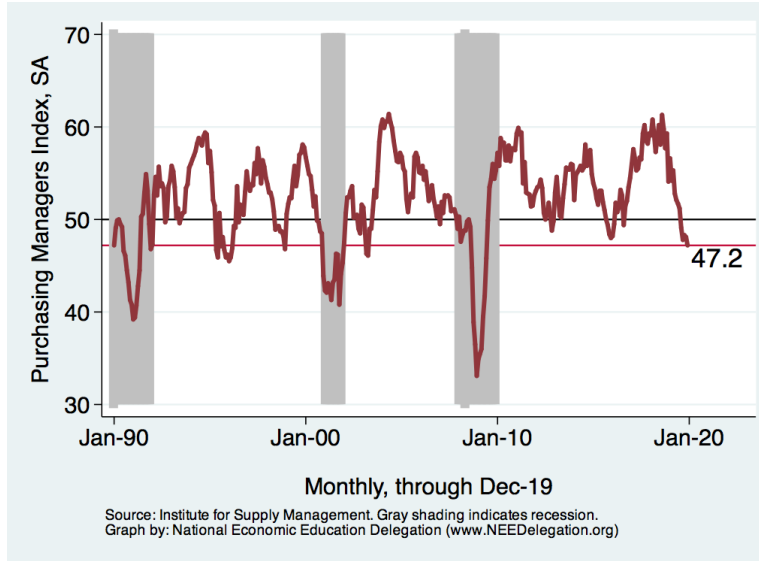


Other Indicators

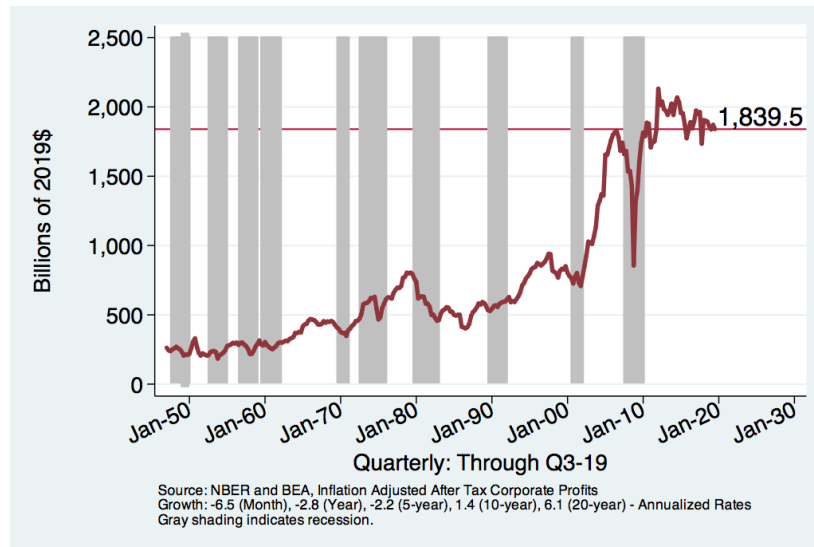
Consumer Confidence: Waning?



Producer Confidence: Not What it Used to be!

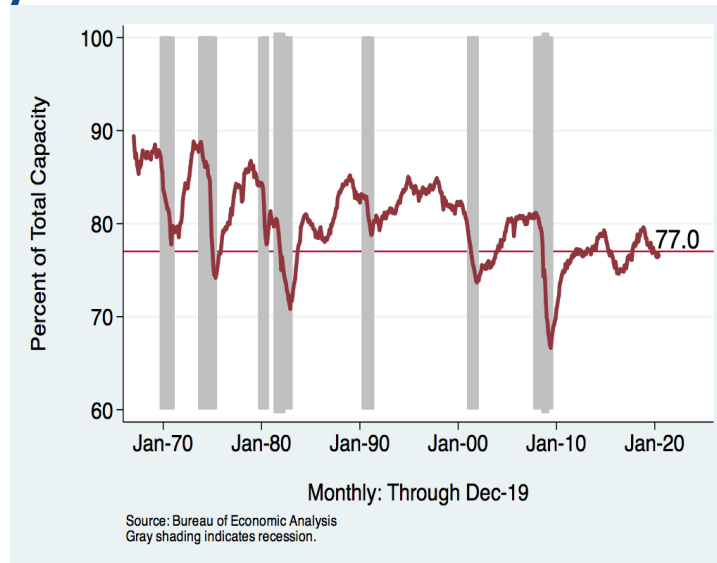


Corporate Profits – Inflation Adjusted



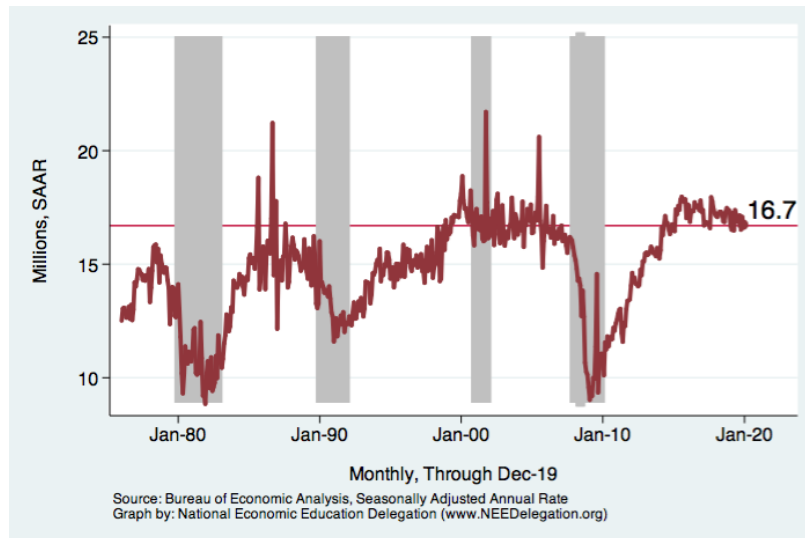
81

Capacity Utilization



82

Automobile and Light Truck Sales



83

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.

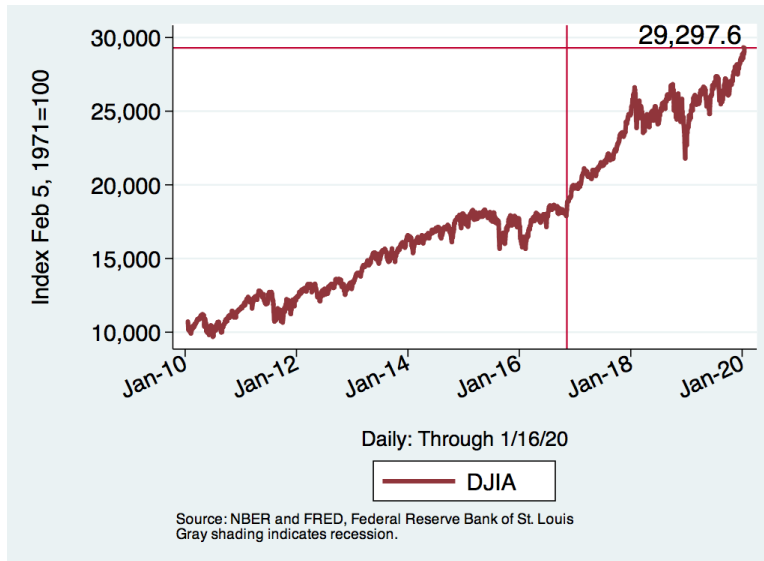
84

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**

85

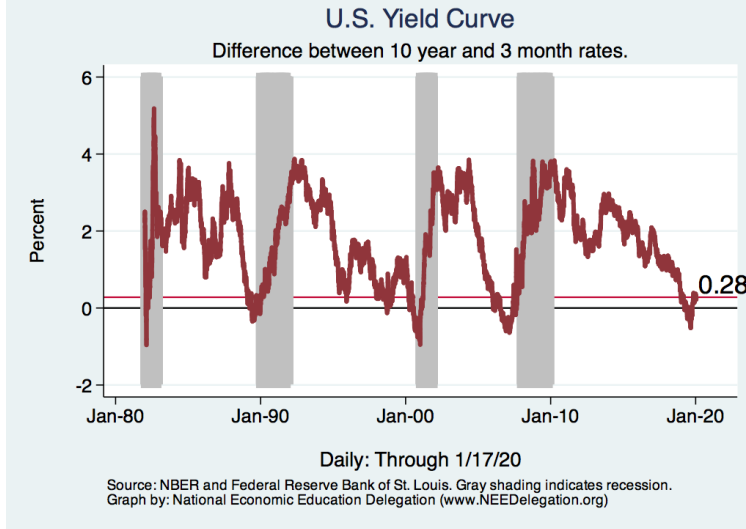
Dow Jones



86

Alarming Compression of Interest Rates

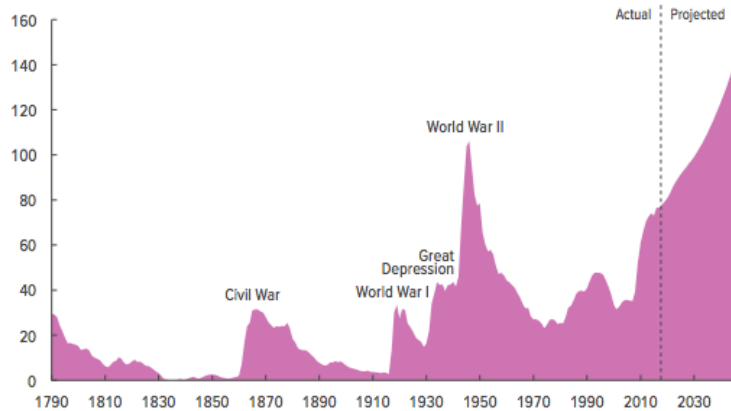
Inverted Yield Curves (negative values) Have Projected Recent Recessions



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.

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



89

Teasers: Upcoming Lectures

- **Government Budgets**
- **Income Inequality**
- **Climate Change**
- **Trade and Globalization**



90



Thank you!

Any Questions?

www.NEEDelegation.org
Jon Haveman, Ph.D.
Jon@NEEDelegation.org

Contact NEED: info@needelegation.org

Submit a testimonial: www.NEEDelegation.org/testimonials.php



NATIONAL ECONOMIC
EDUCATION DELEGATION

91

91



The Local Economy

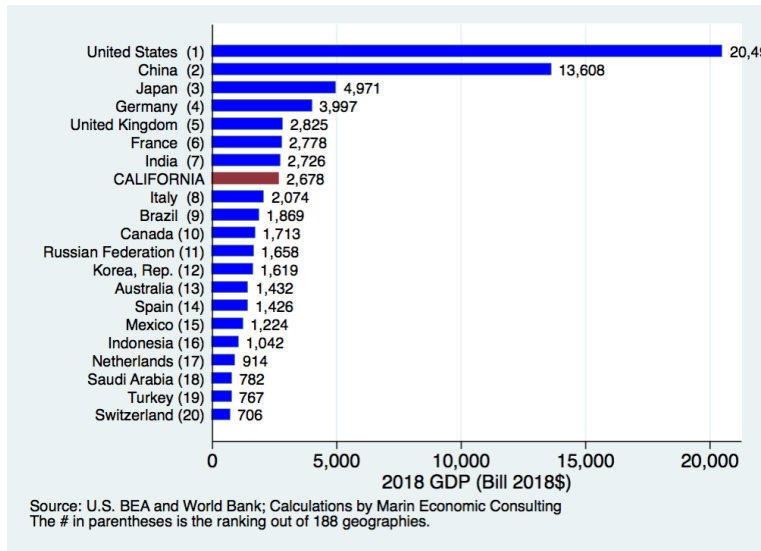


NATIONAL ECONOMIC
EDUCATION DELEGATION

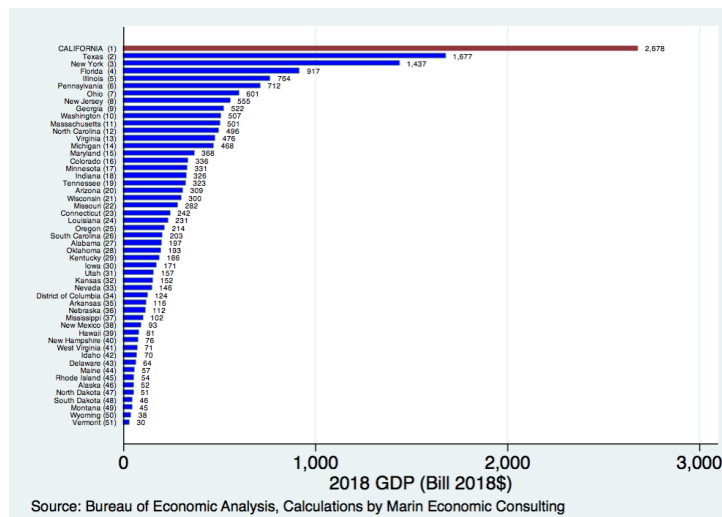
92

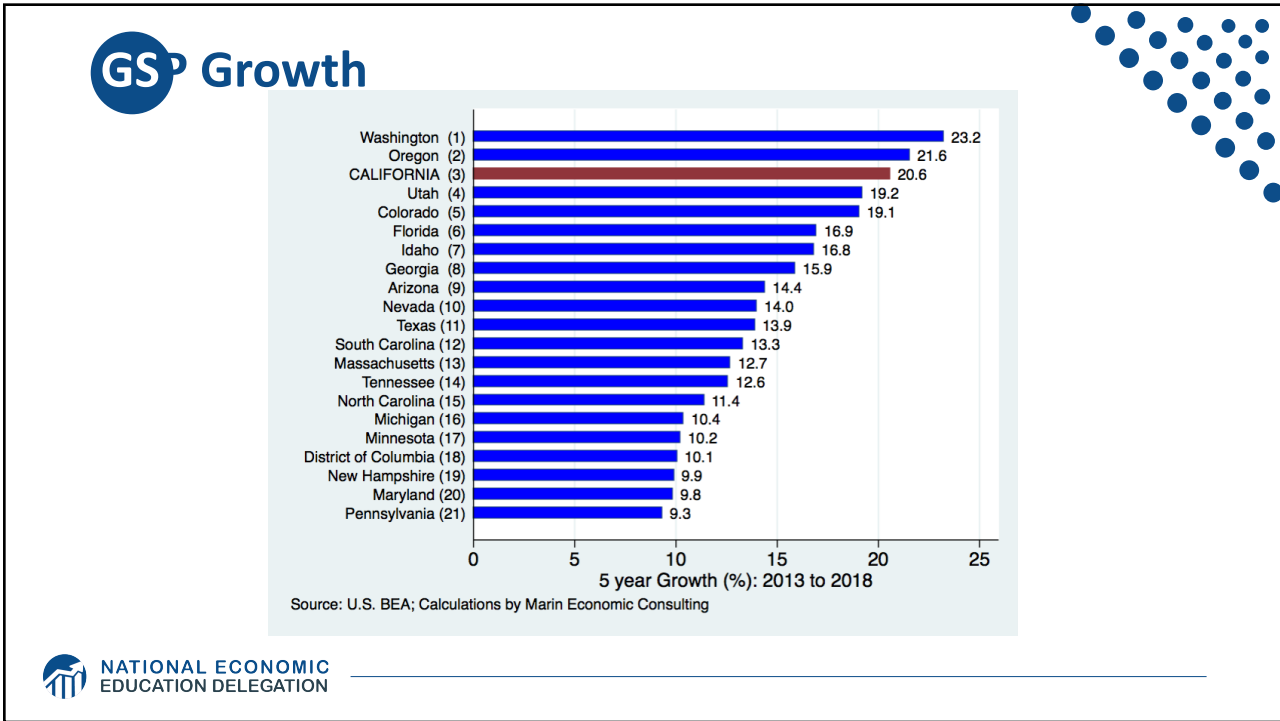
92

If California Were A Country...

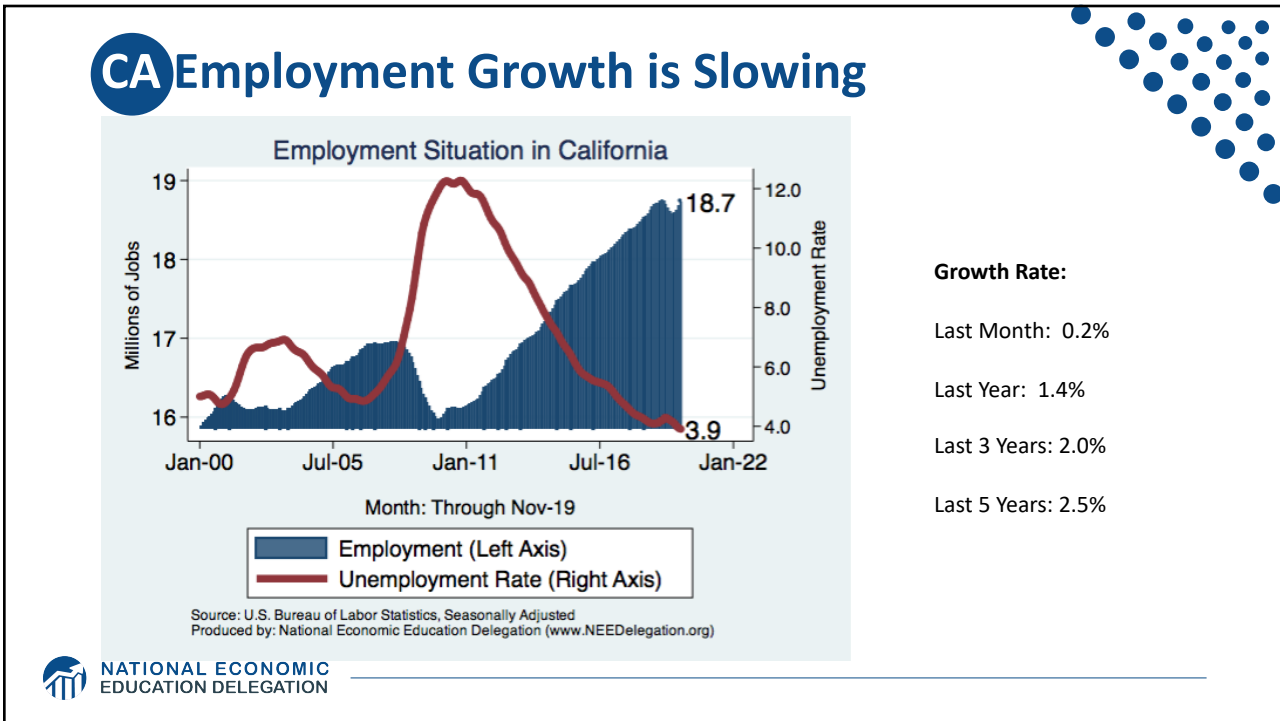


CA is the Largest State, by Far

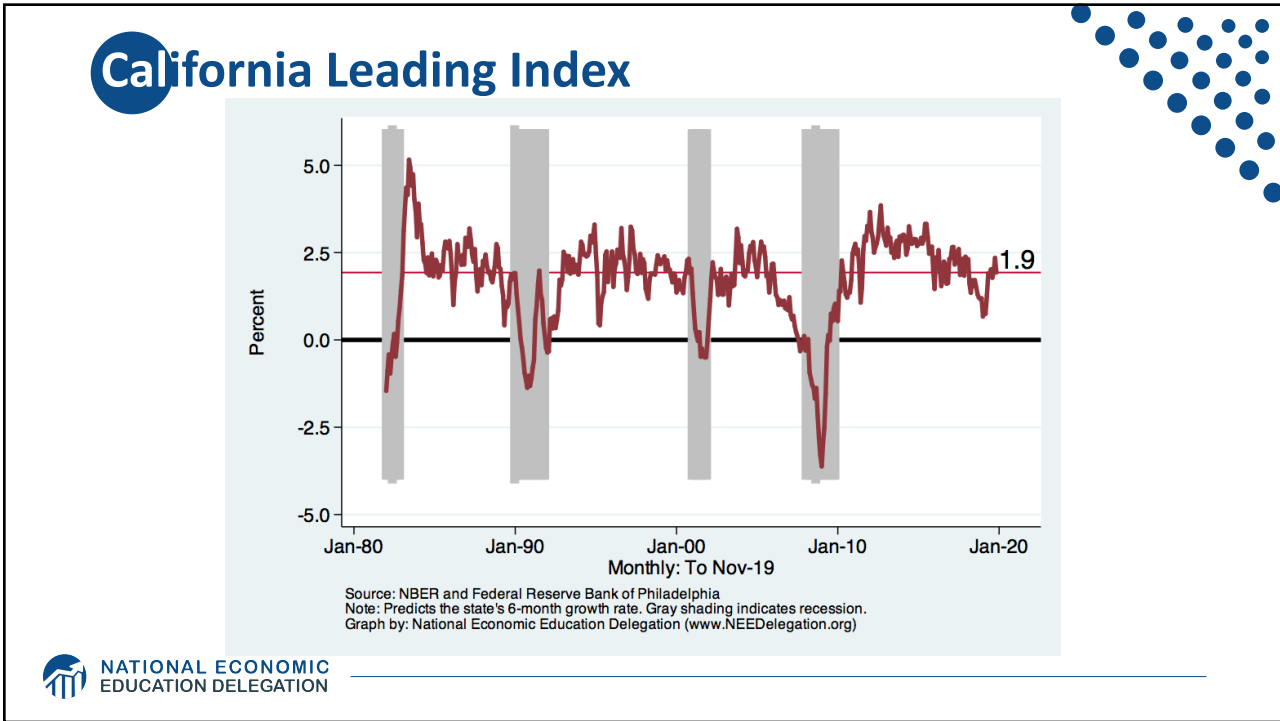




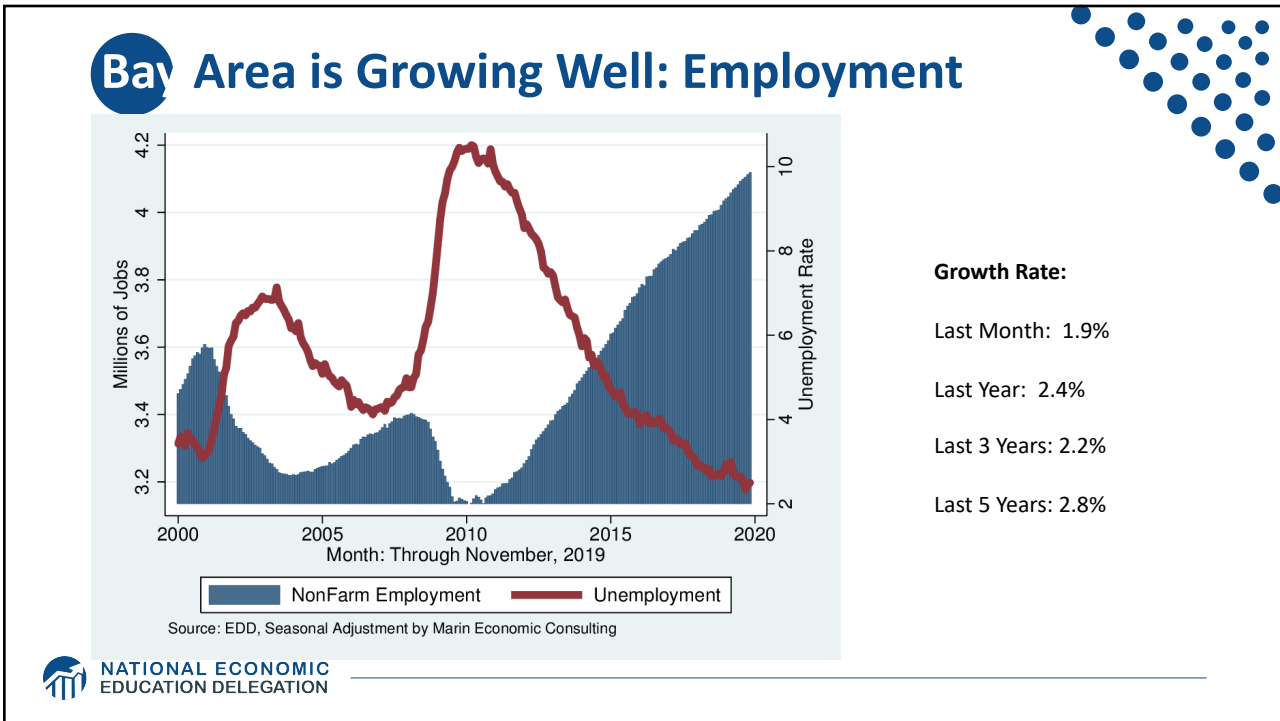
95



96

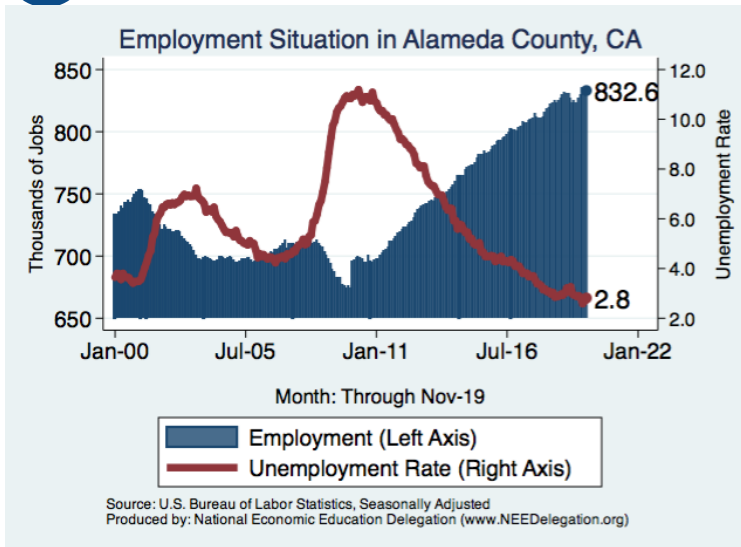


97



98

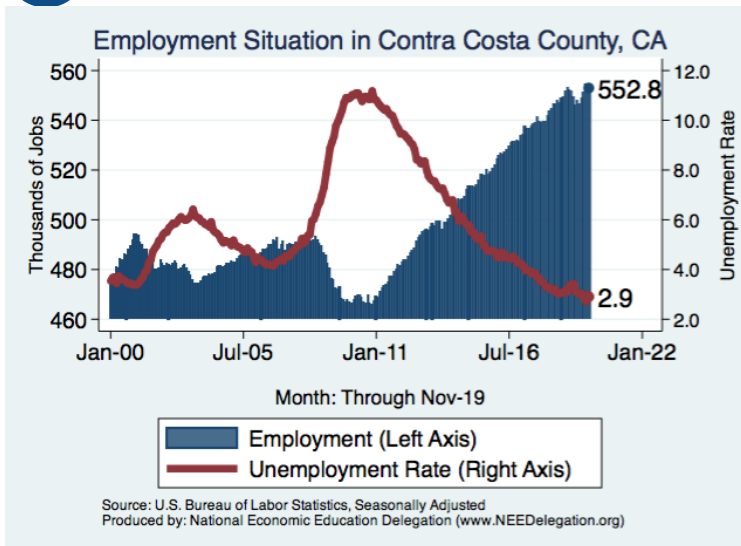
Employment Situation: Alameda County



Growth Rate:

- Last Month: 0.4%
- Last Year: 1.6%
- Last 3 Years: 2.0%
- Last 5 Years: 2.6%

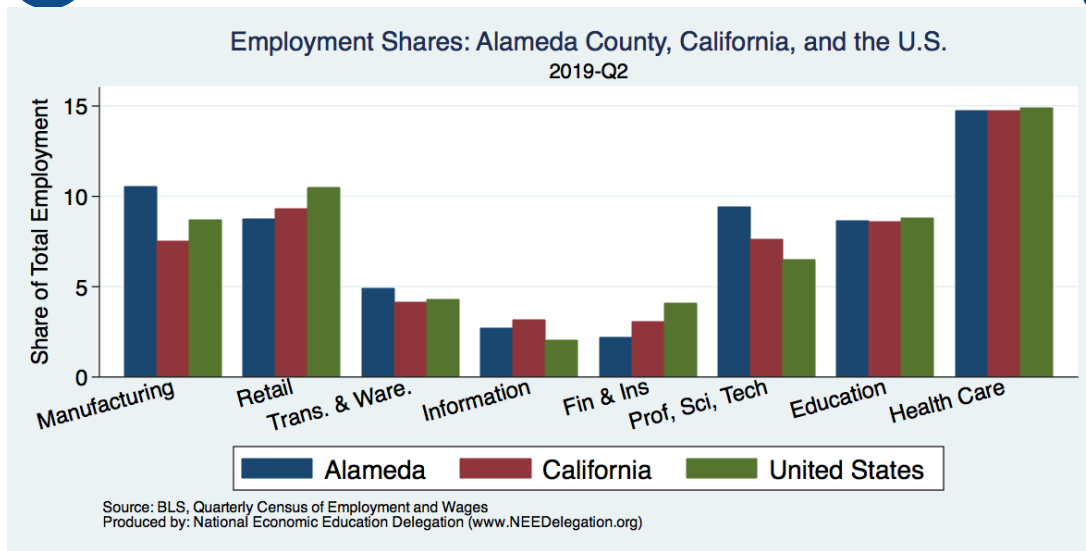
Employment Situation: Contra Costa County



Growth Rate:

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

Alameda Employment Shares

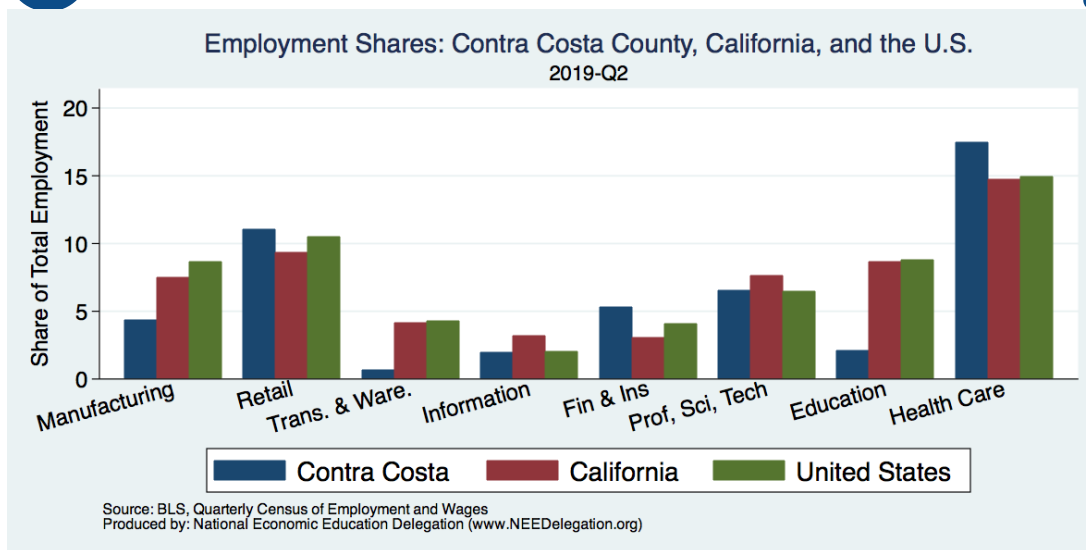


NATIONAL ECONOMIC EDUCATION DELEGATION

101

101

Contra Costa Employment Shares

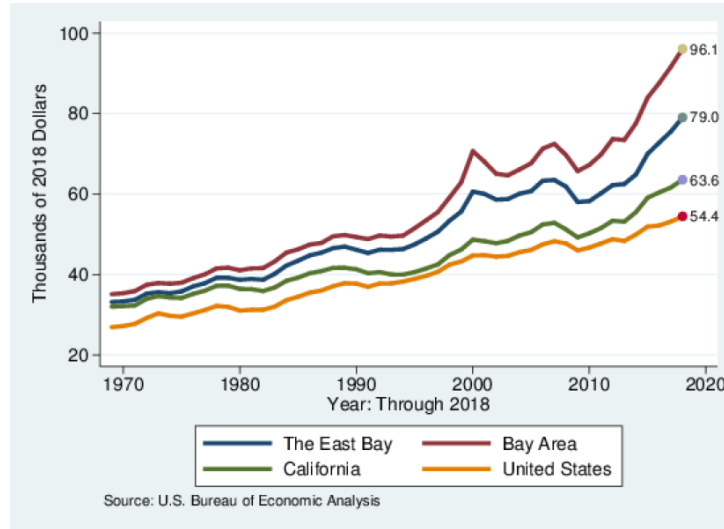


NATIONAL ECONOMIC EDUCATION DELEGATION

102

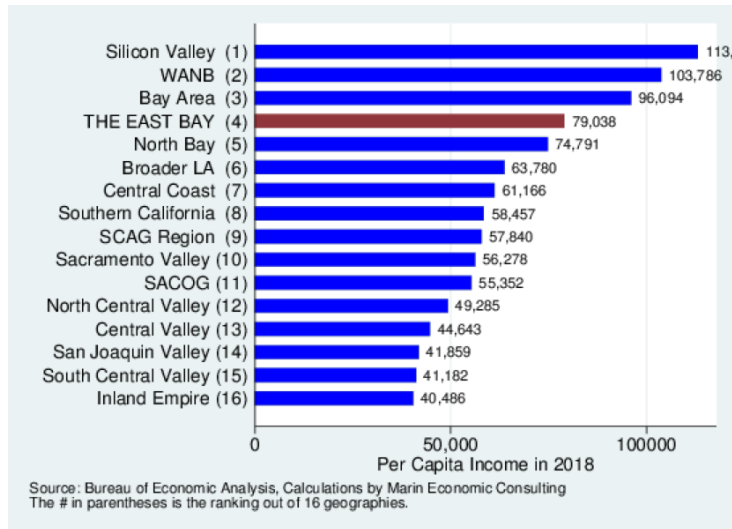
102

East Bay Per Capita Income



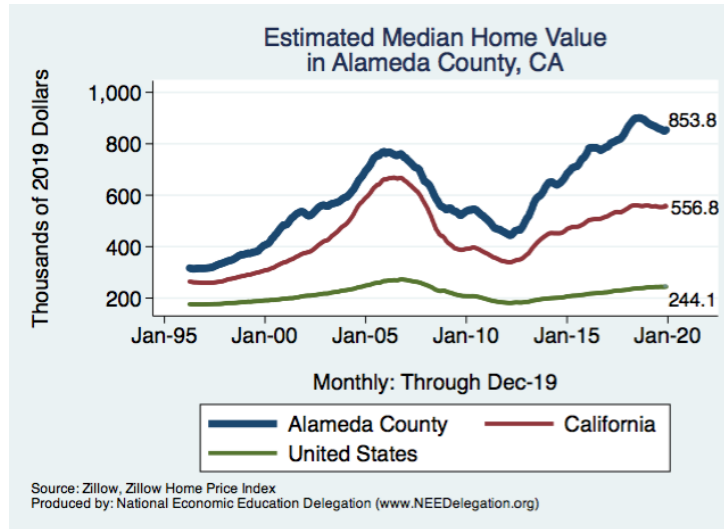
103

East Bay in Statewide Perspective

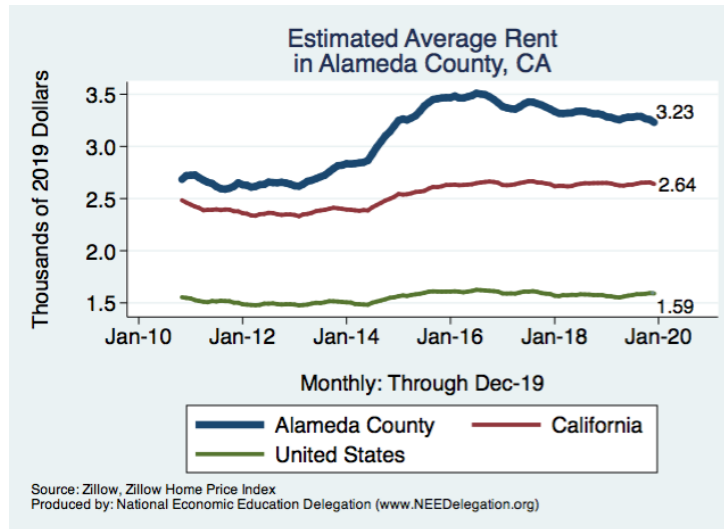


104

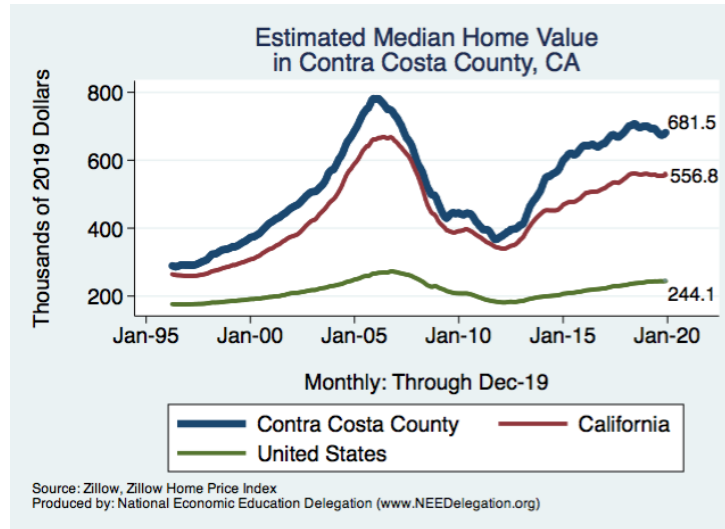
Alameda Home Prices



Alameda Rents



Contra Costa County Home Prices



Contra Costa County Rents

