

*Osher Lifelong Learning Institute, Fall 2019*  
**What Economists Know About Important  
Policy Issues**

# Lecture 1: The U.S. Economy

September 20, 2019

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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: 44 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: 365 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: 42 Ph.D. Economists**

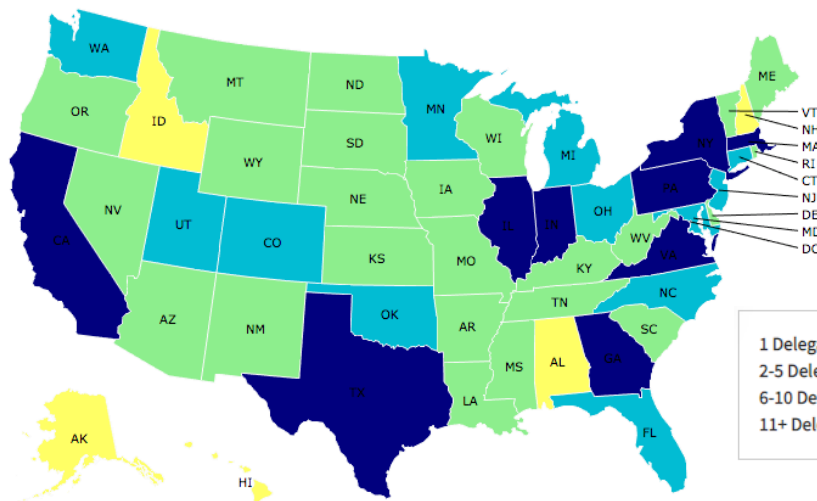
- Aid in slide deck development



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## Where Are We?



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## Course Outline

- **What Economists Know About Important Policy Issues**
  - Week 1 (9/20): US Economic Update
  - Week 2 (9/27): Government Budgets & Debt
  - **October 4: NO CLASS**
  - Week 3 (10/11): Trade and Globalization
  - Week 4 (10/18): Income Inequality
  - Week 5 (10/25): Climate Change
  - Week 6 (11/1): Housing Policy



# Outline – U.S. Economic Outlook

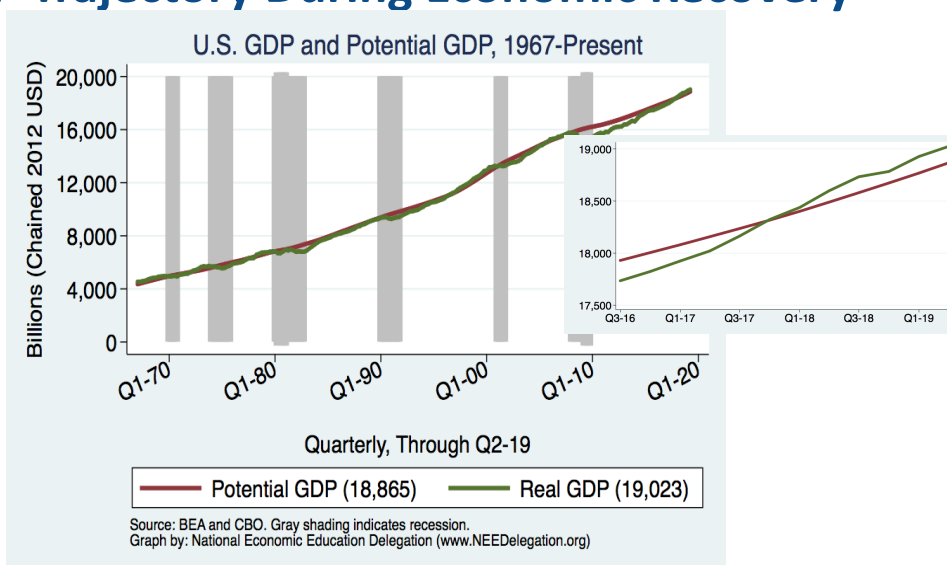
- Behavior of GDP
- Labor Market
- Monetary Policy/Interest Rates
- Other Indicators
- Summary

# Behavior of GDP

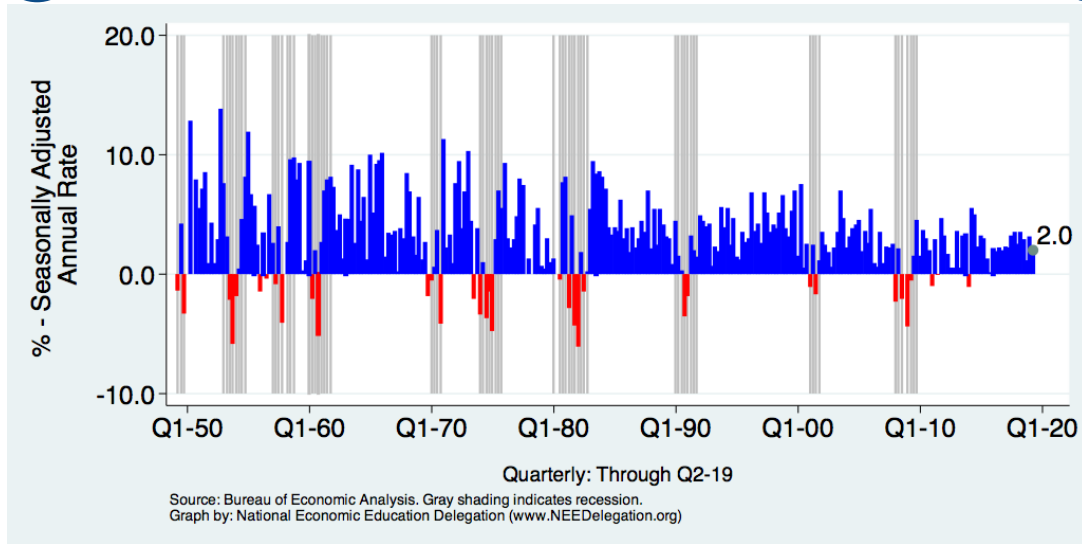
## GDP During the Recovery

- *Real GDP* is a standard measure of production used by economists to assess the 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

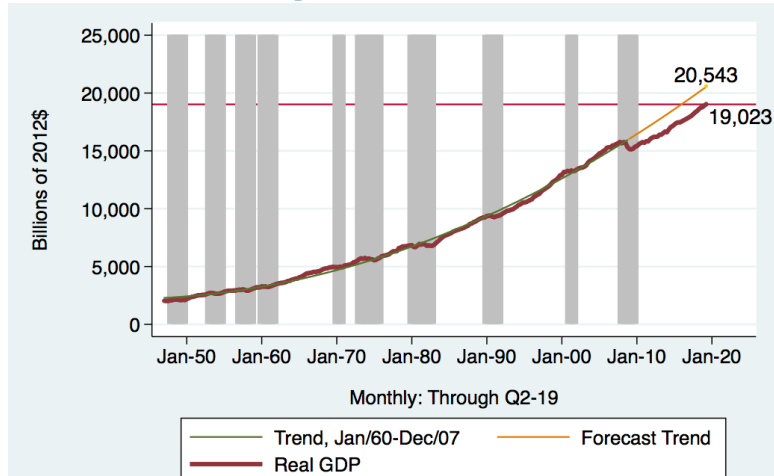
## GDP Trajectory During Economic Recovery



## GDP Growth During Economic Recovery



## GDP Relative to Long-Term Trends



Source: NBER and BEA. Gray shading indicates recession.  
Growth: 2 (Qtr), 2.2 (Year), 2.5 (5-year), 2.5 (10-year), 2.6 (20-year)  
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

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

- **Expenditures drive GDP growth.**

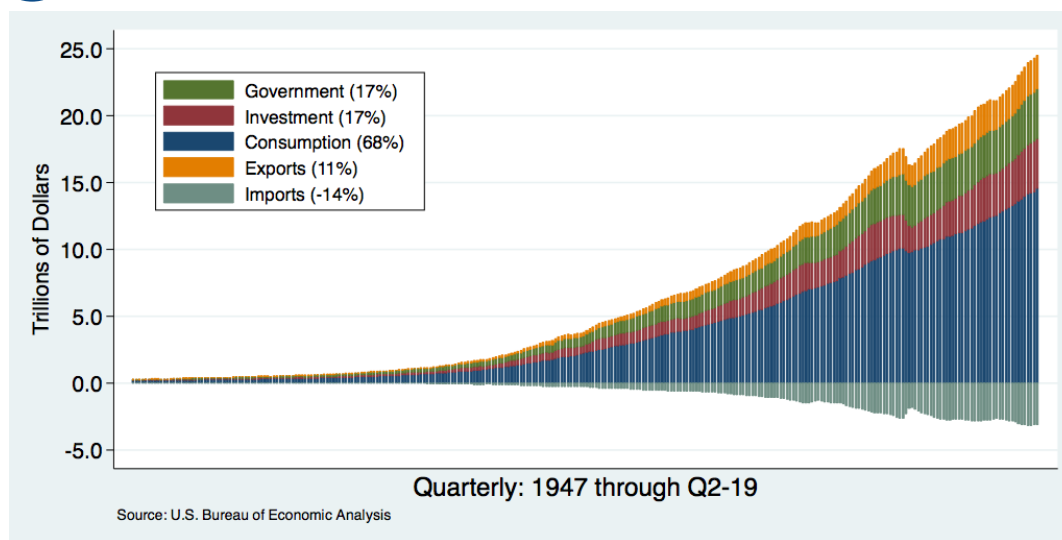
- GDP is the sum of four categories of spending:
  - o Consumption
  - o Investment
  - o Government spending
  - o Net Exports: Exports – Imports
    - Exports add to GDP
    - Imports are subtracted because they are included in the other categories

- **Production also matters.**

- 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?



## Understanding Contributions to GDP Growth

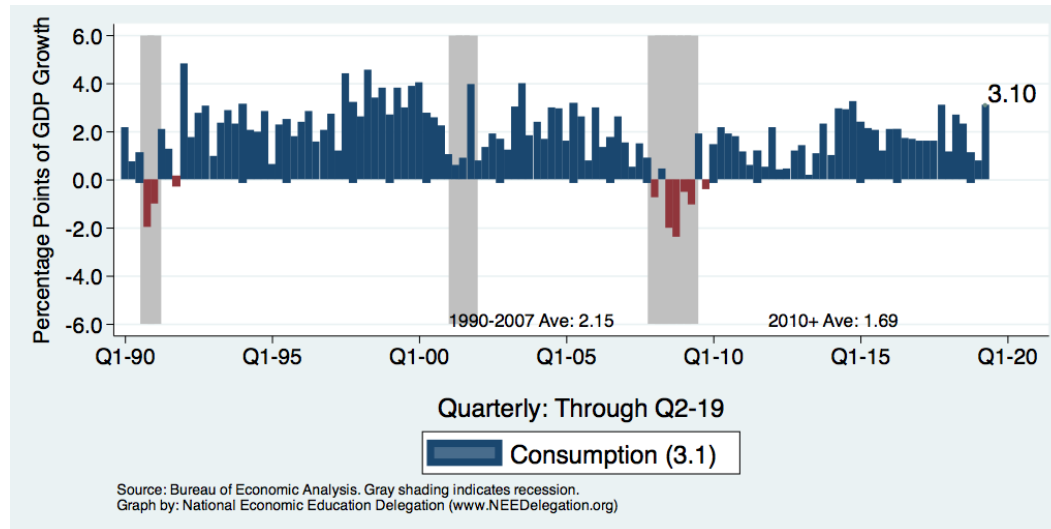
- **GDP Growth is a combination of the growth in its components:**
  - Consumption, Investment, Government, and Net Exports
  - It's a weighted average of these components
- **For example: Consumption**
  - If consumption accounts for **2/3** of the economy,
  - If consumption grew by **3%**,
  - It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

$$2\% = 2/3 * 3\%$$





## Contribution to GDP Growth: Consumption



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## Personal Consumption Expenditures

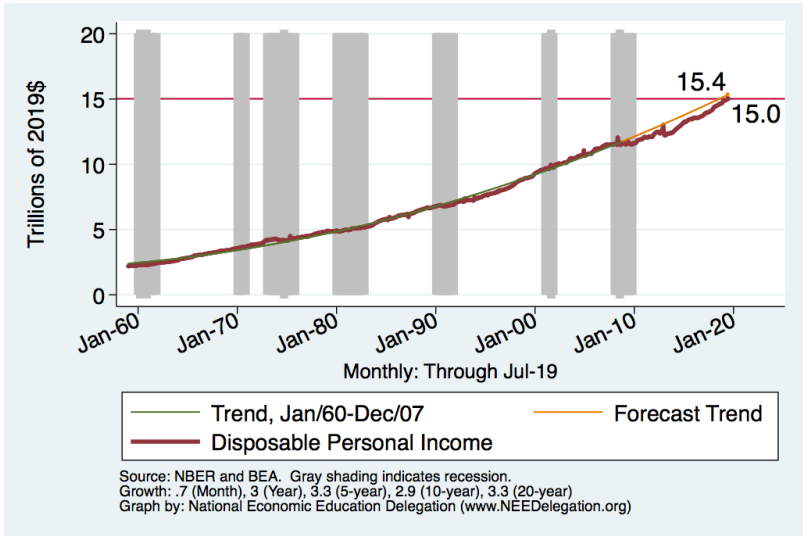
- **Consumption has been slow to recover.**
  - Pre-crisis average contribution of consumption expenditures was 2.15 percentage points.
  - Post-crisis contribution is 1.69 percentage points.
- **In other words, its contribution to GDP growth is down 22%.**
  - Let's explore why



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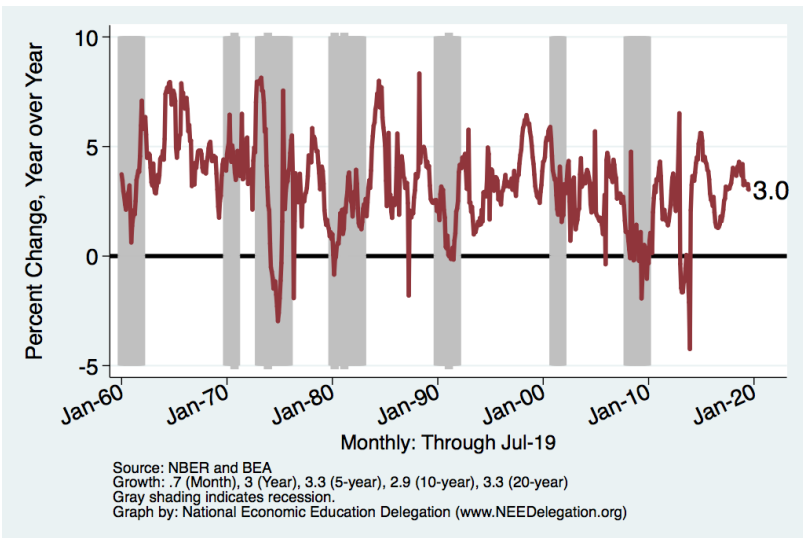
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# Real Disposable Personal Income

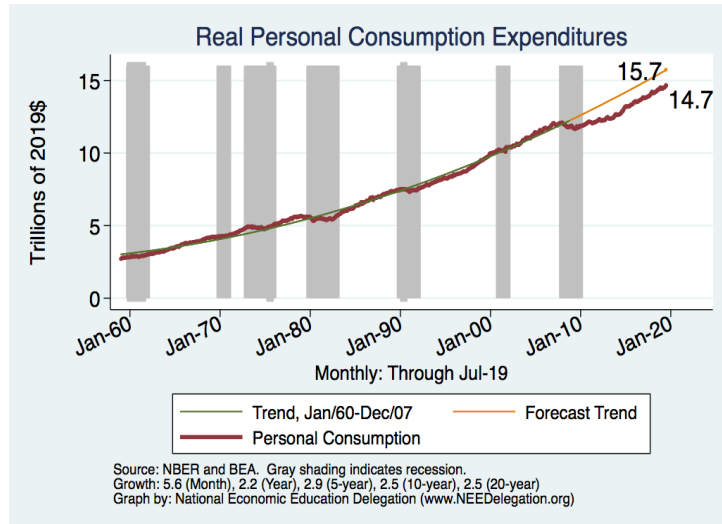


Catching up To Trend

# Real Disposable Personal Income - Growth



## Personal Consumption Expenditures

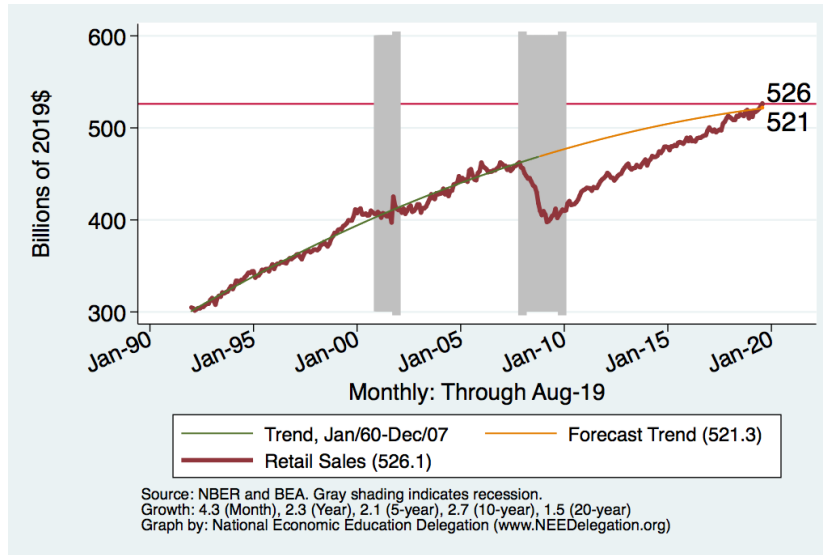


\$1.0 Trillion  
Below Trend

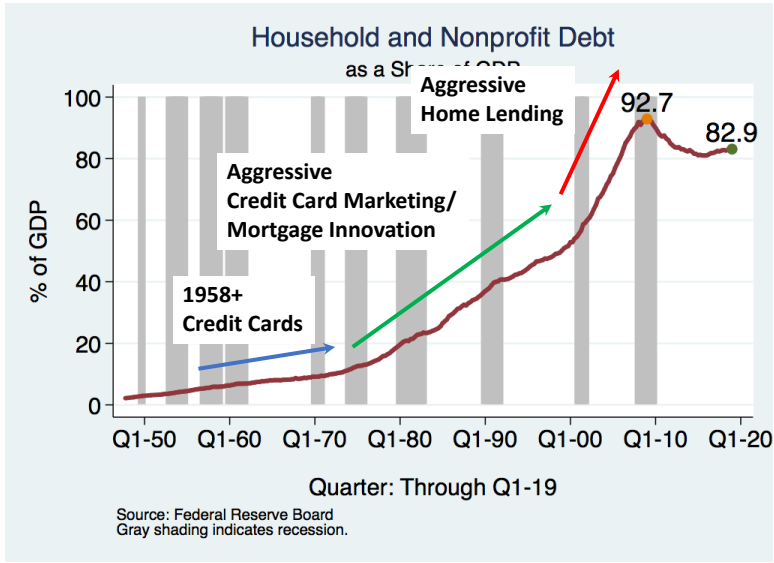
## Explaining Consumption Expenditures

- 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.

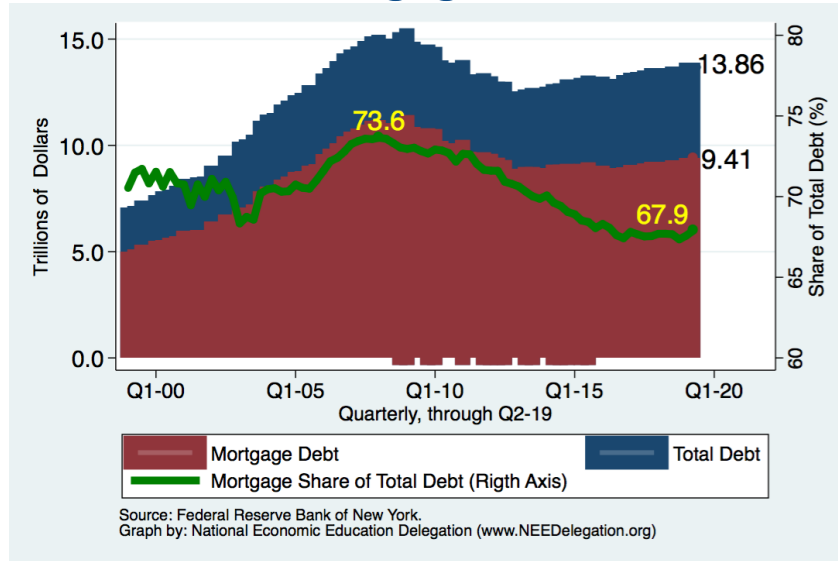
## Retail Sales



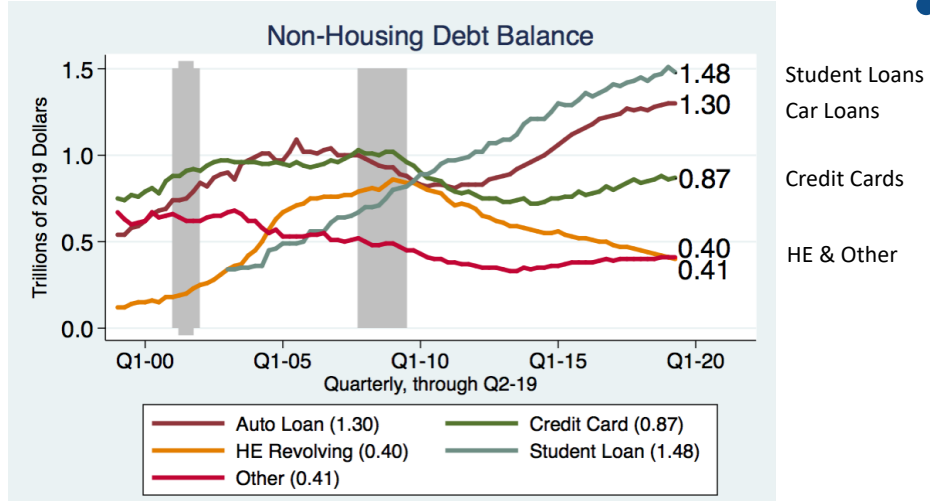
## Household Debt as a Share of GDP



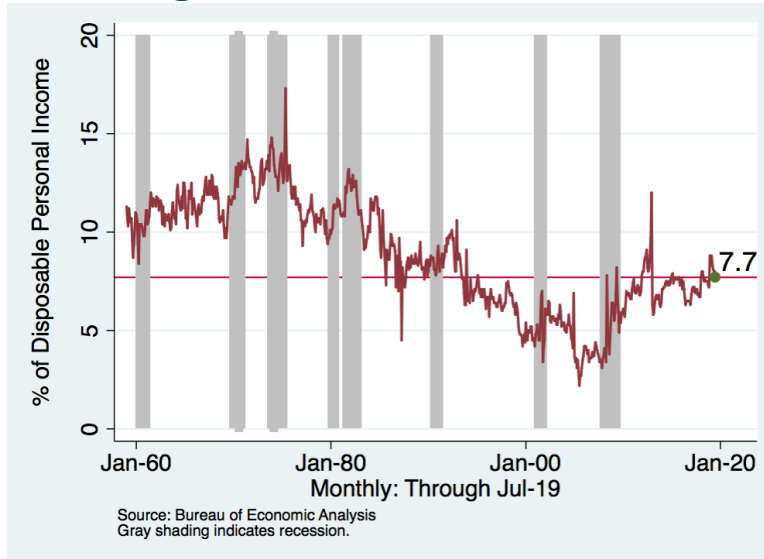
## Household Debt: Mortgages



## Household Debt: Other Sources



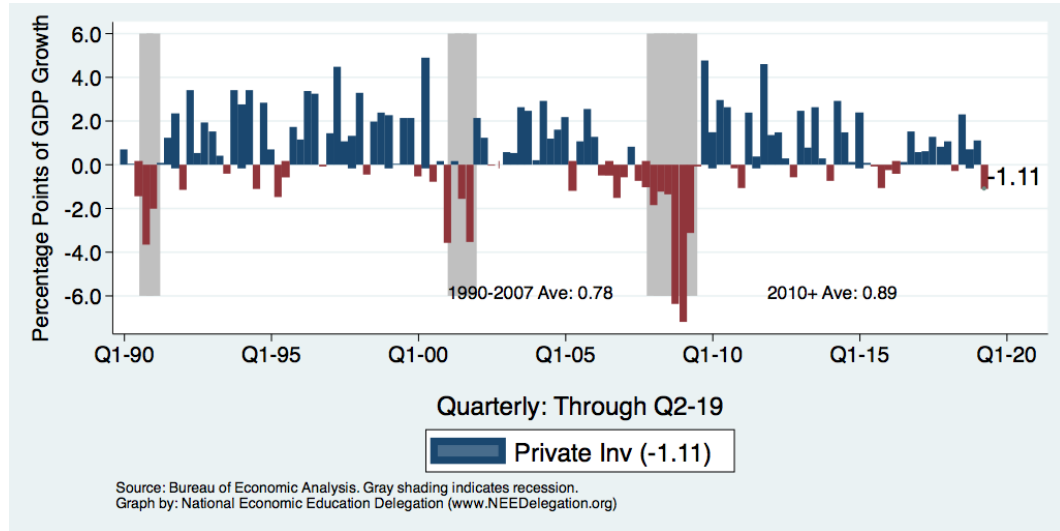
## Personal Savings



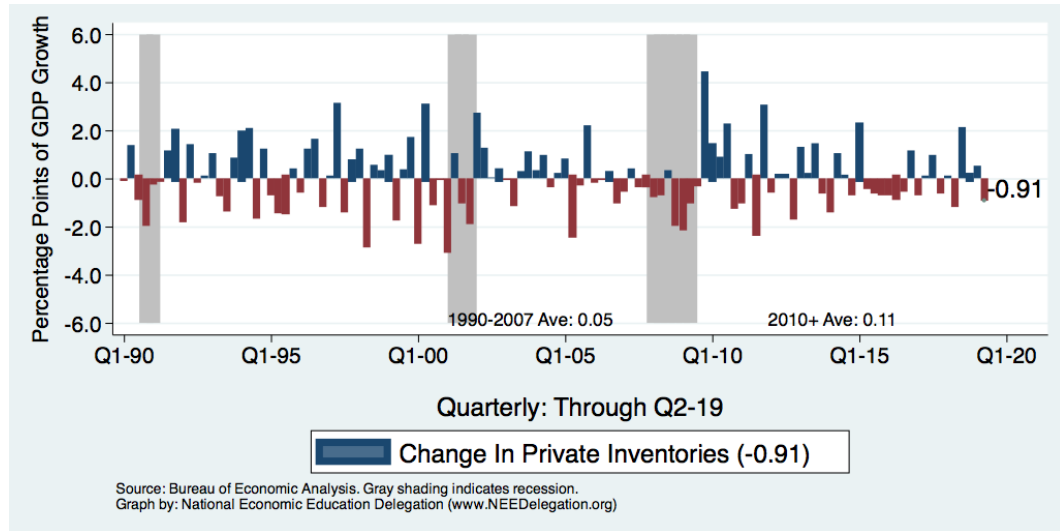
## Investment Expenditures

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

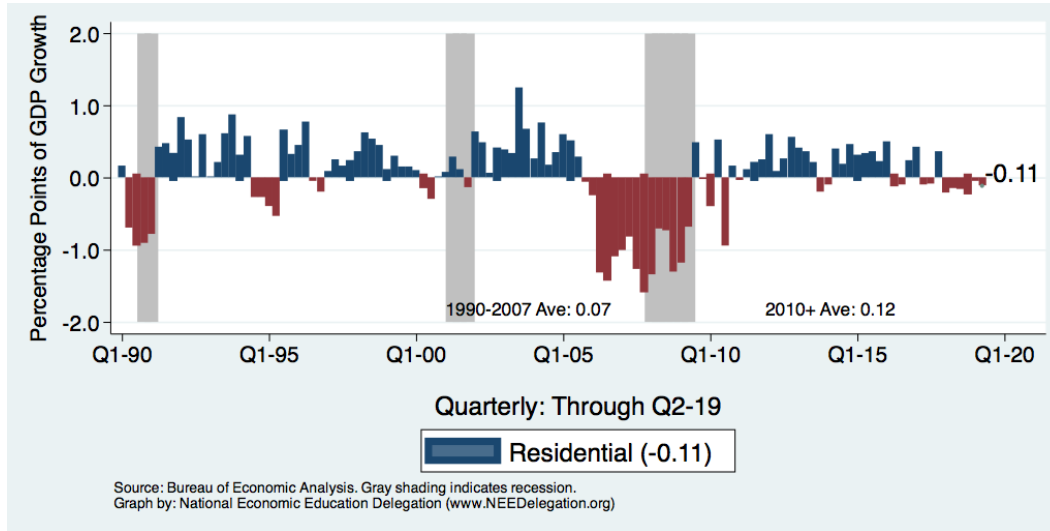
## Contributions to GDP: Private Investment



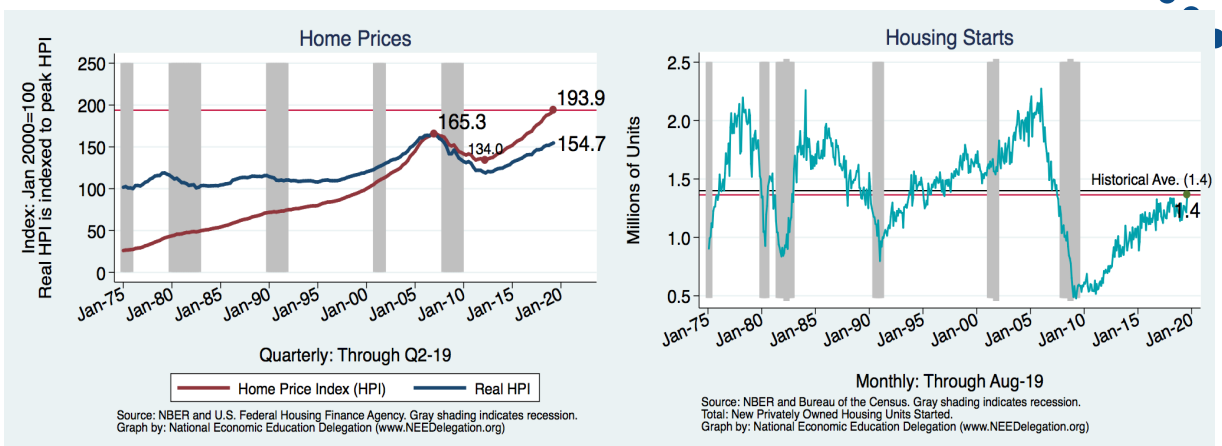
## Contributions to GDP: Change in Inventories



# Contributions to GDP: Residential Investment

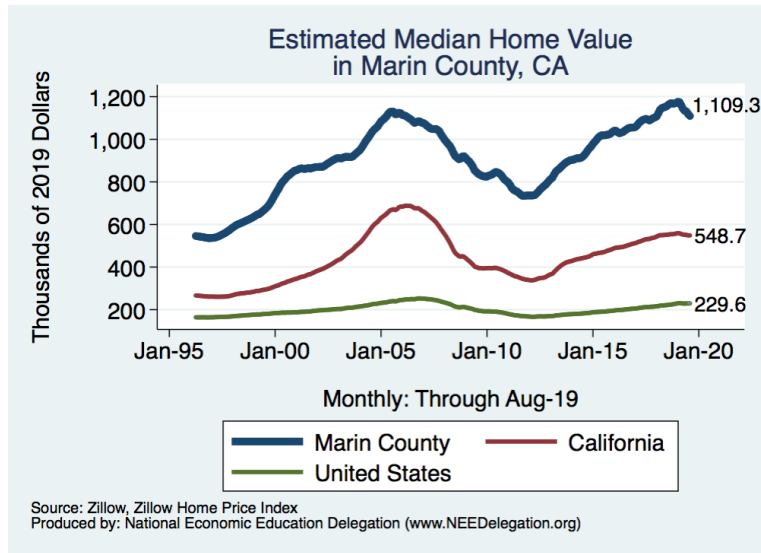


# Home Prices and Housing Starts

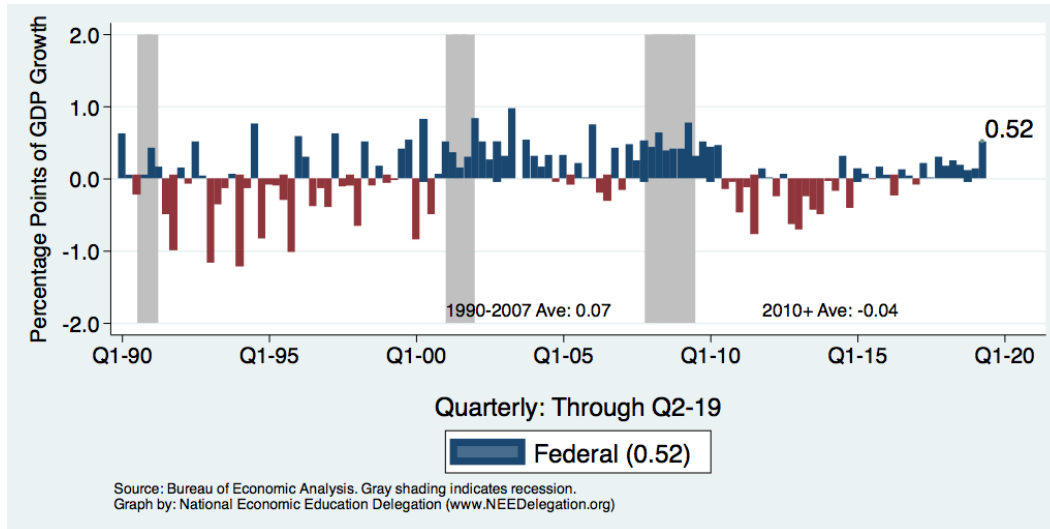




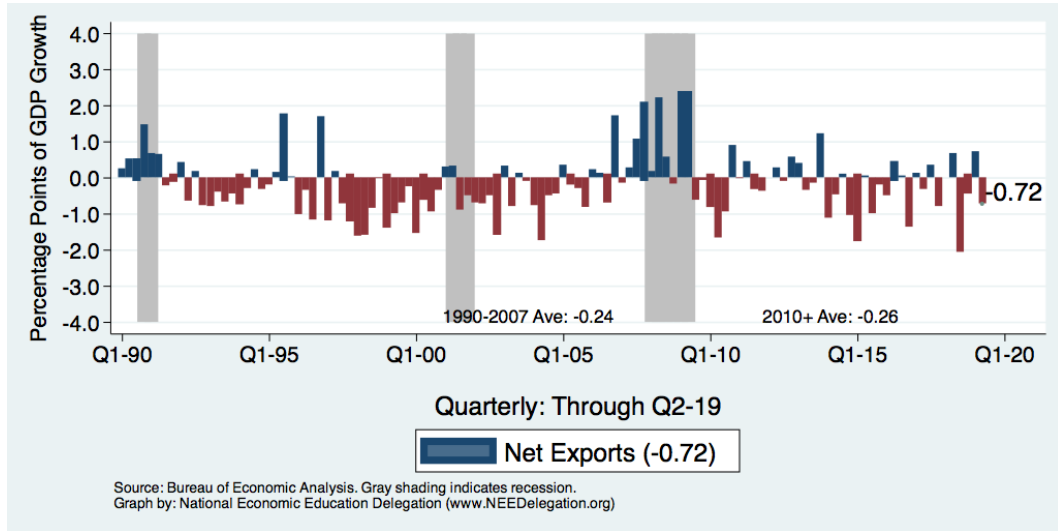
# Home Prices in Marin County



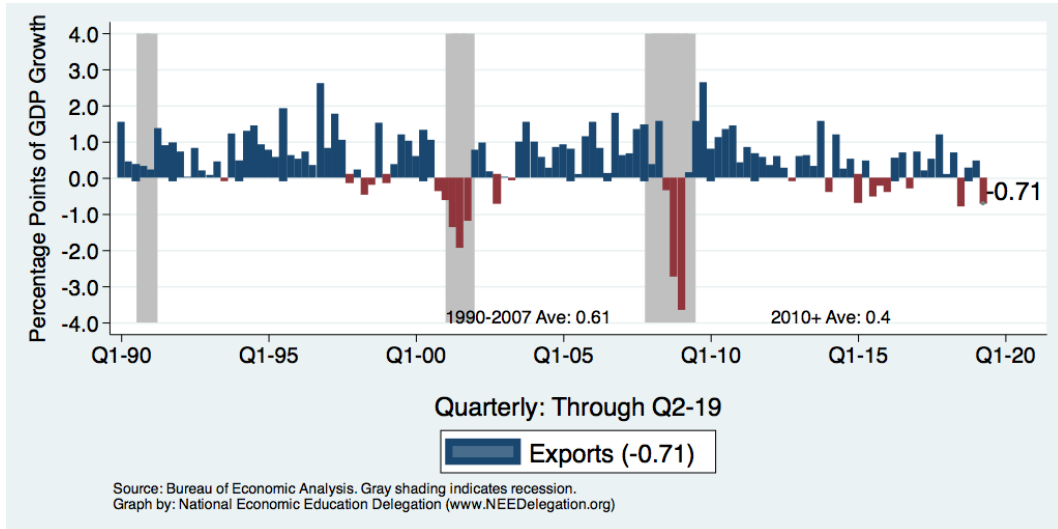
# Contributions to GDP: Government



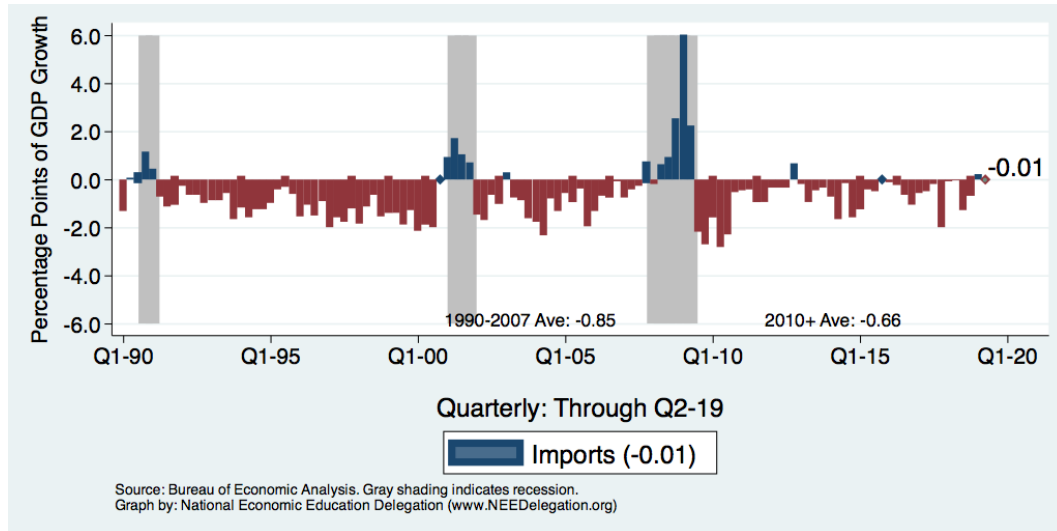
## Contributions to GDP: Net Exports



## Trade's Contribution to GDP: Exports



## Trade's Contribution to GDP: Imports



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## Expenditure Summary

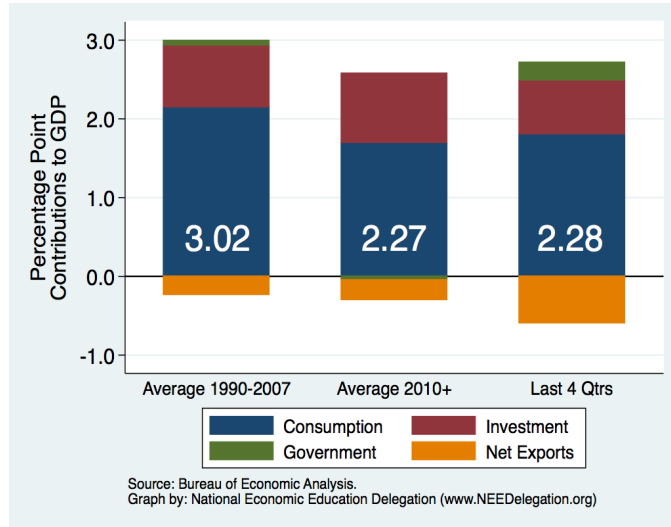
- **Post-recession consumption is down:**
  - Retail sales are returning to trend;
  - Household debt down, but climbing;
  - Personal savings is up.
- **Investment expenditures are contributing more to GDP growth.**
- **Post-recession government spending is down:**
  - But starting to pick up.
- **Net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



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# 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.

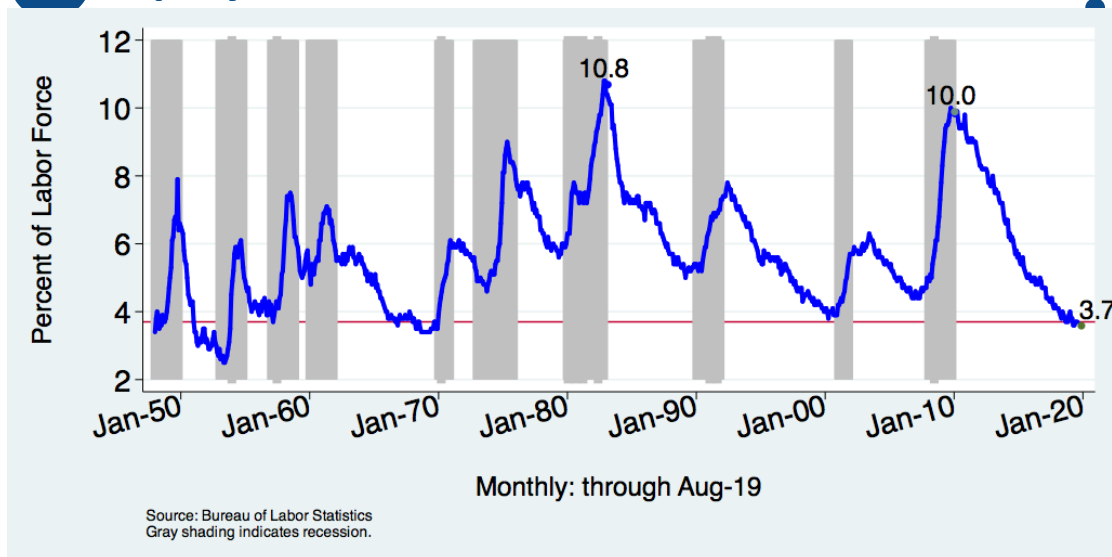


## Labor Market Conditions

- **Unemployment rate is low, 3.7%.**
- **Natural rate of unemployment is estimated to be 4.5% - 5.5%.**
- **Monthly employment gains have averaged 150,000 jobs over the last six months.**
- **Recent Labor Market Concerns:**
  - Low employment-to-population ratio
  - Falling labor force growth
  - Slow wage growth



## Unemployment Rate



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## How is the Unemployment Rate Calculated?

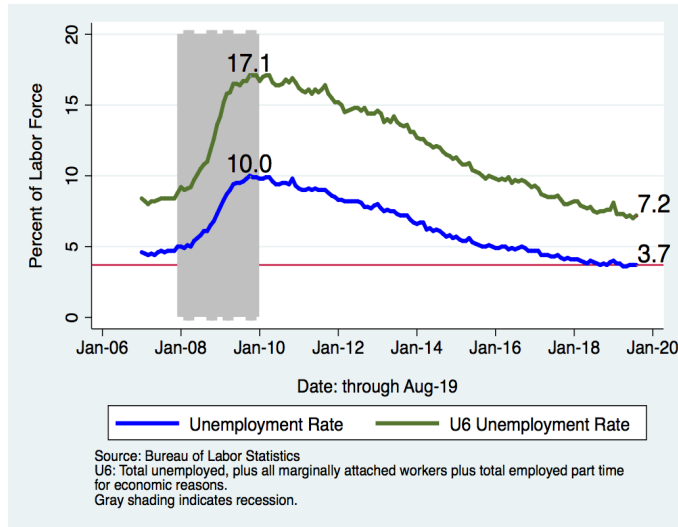
- It is not a simple thing: 
$$UR = \frac{\# \text{ Unemployed}}{\text{Labor Force}} * 100$$
- Why is that not simple?
  - Because it can go up or down for a variety of reasons:
    - If employment shrinks – UR goes up
    - If the labor force grows – UR could go up
  - Not all employment is created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



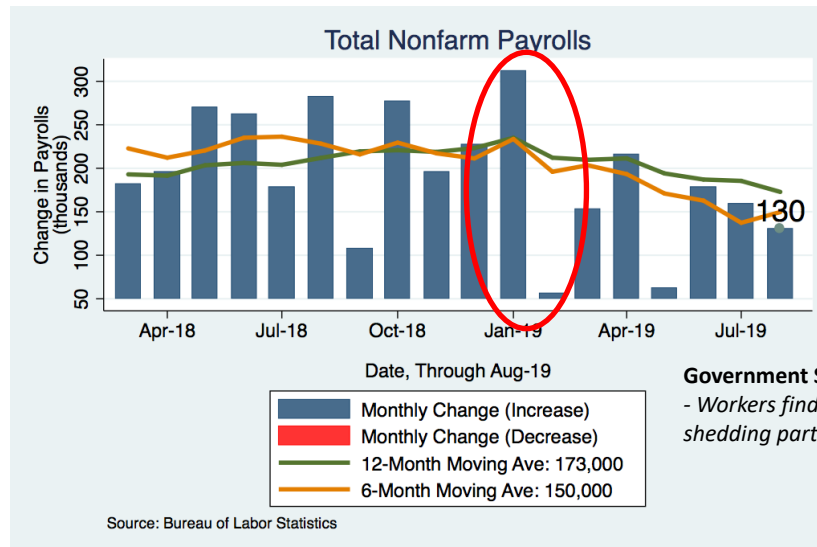
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# Unemployment Rate

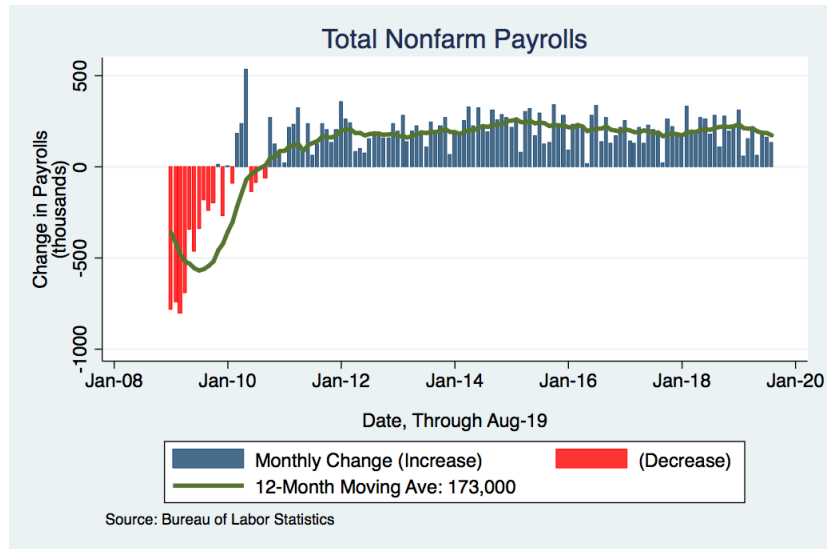


# Monthly Changes in Nonfarm Employment

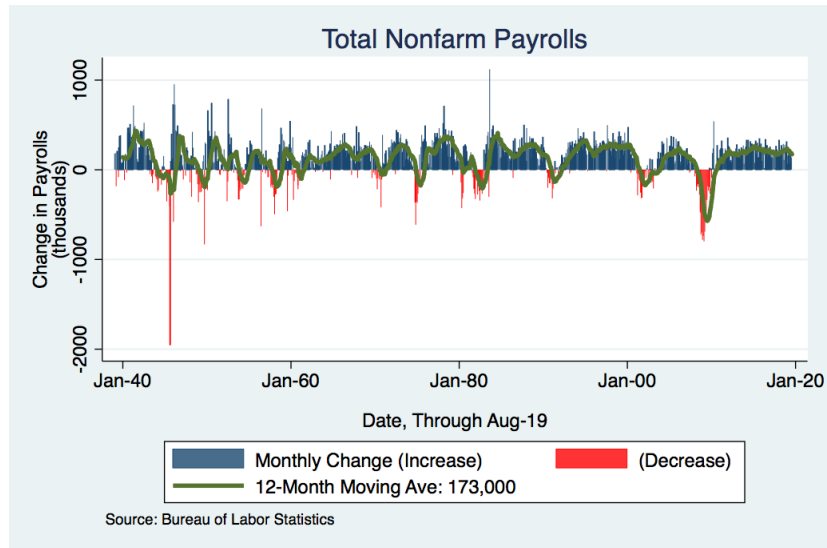


**Government Shutdown**  
 - Workers finding and then shedding part time jobs

# Monthly Changes in Nonfarm Employment

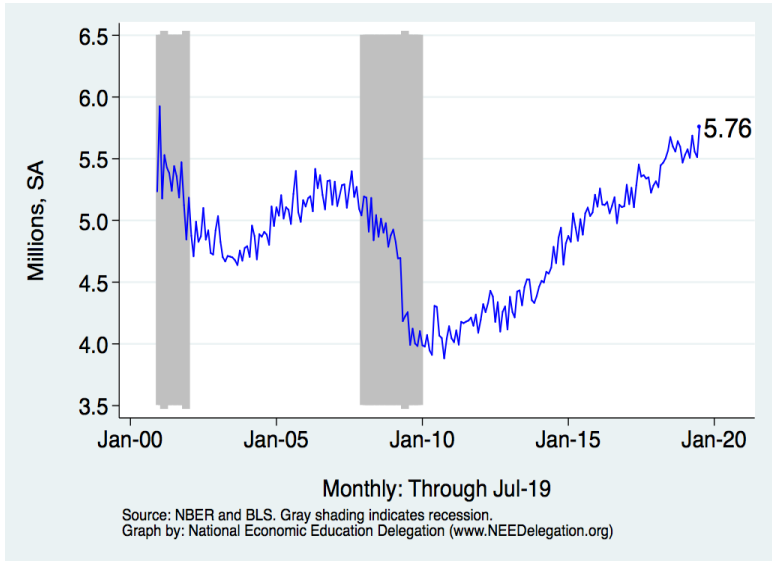


# Monthly Changes in Nonfarm Employment

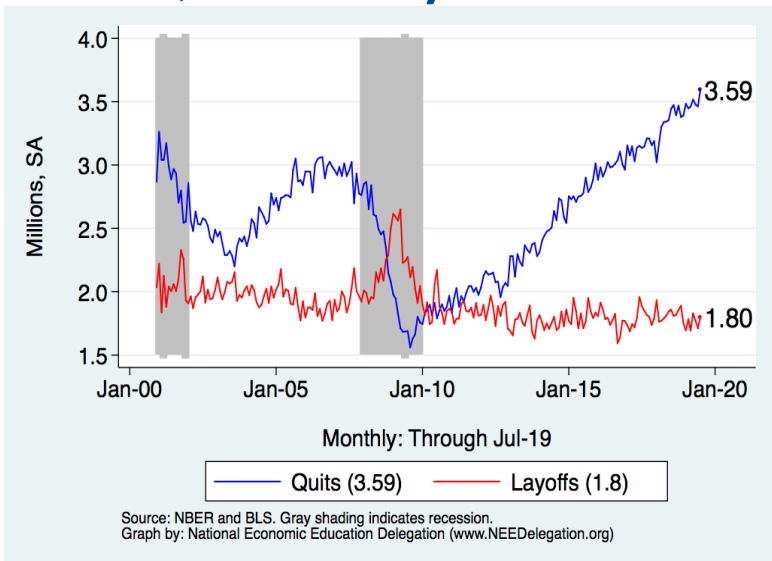




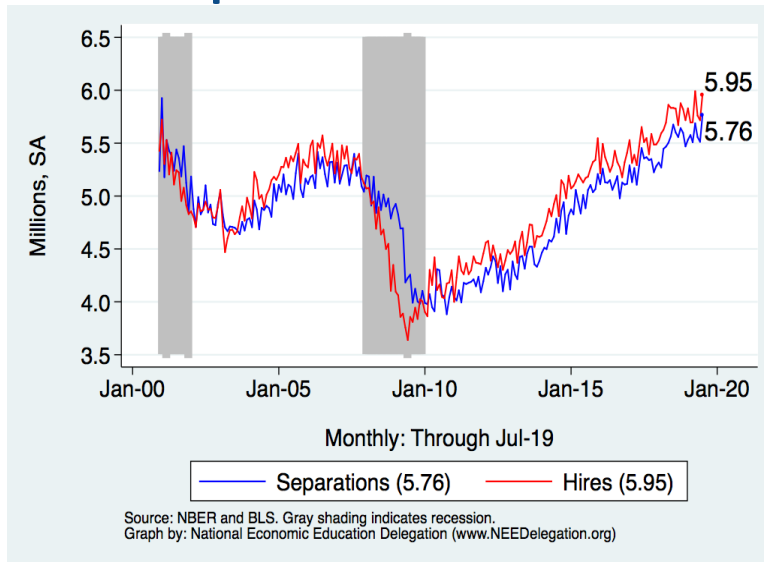
# Job Separations



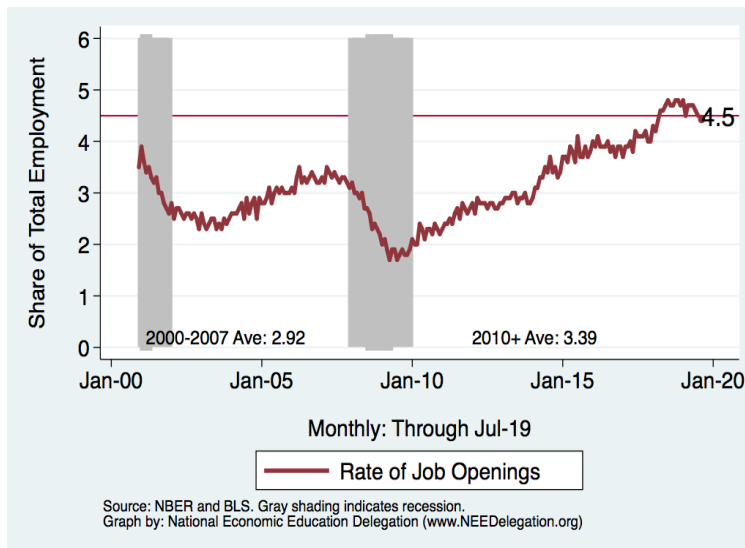
# Separations: Quits and Layoffs



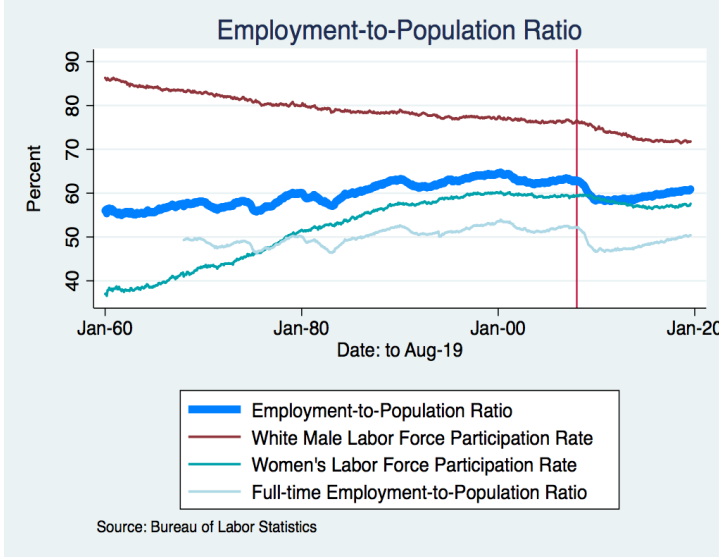
## Job Hires and Separations



## Job Openings: Share of Total Employment



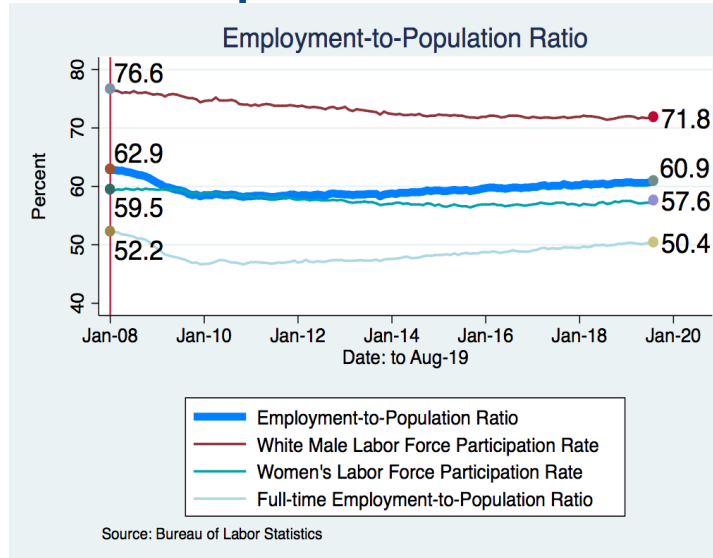
## Employment-to-Population Ratios



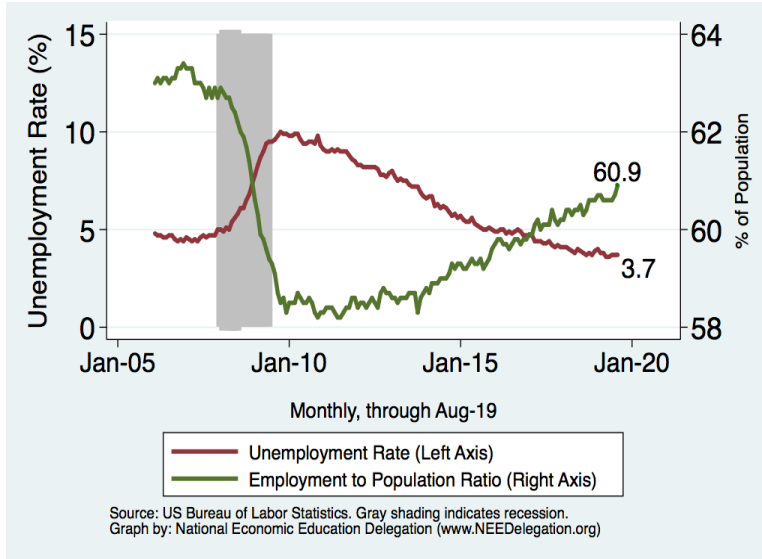
### Labor Force Participation Rate

% of working age population (16-64) actively looking for work

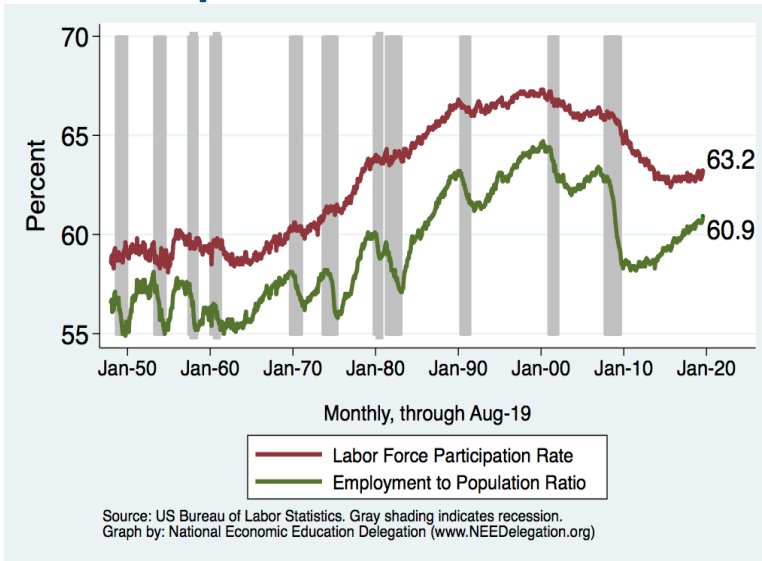
## Employment to Population Ratios – Recent



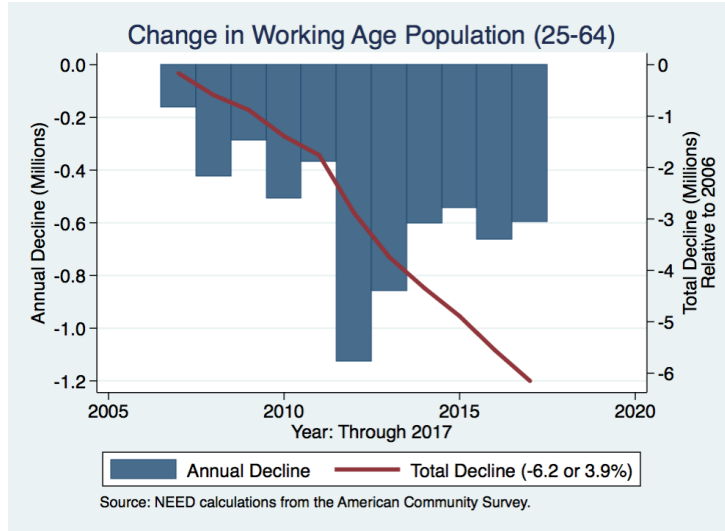
## Slow Employment Recovery



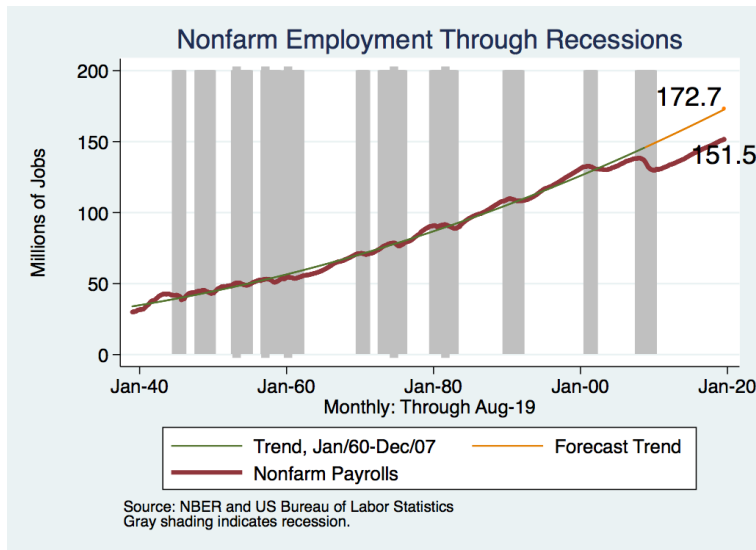
## Labor Force Dropouts



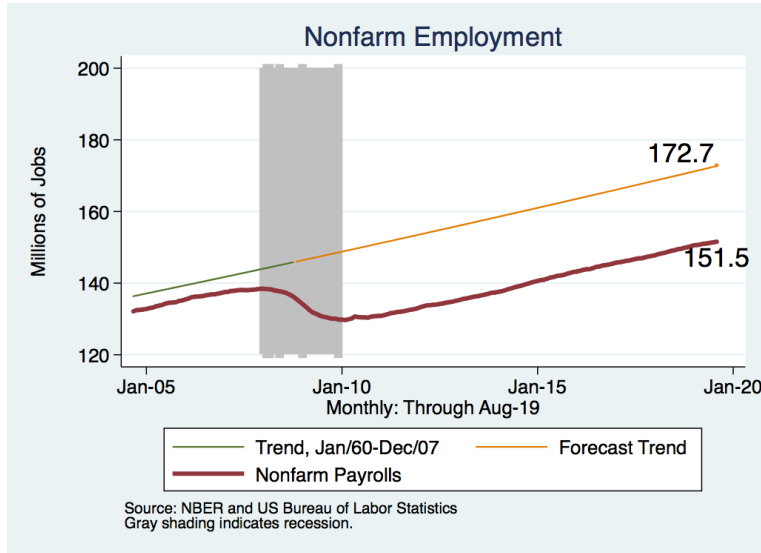
# Baby Boomers Are Retiring!



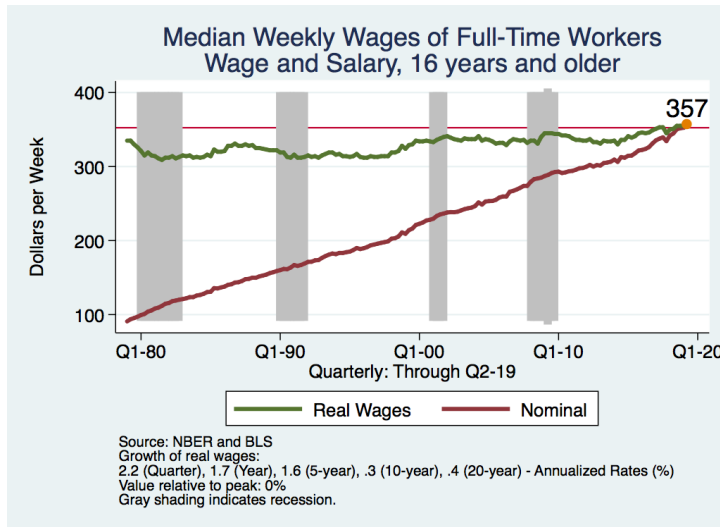
# Employment Growth



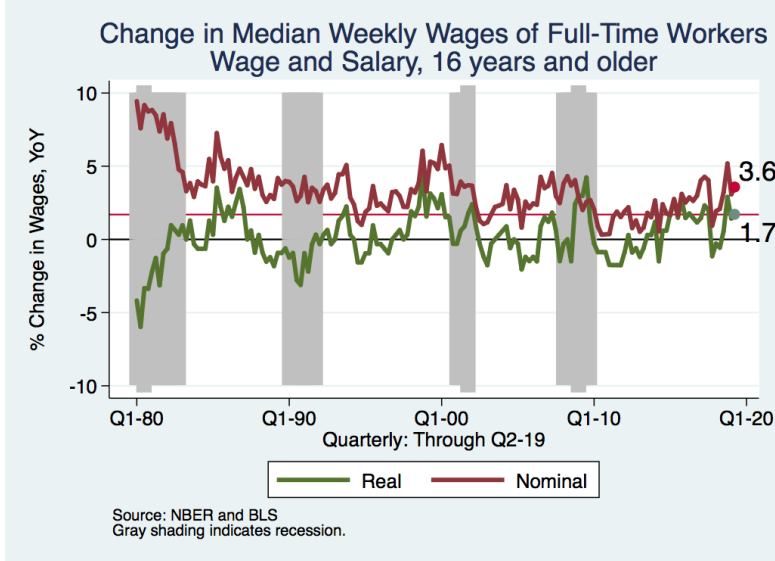
# Employment Gap: Up Close



# Wage Growth



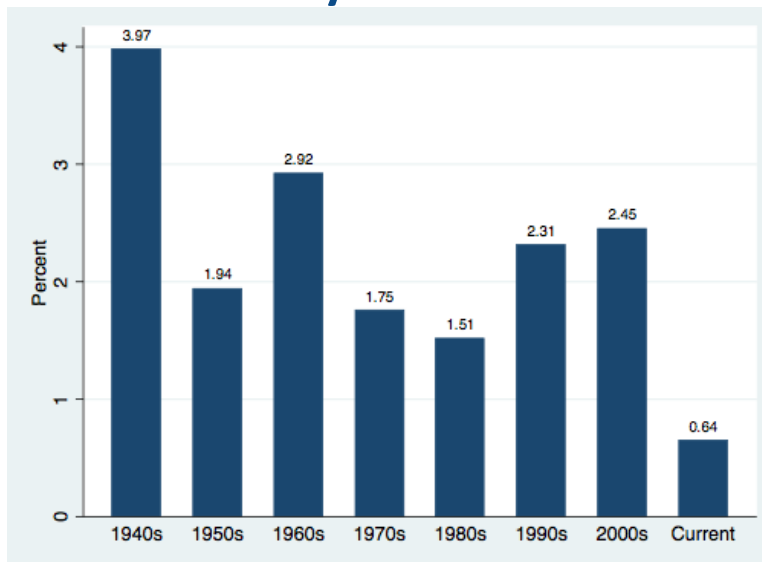
## Wage Growth



## GDP Growth, Productivity, and Employment



## History of Productivity Growth



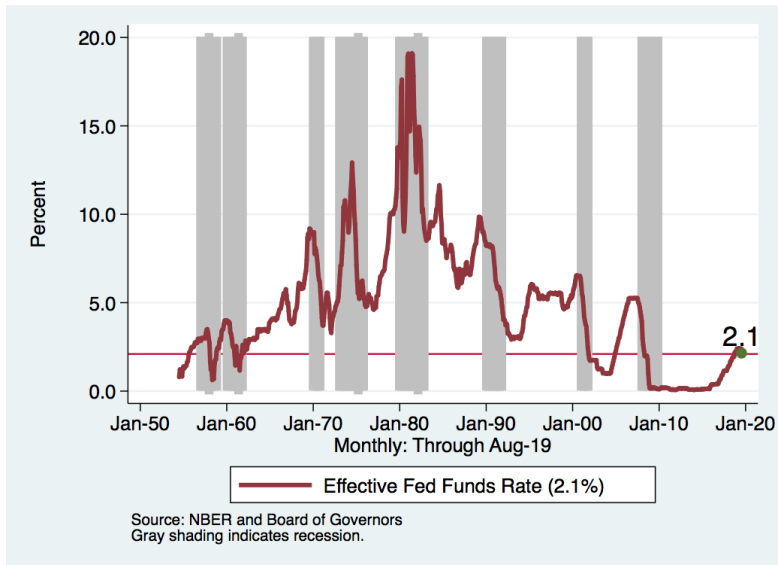
## Summary

- **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 led to slow increases in employment.**
  - Although labor markets have tightened, wages have not experienced rapid growth.
- **Productivity growth has played little role in growing GDP.**
  - Why this is so is not immediately clear.

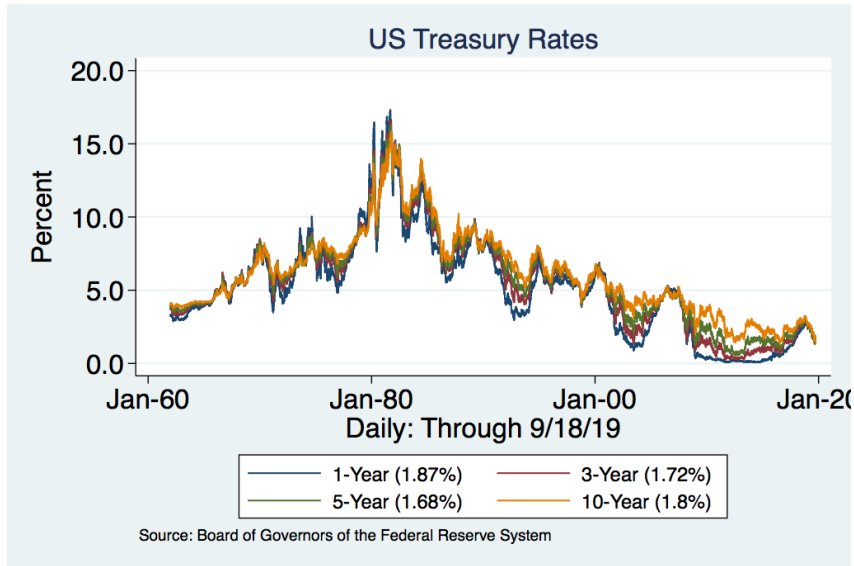


# Monetary Policy

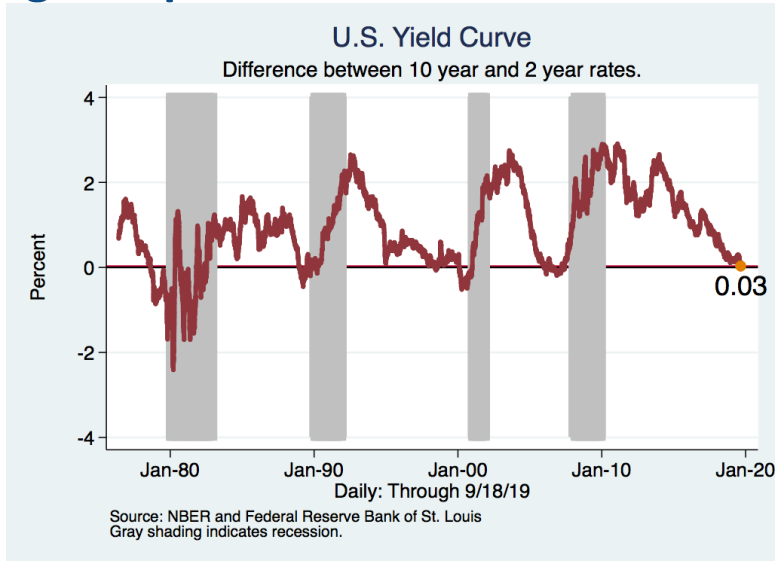
## Federal Funds Rate



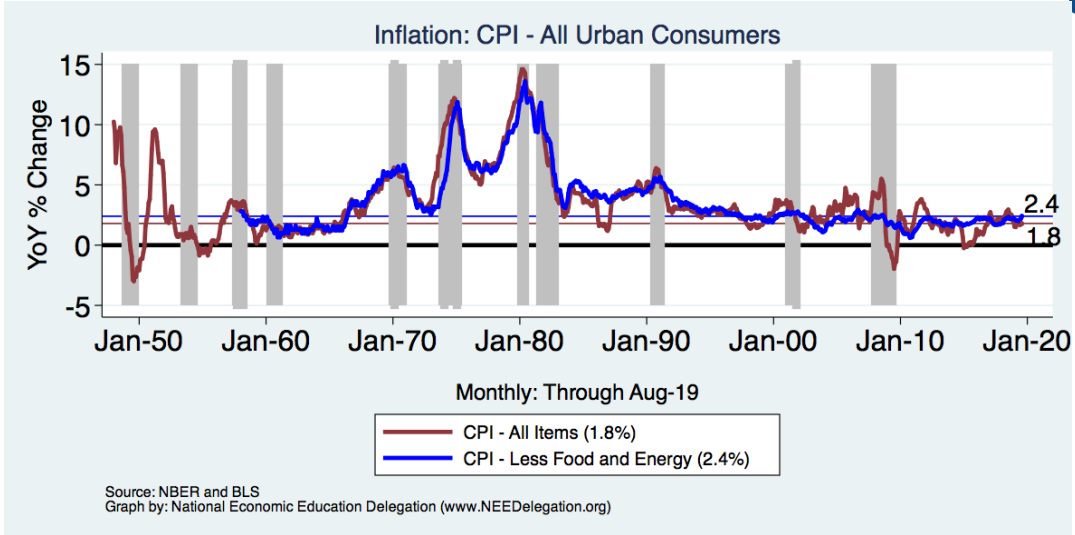
# Treasuries



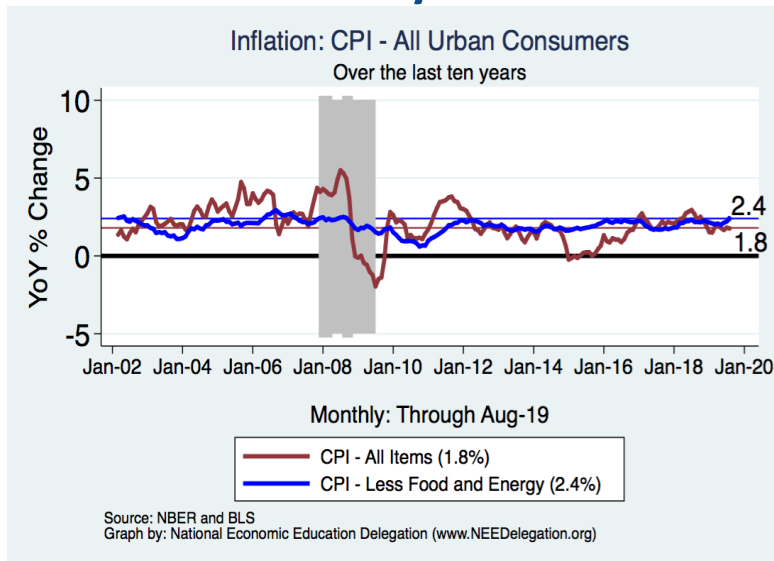
# Alarming Compression of Interest Rates



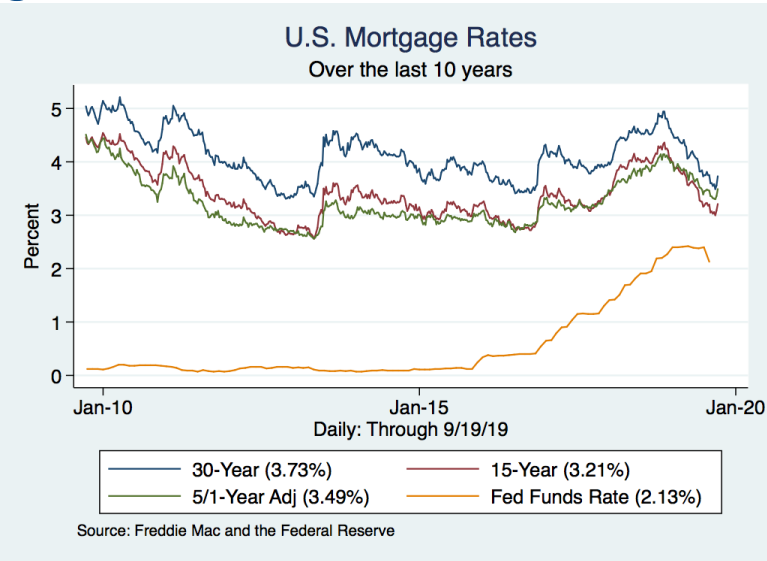
# Inflation



# Inflation – Recent Stability

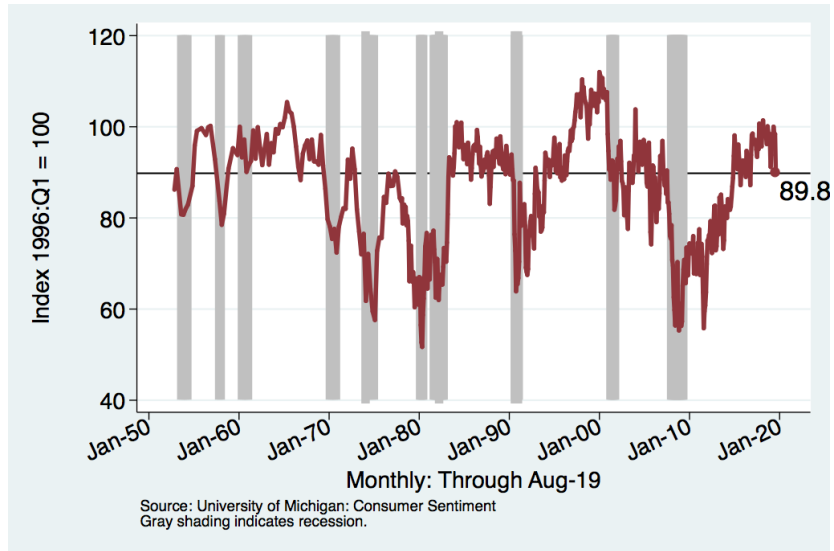


# Mortgage Rates

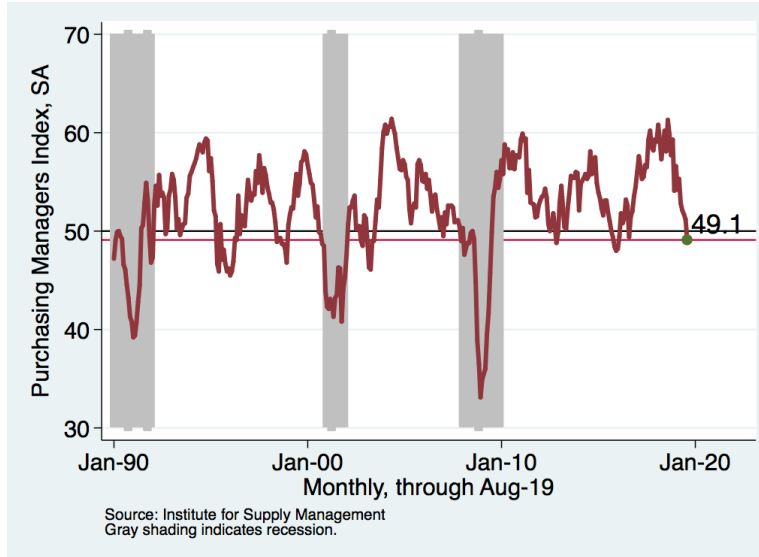


# Other Indicators

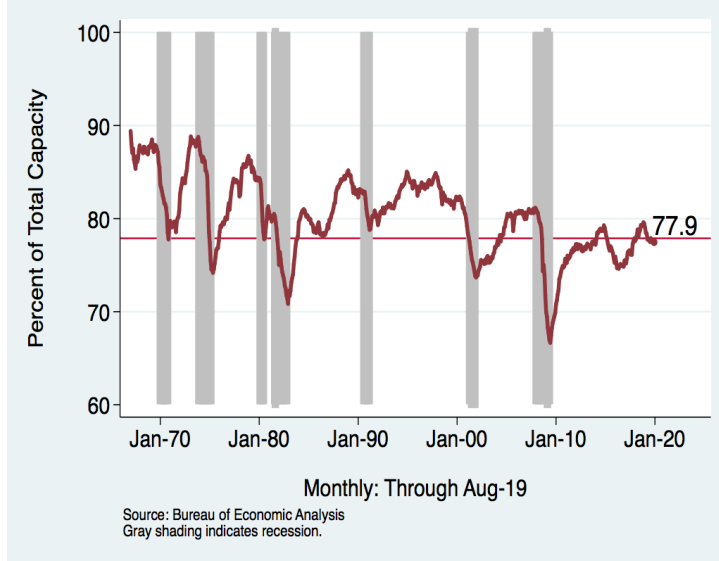
## Consumer Confidence: Crashing?



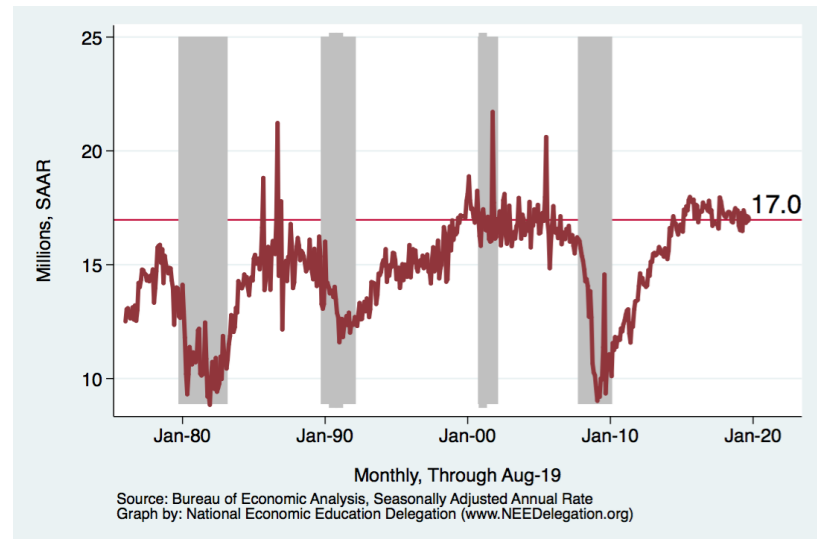
## Producer Confidence: Not What it Used to be!



# Capacity Utilization

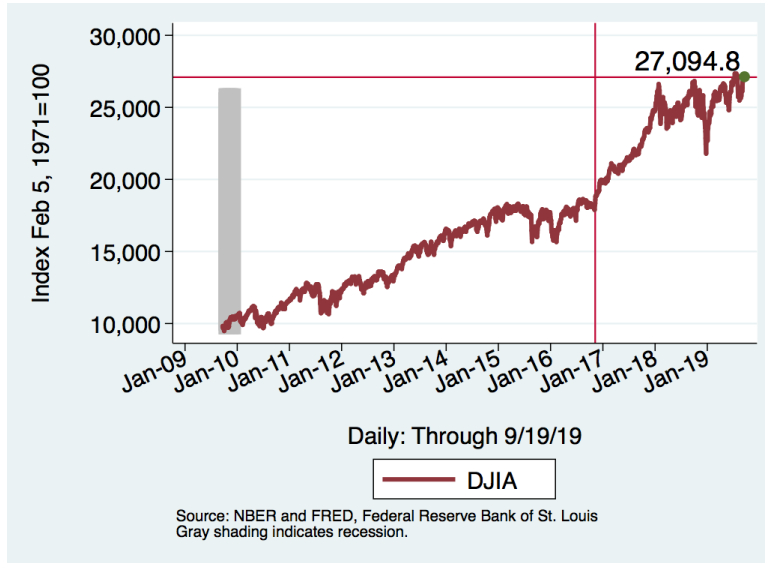


# Automobile and Light Truck Sales



# Stock Markets

## Dow Jones



## 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 are growing, but slowly.

- **Monetary Policy**

- Interest rates are likely to continue falling.



## Things to Be Worried About

- **Middle East**

- **Yield Curve**

- **Government Debt**

- **Growth Abroad**

- **Income and Wealth Inequality**

- **Corporate Debt**

- **Policy Uncertainty**

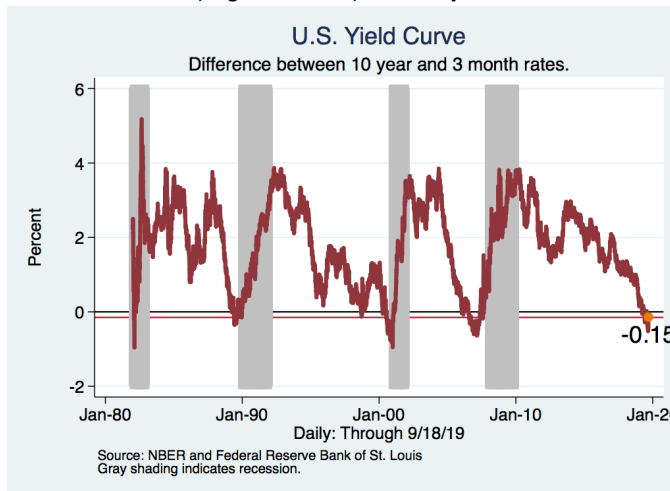
- Trade and immigration policy, especially





# Alarming Compression of Interest Rates

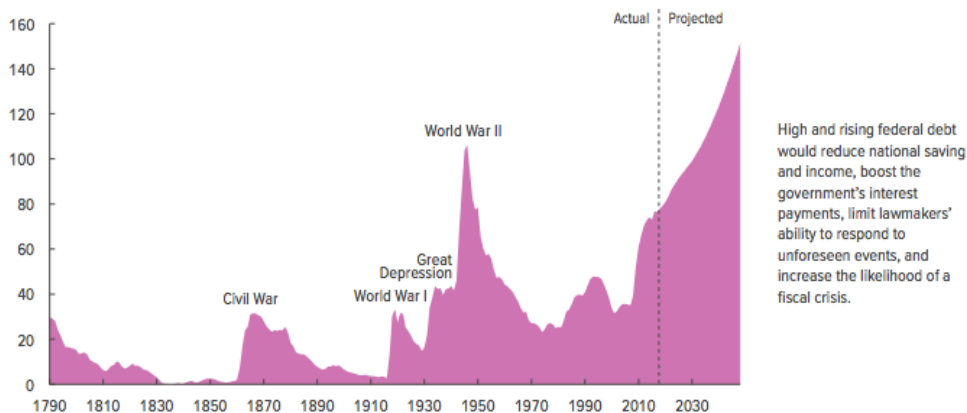
Inverted Yield Curves (negative values) Have Projected Recent Recessions



# Federal Government Debt Projections

## Federal Debt Held by the Public

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

## Overall Summary

- **Tailwinds and headwinds both exist**
  - Economic forecasts for near term are moderate, but gaining pessimism.
  - 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
  - Business investment is slowing
  - Slack in housing markets
- **Long term concerns unaddressed...**
- **Yield curve and Geopolitical concerns**



## Teasers: Upcoming Lectures

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



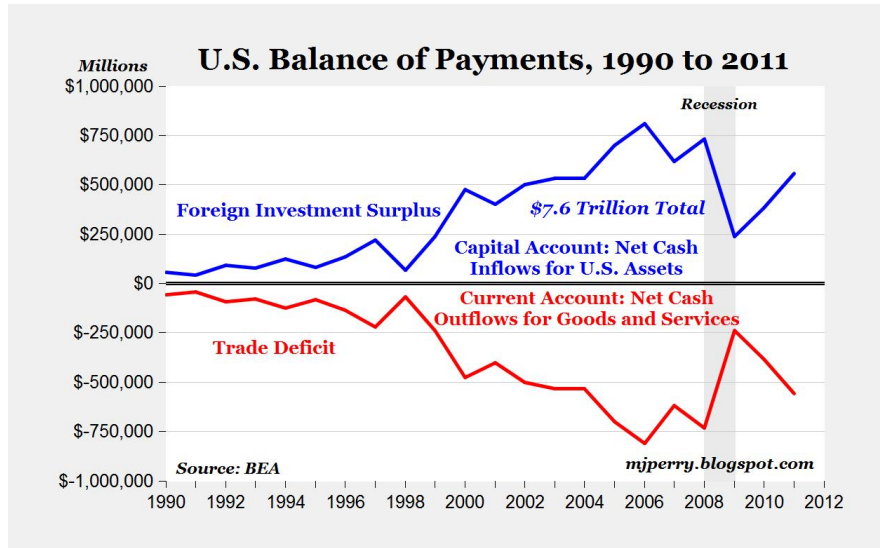
# What Does the U.S. Gov't Budget Look Like?

## 2018 Budget Summary

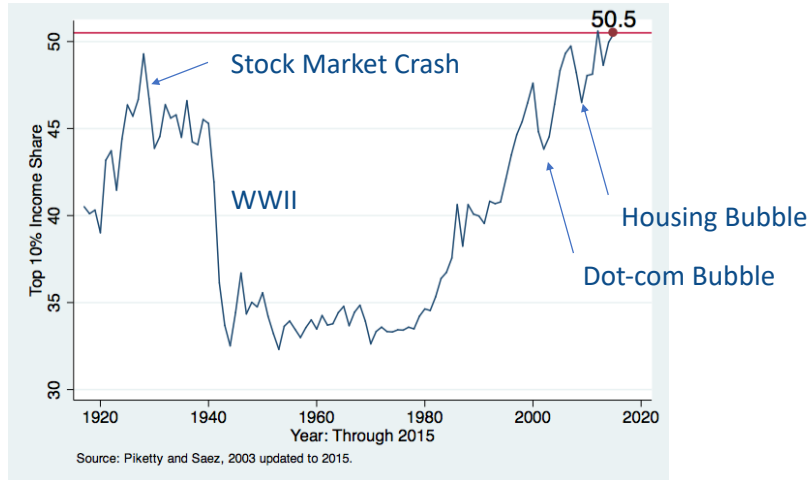
Revenue	Billions	Expenditures	Billions
Income Taxes	\$1,684	Mandatory	\$2,520
Payroll Taxes	\$1,171	Discretionary	\$1,263
Corporate Taxes	\$205	Interest	\$325
Other	\$270		
<b>Total</b>	<b>\$3,329</b>	<b>Total</b>	<b>\$4,108</b>

Budget Deficit **\$779 Billion**

# I Don't Care About the Trade Deficit

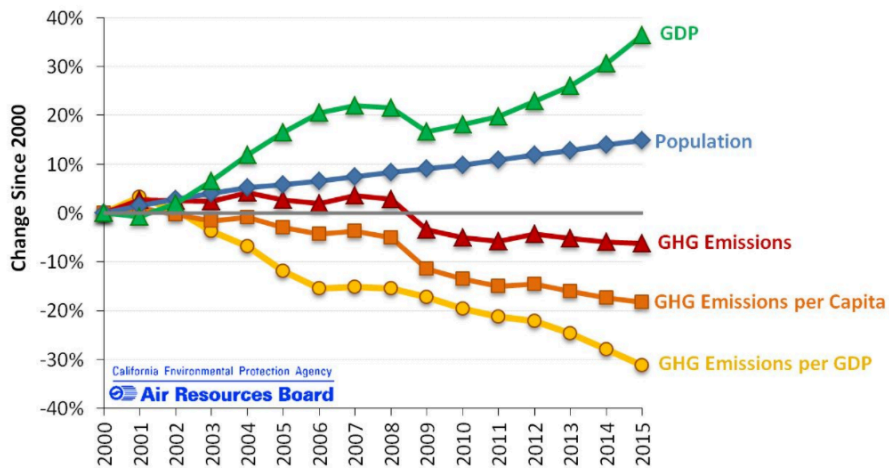


## National Income Inequality: Share of Top 10%

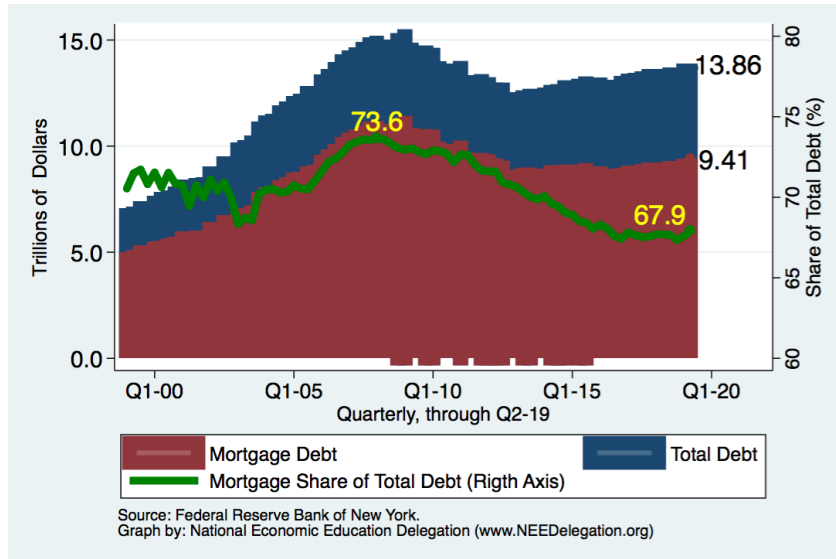


Source: Piketty and Saez, 2003 updated to 2015. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

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



# Housing Debt



# Thank you!

## Any Questions?

[www.NEEDelegation.org](http://www.NEEDelegation.org)

Jon Haveman, Ph.D.

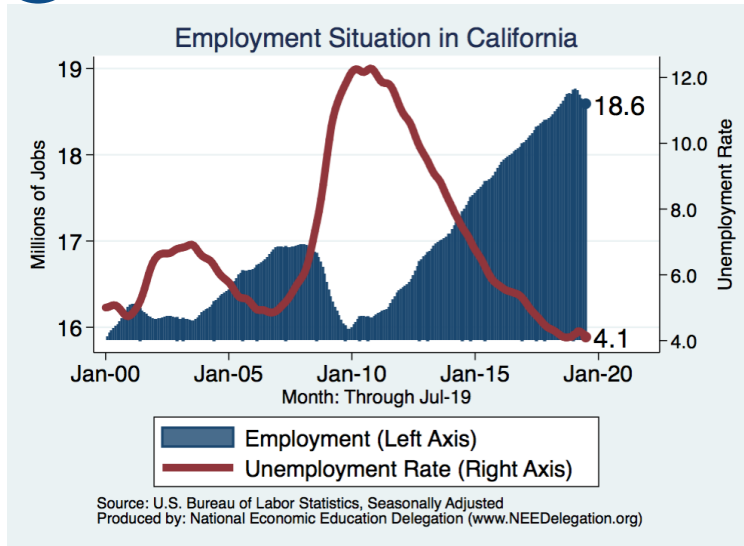
Jon@NEEDelegation.org

Contact NEED: [info@needelegation.org](mailto:info@needelegation.org)

Submit a testimonial: [www.NEEDelegation.org/testimonials.php](http://www.NEEDelegation.org/testimonials.php)

# The Local Economy

## CA Employment Growth is Slowing



**Growth Rate:**

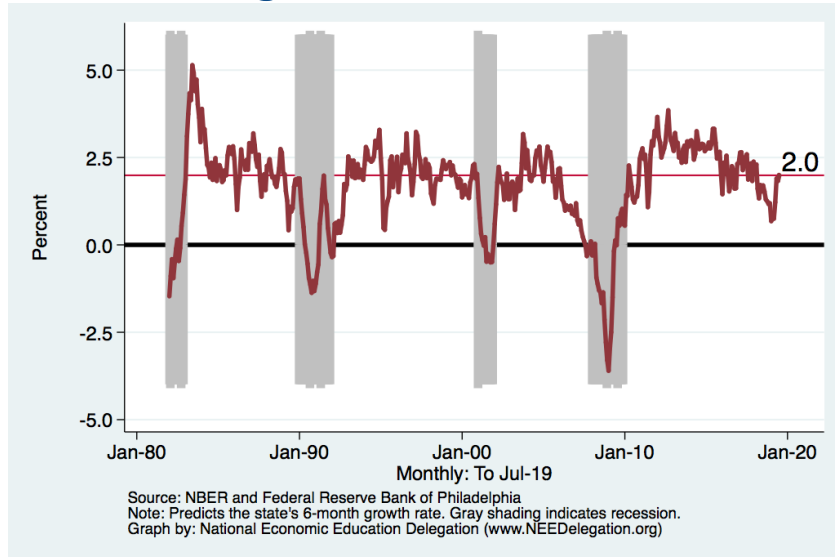
Last Month: 1.4%

Last Year: 1.8%

Last 3 Years: 2.0%

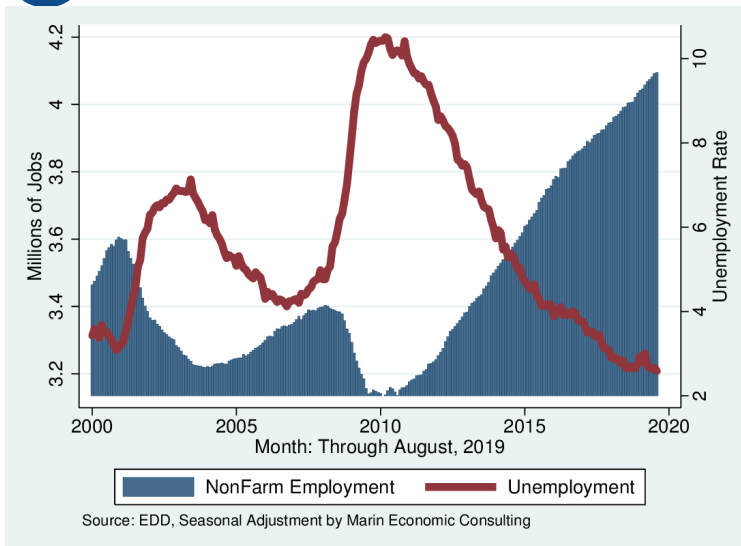
Last 5 Years: 2.5%

## California Leading Index



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## Bay Area is Growing Well: Employment



**Growth Rate:**

Last Month: 2.5%

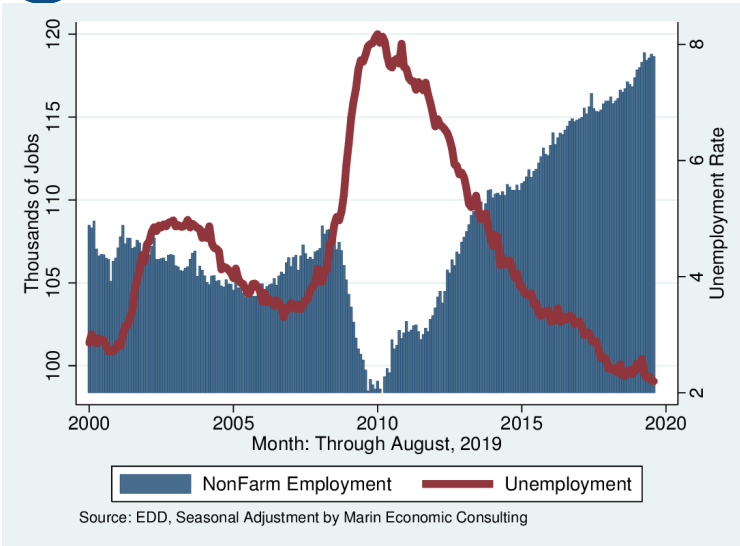
Last Year: 2.4%

Last 3 Years: 2.3%

Last 5 Years: 3.0%

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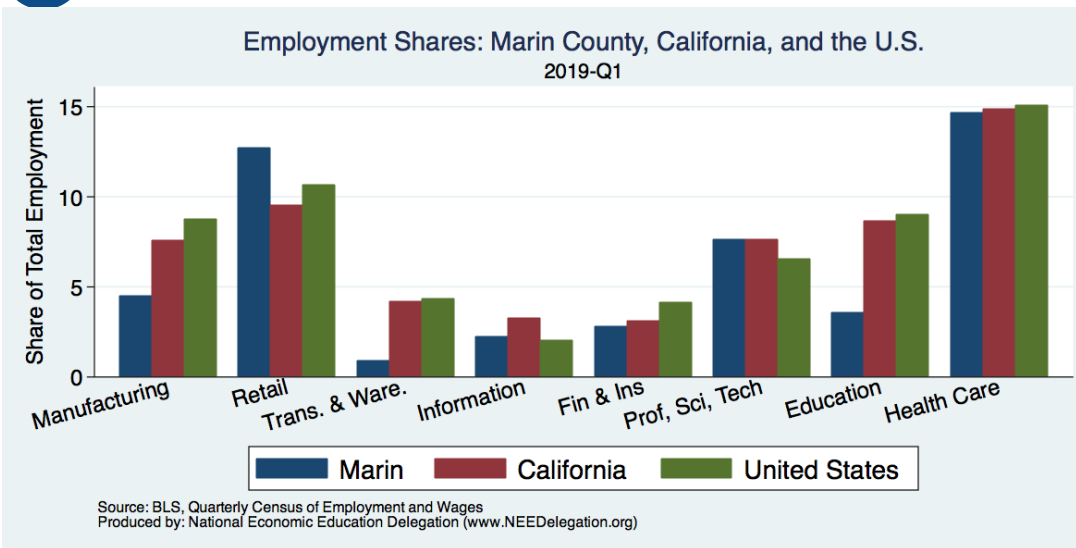
## Employment Situation: Marin County



**Growth Rate:**

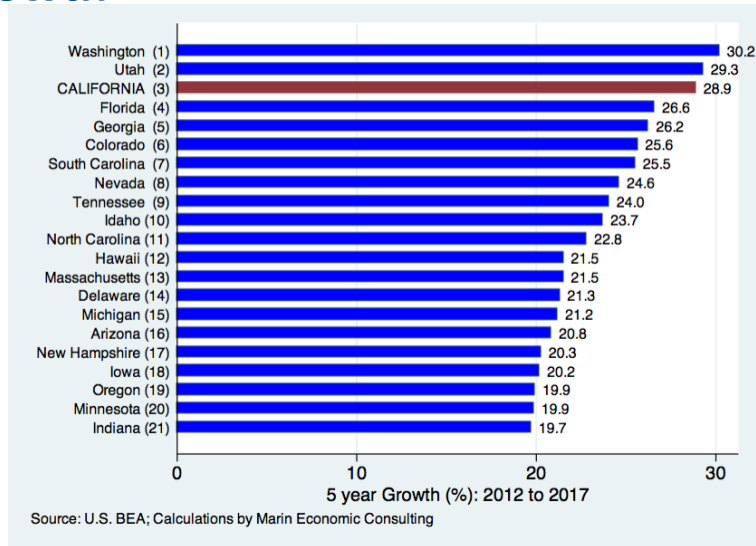
- Last Month: 2.2%
- Last Year: 2.0%
- Last 3 Years: 1.3%
- Last 5 Years: 1.4%

## Marin Employment Shares



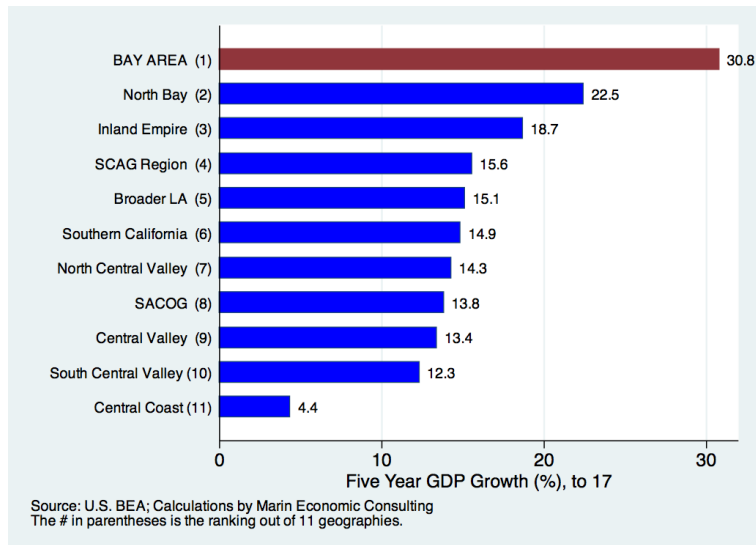


## GSP Growth



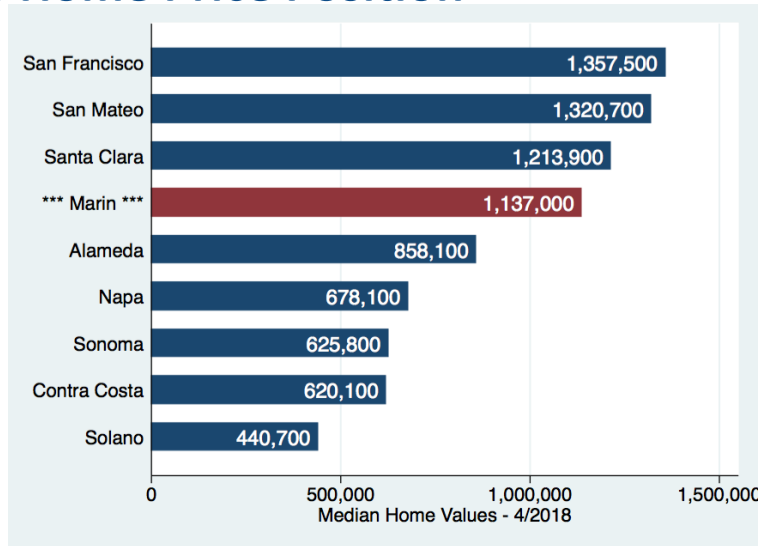
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## Bay Area is Growing Well: GSP – Over 5 Years



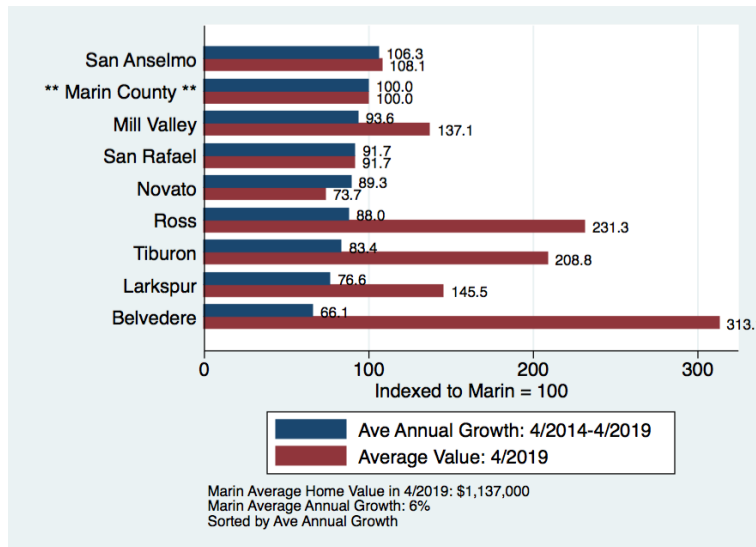
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## Marin's Home Price Position



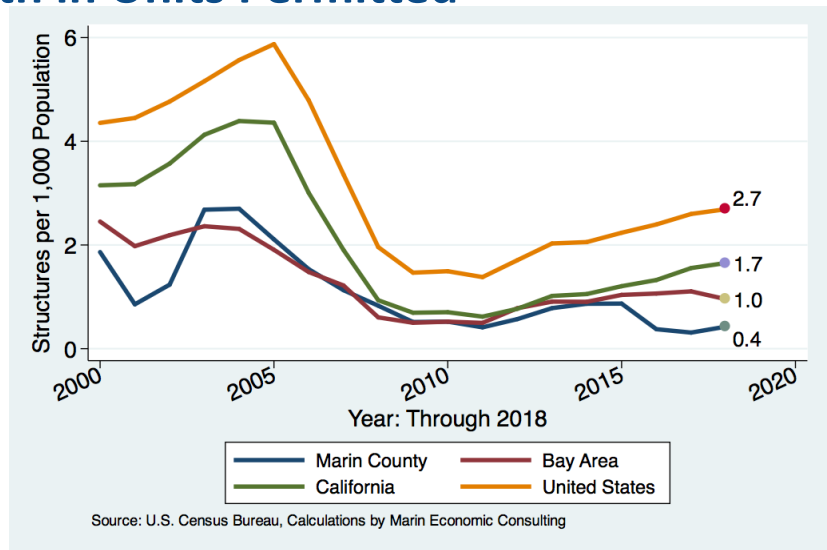
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## Home Price Appreciation w/in Marin



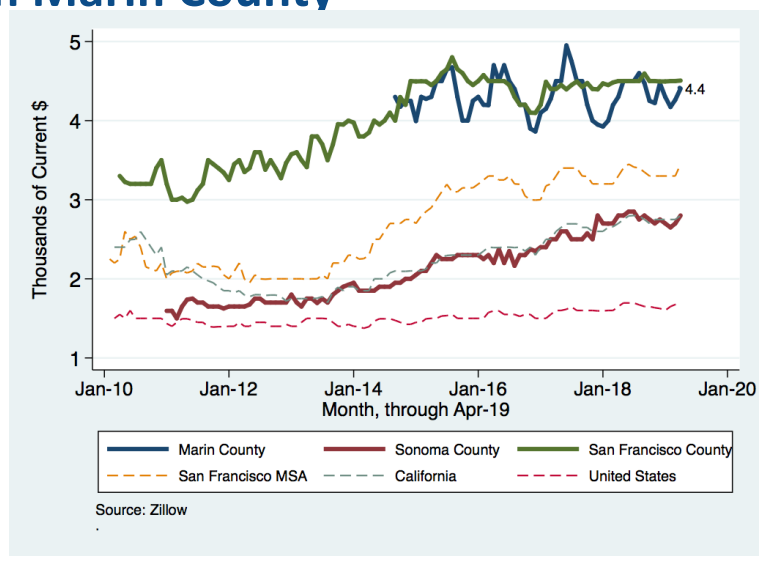
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## Growth in Units Permitted



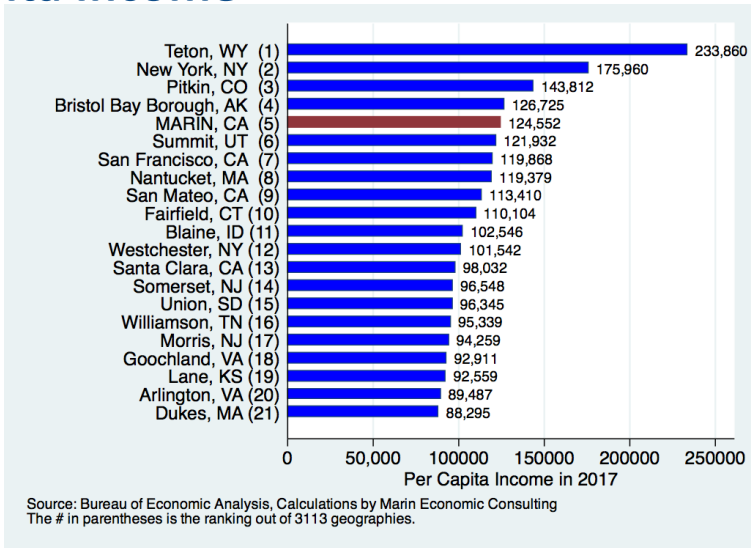
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## Rents in Marin County

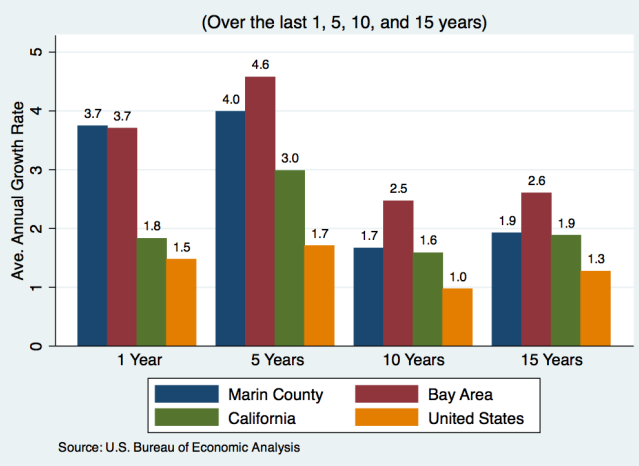
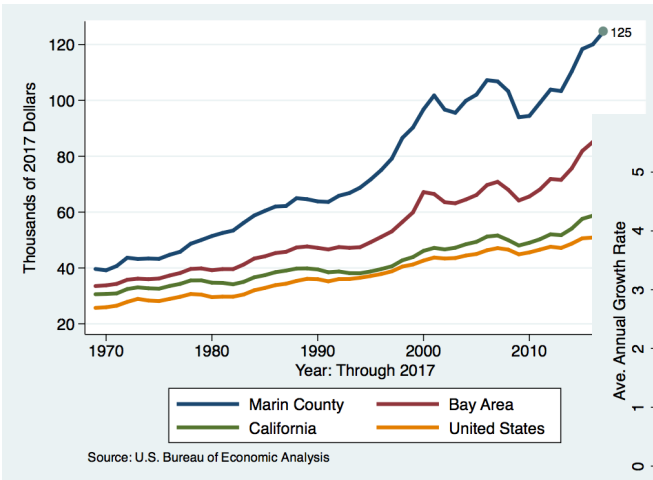


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# Per Capita Income



# Per Capita Income is High and Growing Quickly

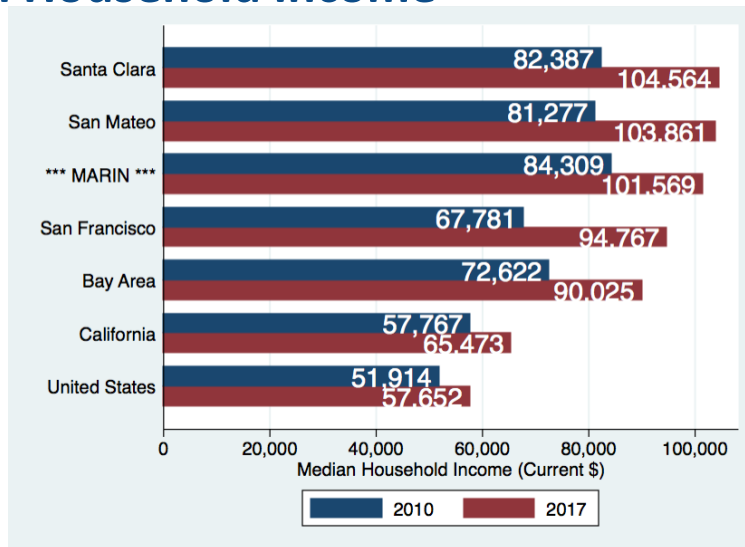


## Migration into Marin



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## Median Household Income



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# Educational Attainment

