#### Macroeconomic Outlook

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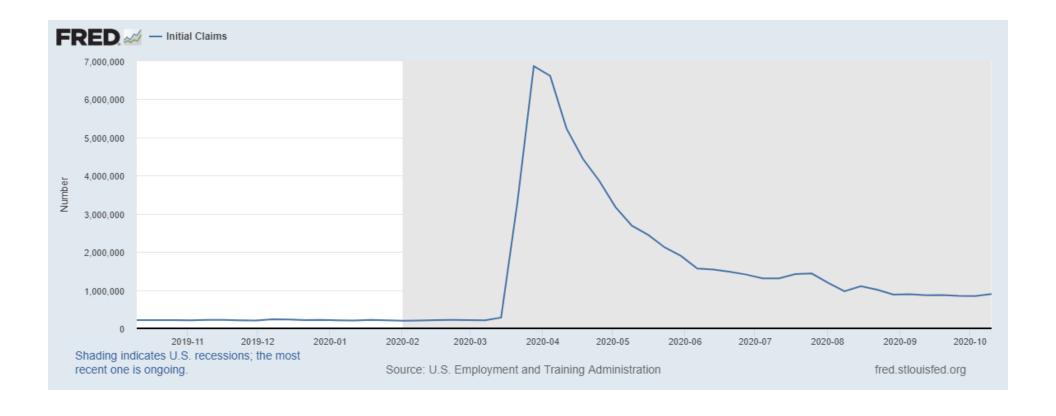


## Unemployment One of the Biggest Stories of the COVID Pandemic



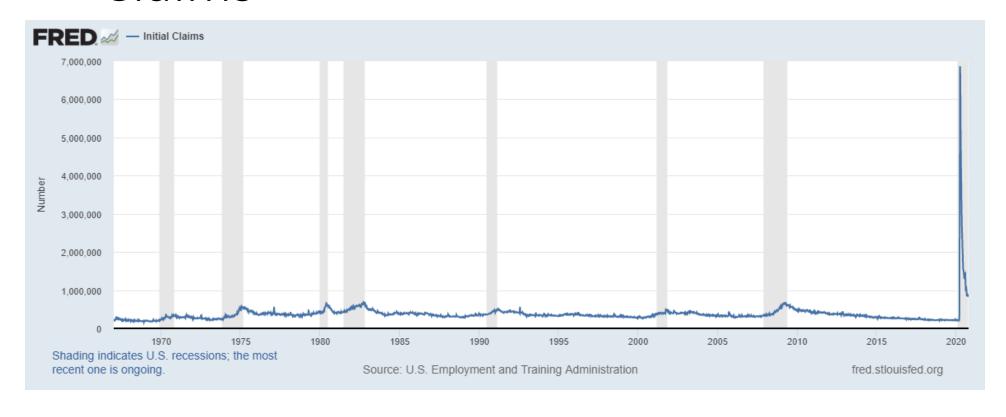


#### 1 Year U.S. Initial Jobless Claims



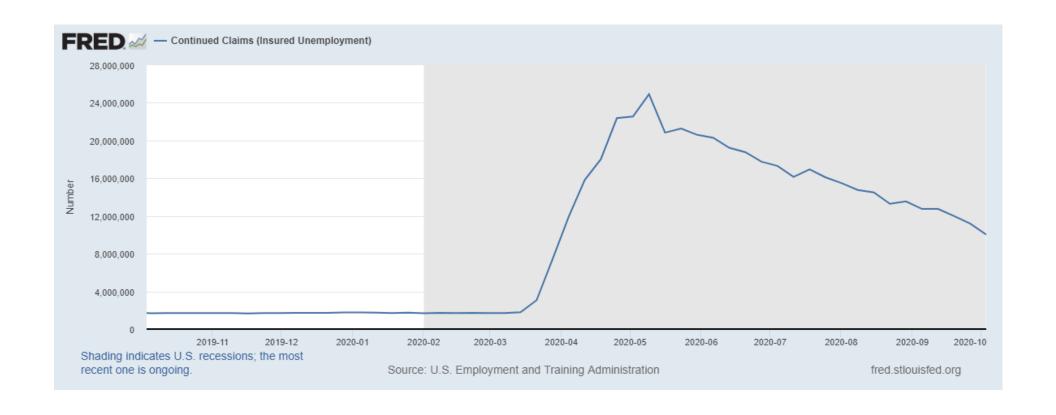


# Historical U.S. Initial Jobless Claims



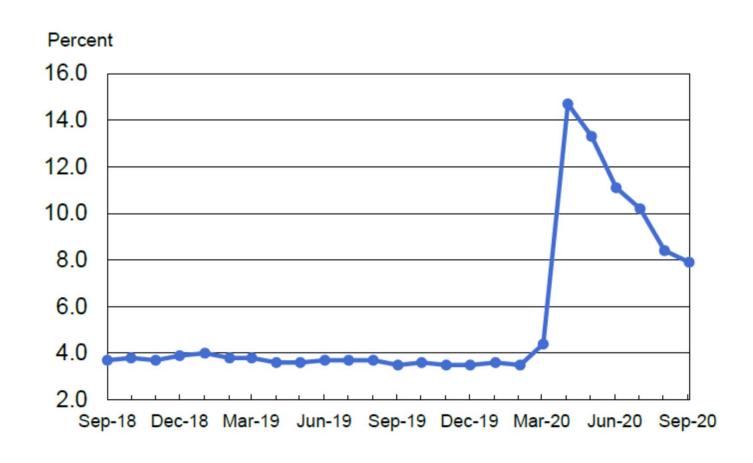


#### Continued Jobless Claims Perisist





# BLS Unemployment Rate October 2020

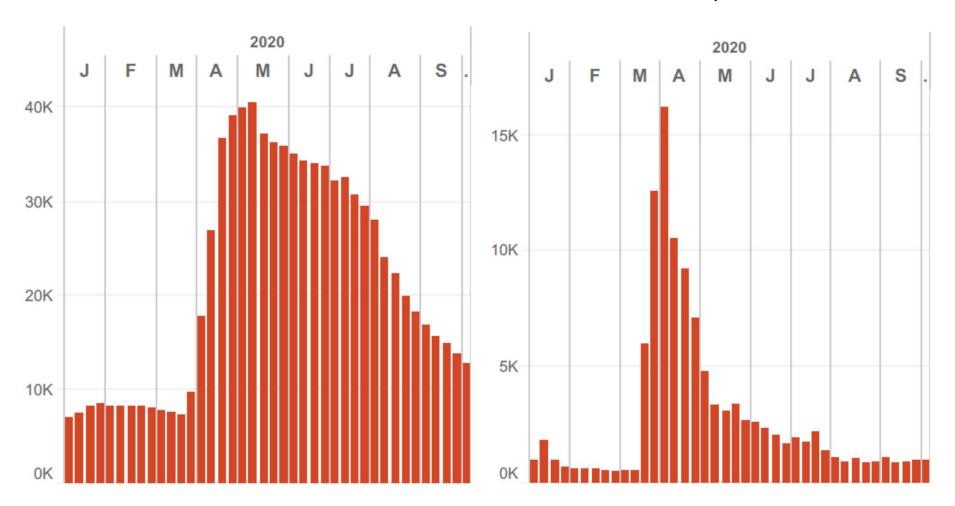




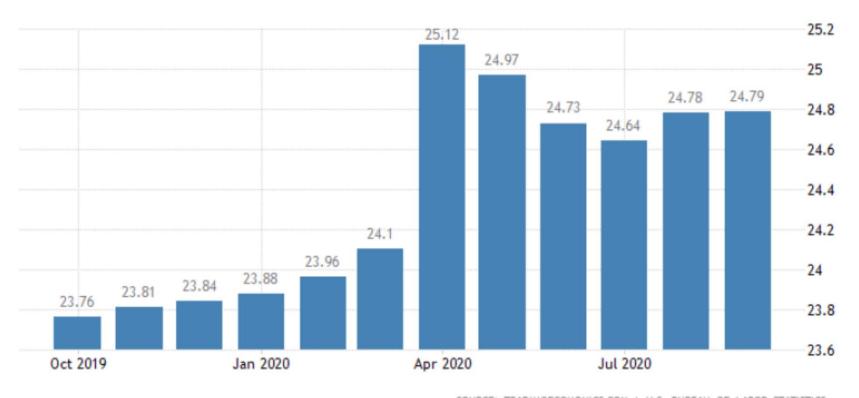
#### North Dakota Unemployment Situation

North Dakota Continuous Jobless Claims

North Dakota Weekly Initial Jobless Claims



## Average U.S. Hourly Wages

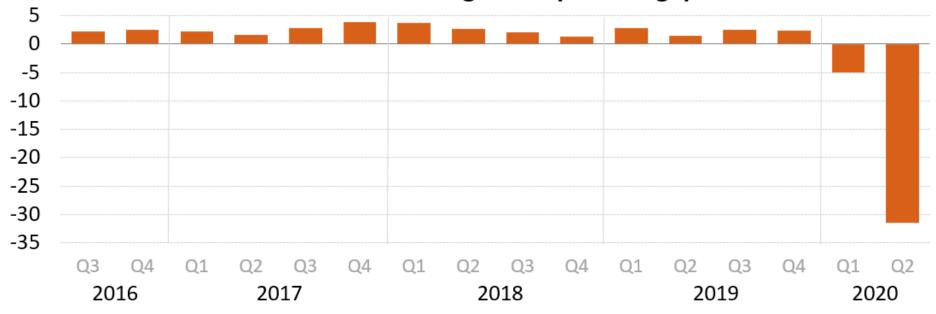


SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS



#### GDP Decreased 32.8% in Q2 2020

#### Real GDP: Percent change from preceding quarter



U.S. Bureau of Economic Analysis

Seasonally adjusted at annual rates



### 3<sup>rd</sup> Quarter GDP Projections

- Bank of America 27% Growth
- Morgan Stanley 21.3%
- HIS Markit 20.1%
- S&P Global 22%
- Atlanta Federal Reserve 20%
- Previous record of annualized GDP growth in 1 quarter was 16.7% in 1950



## 4<sup>th</sup> Quarter GDP Projections

- Bank of America 3%
- Wall Street Journal 3.8%
- New York Fed 4.8%
- Conference Board of Economic Forecast for U.S. 1.5%

#### Note:

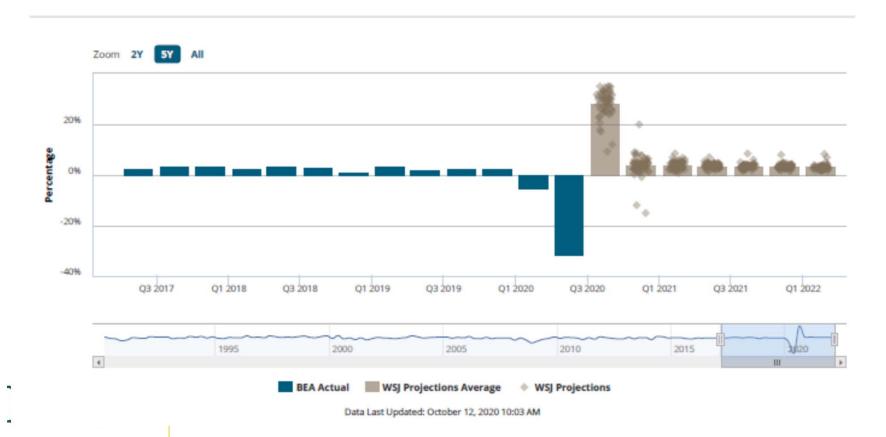
- -Recession is defined as 2 consecutive quarters of negative growth (Q1 & Q2 of 2020 qualify).
- Recession ends after 2 consecutive quarters of 0% ≤ (Q3 & Q4 would qualify)



# Wall Street Journal Economists GDP Projections to 2022

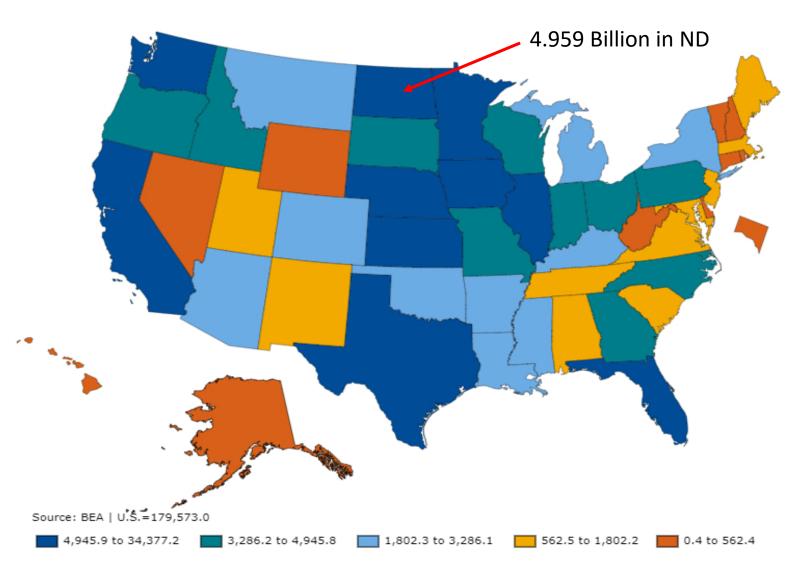
#### GDP Quarterly

Actual gross domestic product annualized rates and projections by Wall Street Journal economists.



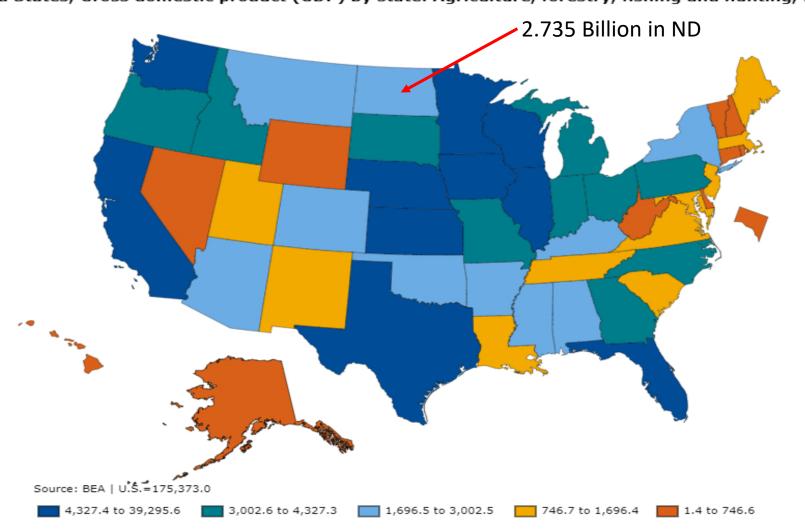
#### Agricultural GDP by State - 2012

United States, Gross domestic product (GDP) by state: Agriculture, forestry, fishing and hunting, 2012



## Agricultural GDP by State - 2019

United States, Gross domestic product (GDP) by state: Agriculture, forestry, fishing and hunting, 2019



#### Consumer Asset Values

- For most consumers in the U.S., the largest assets they have includes
  - Their home
  - Their retirement portfolio
- Consumer sentiment heavily tied to stock/bond markets and home values
- Low interest rates hurt new bond investors but helps prop up large asset values such as homes or land



## University of Michigan Consumer Confidence Index



SOURCE: TRADINGECONOMICS.COM | UNIVERSITY OF MICHIGAN



# 1- Year Dow Jones Industrial Average



#### 3-Year S&P 500 Index



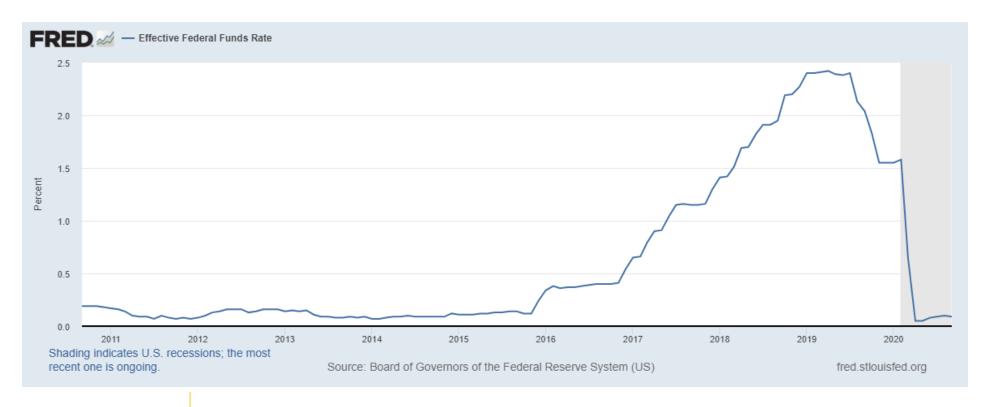


#### 10 Year Treasury: Constant Maturity





#### Federal Funds Rate At or Near 0





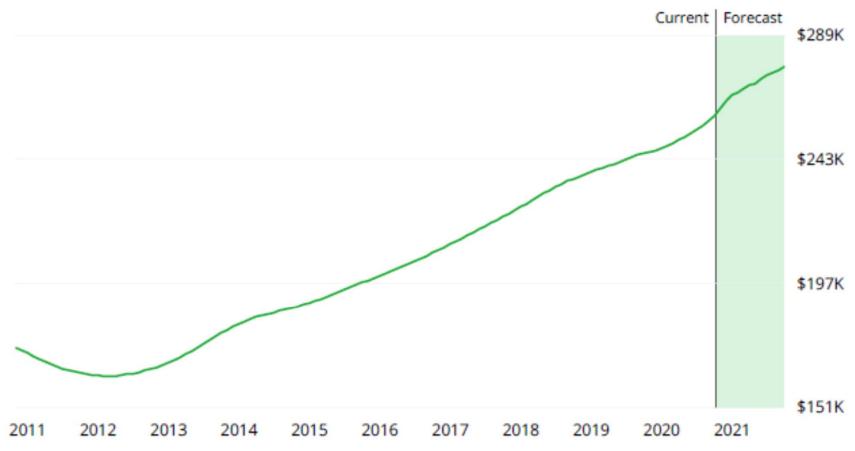
# New Housing Starts — St. Louis FED





#### Zillow Home Price Forecasts

United States Home Prices & Home Values | Zillow





# State and Federal Funding Impacts

- Local and State Governments facing lower tax revenues while dealing with greater spending on social safety nets
- Federal relief programs in the trillions of dollars adding to the growing federal debt and deficits



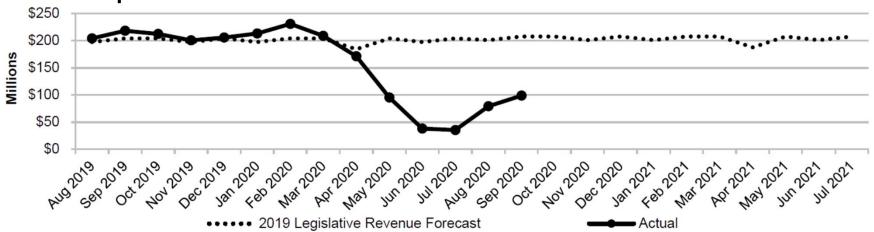


### ND General Fund Tax Revenues September Report

| Amounts Shown in Millions                  |          |          |           |         |                  |   |          |         |
|--|----------|----------|-----------|---------|------------------|---|----------|---------|
|  |          | Augus    | t 2020    |         | Biennium to Date |   |          |         |
|  |          |          | Varia     | ance    |                  |   | Variance |         |
|  | Actual   | Forecast | Amount    | Percent | Actual           | Forecast                                    | Amount   | Percent |
| Tax and fee revenues                       |          |          |           |         |                  |   |          |         |
| Sales and use taxes                        | \$67.64  | \$90.68  | (\$23.04) | (25%)   |                  |   |          | 0%      |
| Motor vehicle excise tax                   | 11.95    | 11.92    | 0.03      | 0%      | 142.21           | 146.19                                      | \ /      | (3%)    |
| Individual income tax                      | 10.95    | 14.42    | (3.47)    | (24%)   |                  | 470.32                                      |          | 4%      |
| Corporate income tax                       | 0.03     | 0.38     | (0.35)    | (92%)   |                  |   |          | 39%     |
| Oil and gas taxes                          | 23.41    | 23.41    | 0.00      | 0%      | 374.02           |   |          | 0%      |
| Coal conversion tax                        | 1.59     | 1.64     | (0.05)    | (3%)    |                  |   |          | 2%      |
| Cigarette and tobacco tax                  | 2.37     | 2.16     | 0.21      | 10%     |                  |   |          | 4%      |
| Wholesale liquor tax                       | 0.82     | 0.78     | 0.04      | 5%      |                  | 11.05                                       |          | (1%)    |
| Gaming tax                                 | 1.26     | 0.47     | 0.79      | 168%    |                  |   |          | 227%    |
| Insurance premium tax                      | 0.00     | 0.00     | 0.00      | N/A     | 52.90            | 42.26                                       |          | 25%     |
| Departmental collections                   | 1.12     | 2.33     | (1.21)    | (52%)   |                  | 37.79                                       |          | 6%      |
| Interest income                            | 0.63     | 0.42     | 0.21      | 50%     |                  | 4.09  |          | 198%    |
| Mineral leasing fees                       | 0.62     | 1.41     | (0.79)    | (56%)   | 24.59            | 22.72                                       | 1.87     | 8%      |
| Total tax and fee revenues                 | \$122.39 | \$150.02 | (\$27.63) | (18%)   | \$2,422.08       | \$2,343.12                                  | \$78.96  | 3%      |
| Transfers and other sources                |          |          |           |         |                  |   |          |         |
| Bank of North Dakota profits               | \$0.00   | \$0.00   | \$0.00    | N/A     |                  | \$70.00                                     |          | 0%      |
| Mill and Elevator Association profits      | 0.00     | 0.00     | 0.00      | N/A     |                  | 6.70  | \ /      | (19%)   |
| Lottery                                    | 0.00     | 0.00     | 0.00      | N/A     | 2204022243       | 1,200 10 10 10 10 10 10 10 10 10 10 10 10 1 | \        | (33%)   |
| Gas tax administration                     | 0.00     | 0.00     | 0.00      | N/A     |                  |   |          | 0%      |
| Legacy fund                                | 0.00     | 0.00     | 0.00      | N/A     |                  |   |          | N/A     |
| Tax relief fund                            | 0.00     | 0.00     | 0.00      | N/A     | 8.60             | 8.60  | 0.00     | 0%      |
| Strategic investment and improvements fund | 0.00     | 0.00     | 0.00      | N/A     | 764.40           | 764.40                                      |          | 0%      |
| Research North Dakota fund                 | 0.00     | 0.00     | 0.00      | N/A     |                  |   |          | N/A     |
| Remaining transfers and other sources      | 0.00     | 0.00     | 0.00      | N/A     | 1.06             | 0.00  | 1.06     | N/A     |
| Total transfers and other sources          | \$0.00   | \$0.00   | \$0.00    | N/A     | \$854.82         | \$857.06                                    | (\$2.24) | 0%      |
| Total general fund revenues                | \$122.39 | \$150.02 | (\$27.63) | (18%)   | \$3,276.90       | \$3,200.18                                  | \$76.72  | 2%      |

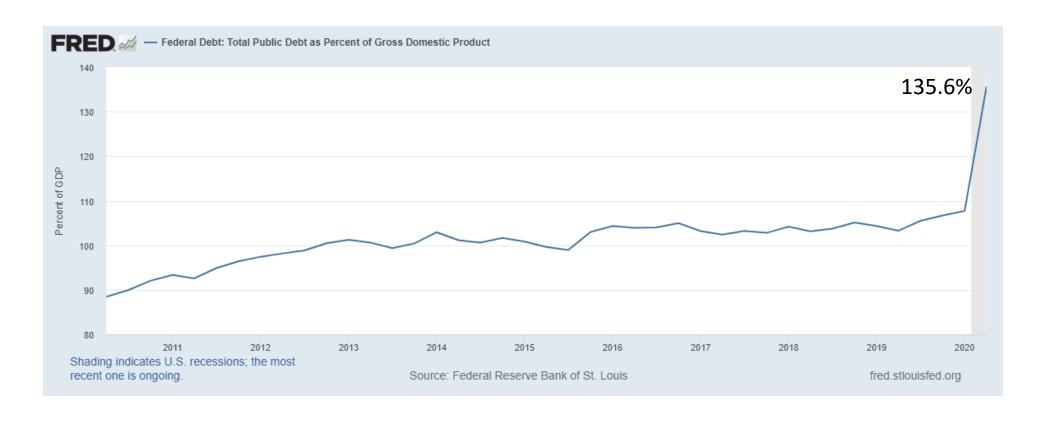


#### Oil and Gas Tax Revenues September Report



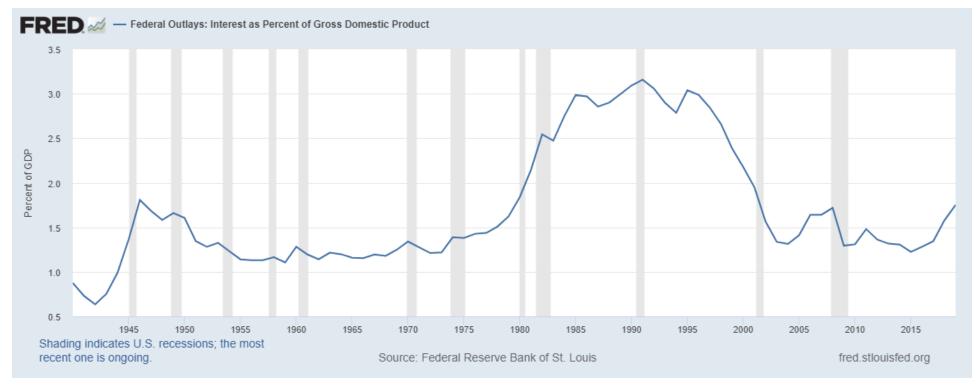
| Amounts Shown in Millions                  |                |          |            |         |                  |            |            |         |  |
|--|----------------|----------|------------|---------|------------------|------------|------------|---------|--|
|  | September 2020 |          |            |         | Biennium to Date |            |            |         |  |
|  |                |          | Varia      | nce     |                  |            | Variance   |         |  |
|  | Actual         | Forecast | Amount     | Percent | Actual           | Forecast   | Amount     | Percent |  |
| Three Affiliated Tribes                    | \$11.96        | \$22.50  | (\$10.54)  | (47%)   | \$243.56         | \$304.49   | (\$60.93)  | (20%)   |  |
| Legacy fund                                | 26.13          | 55.60    | (29.47)    | (53%)   | 591.36           | 752.55     | (161.19)   | (21%)   |  |
| North Dakota outdoor heritage fund         | 0.67           | 1.35     | (0.68)     | (50%)   | 8.17             | 8.85       | (0.68)     | (8%)    |  |
| Abandoned well reclamation fund            | 0.34           | 0.68     | (0.34)     | (50%)   |                  | 8.18       | \ /        | (18%)   |  |
| Political subdivisions                     | 29.33          | 43.30    | (13.97)    | (32%)   |                  | 396.62     | (58.55)    | (15%)   |  |
| Common schools trust fund                  | 3.94           | 9.14     | (5.20)     | (57%)   |                  | 123.67     | (31.84)    | (26%)   |  |
| Foundation aid stabilization fund          | 3.94           | 9.14     | (5.20)     | (57%)   |                  | 123.67     | (31.84)    | (26%)   |  |
| Resources trust fund                       | 8.08           | 18.73    | (10.65)    | (57%)   |                  | 253.53     | (65.27)    | (26%)   |  |
| Oil and gas research fund                  | 0.29           | 0.12     | 0.17       | 142%    | 13.10            | 16.00      | (2.90)     | (18%)   |  |
| State energy research center fund          | 0.00           | 0.00     | 0.00       |         |                  | 5.00       | 0.00       |         |  |
| General fund                               | 14.39          | 0.00     | 14.39      | N/A     | 388.41           | 400.00     | (11.59)    | (3%)    |  |
| Tax relief fund                            | 0.00           | 0.00     | 0.00       | N/A     | 200.00           | 200.00     | 0.00       | 0%      |  |
| Budget stabilization fund                  | 0.00           | 0.00     | 0.00       | N/A     | 48.43            | 75.00      | (26.57)    | (35%)   |  |
| Lignite research fund                      | 0.00           | 0.00     | 0.00       | N/A     | 0.00             | 10.00      | (10.00)    | (100%)  |  |
| State disaster relief fund                 | 0.00           | 0.00     | 0.00       | N/A     | 0.00             | 0.00       | 0.00       | N/A     |  |
| Municipal infrastructure fund              | 0.00           | 0.00     | 0.00       | N/A     | 0.00             | 30.38      | (30.38)    | (100%)  |  |
| Strategic investment and improvements fund | 0.00           | 47.29    | (47.29)    | (100%)  |                  | 105.04     | (105.04)   | (100%)  |  |
| County and township infrastructure fund    | 0.00           | 0.00     | 0.00       |         |                  | 0.00       | 0.00       |         |  |
| Airport infrastructure fund                | 0.00           | 0.00     | 0.00       | N/A     | 0.00             | 0.00       | 0.00       | N/A     |  |
| Total oil and gas tax revenue allocations  | \$99.07        | \$207.85 | (\$108.78) | (52%)   | \$2,214.75       | \$2,812.98 | (\$598.23) | (21%)   |  |

#### Debt as a Percentage of GDP





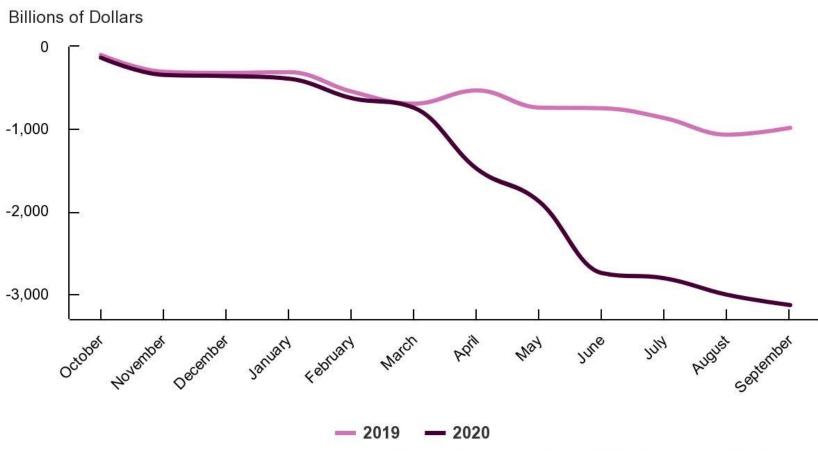
# Interest on Govt. Debt as a Percentage of GDP





# Congressional Budget Office 2019 vs 2020 Deficits

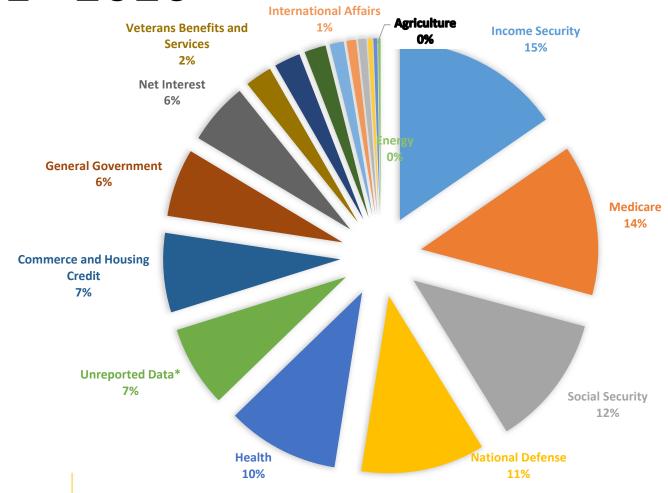
#### Monthly Cumulative Deficits Fiscal Years 2019 and 2020



Sources: Congressional Budget Office; Department of the Treasury.

The value shown for September 2020 is CBO's estimate.

# 8.7 Trillion Dollars Spent as of Aug 31<sup>st</sup> 2020





#### Ag Department Funding

- 58.5% Farm Income Spatialization- 30.3 Billion
  - 53.1% Federal Crop/RMA
  - 37.5% CCC Fund
  - 7.4% FSA Salaries and Services
  - 1.2% Conservation and Services
- 41.5 % Agricultural Research and Services-12.6 Billion
  - 38% Processing and Research Marketing Sec. Ag.
  - 10.8% Plant/Animal Health Inspection
  - 10% ARS
  - 8.1% Working Capital Fund
  - 7.6% Research and Ed
  - 6.2% Buildings and facilities
  - 4.3% Extension Activities
  - 2.7% Marketing Services
  - 1.6% NASS



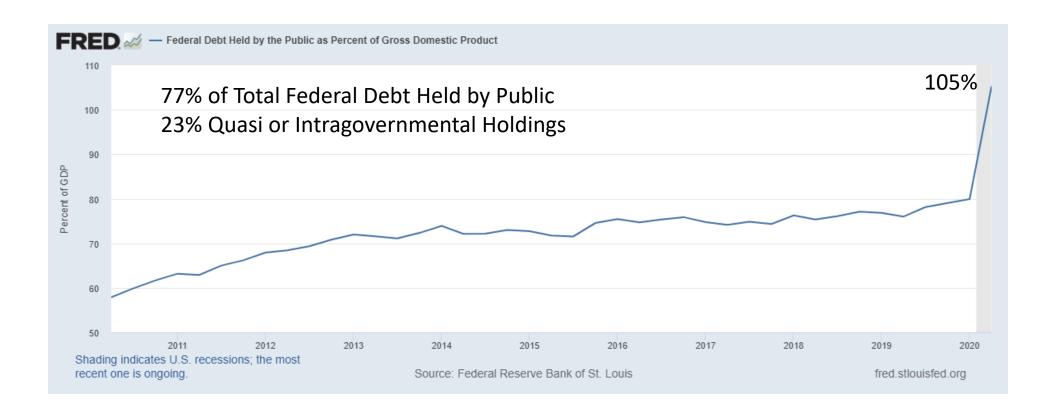
### PPP Subsidies by Industry: U.S. BEA

|      |  | Lev | els   | Change from preceding quarter |  |
|------|--|-----|-------|-------------------------------|--|
| Line |  | 20  | 20    | 2020                          |  |
|      |  | Q1  | Q2    | Q2                            |  |
| 1    | Total Paycheck Protection Program Subsidies to Private Industries <sup>1</sup> |     | 609.3 | 609.3                         |  |
| 2    | Agriculture, forestry, fishing, and hunting                                    |     | 10.2  | 10.:                          |  |
| 3    | Mining   |     | 5.9   | 5.5                           |  |
| 4    | Utilities  |     | 1.8   | 1.8                           |  |
| 5    | Construction \$\$\$  |     | 83.5  | 83.5                          |  |
| 6    | Manufacturing \$\$   |     | 69.8  | 69.8                          |  |
| 7    | Durable goods  |     | 22.3  | 22.3                          |  |
| 8    | Nondurable goods   |     | 47.5  | 47.5                          |  |
| 9    | Wholesale trade \$   |     | 35.8  | 35.:                          |  |
| 10   | Retail trade \$\$  |     | 52.1  | 52.3                          |  |
| 11   | Transportation and warehousing\$   |     | 22.0  | 22.0                          |  |
| 12   | Information  |     | 11.6  | 11.0                          |  |
| 13   | Finance and insurance  |     | 15.6  | 15.0                          |  |
| 14   | Real estate and rental and leasing \$  |     | 20.0  | 20.0                          |  |
| 15   | Professional, scientific, and technical services \$\$\$                        |     | 84.1  | 84.:                          |  |
| 16   | Management of companies and enterprises  |     | 2.0   | 2.0                           |  |
| 17   | Administrative and waste management services\$                                 |     | 33.9  | 33.9                          |  |
| 18   | Educational services   |     | 5.6   | 5,0                           |  |
| 19   | Health care and social assistance \$\$   |     | 67.6  | 67.0                          |  |
| 20   | Arts, entertainment, and recreation  |     | 7.9   | 7.5                           |  |
| 21   | Accommodation and food services \$\$   |     | 54.4  | 54.4                          |  |
| 22   | Other services, except government \$   |     | 25.4  | 25.4                          |  |



80 Billion Plus \$\$\$
50-79 Billion \$\$
20-49 Billion \$

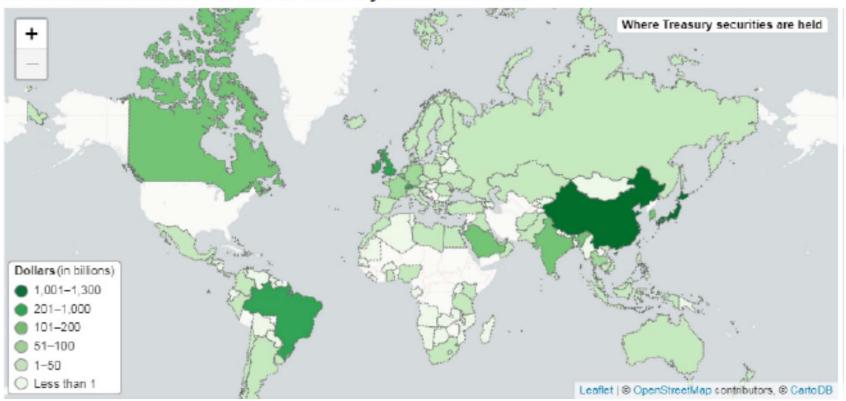
#### Who Owns Federal Debt?





#### Who Owns Federal Debt

#### In which countries are the most Treasury securities held?





#### Who Owns Federal Debt?

- Foreign: \$6.81 trillion (in July 2020, Japan owned \$1.29 trillion and China owned \$1.07 trillion of U.S. debt, which is more than a third of foreign holdings)<sup>3</sup>
- Federal Reserve and government: \$10.16 trillion (June 2020)
- Mutual funds: \$2.5 trillion
- State and local governments, including their pension funds: \$1.14 trillion
- Private pension funds: \$819 billion
- Insurance companies: \$244 billion
- U.S. savings bonds: \$150 billion (June 2020)
- Other holders such as individuals, government-sponsored enterprises, brokers and dealers, banks, bank personal trusts and estates, corporate and non-corporate businesses, and other investors: \$1.79 trillion



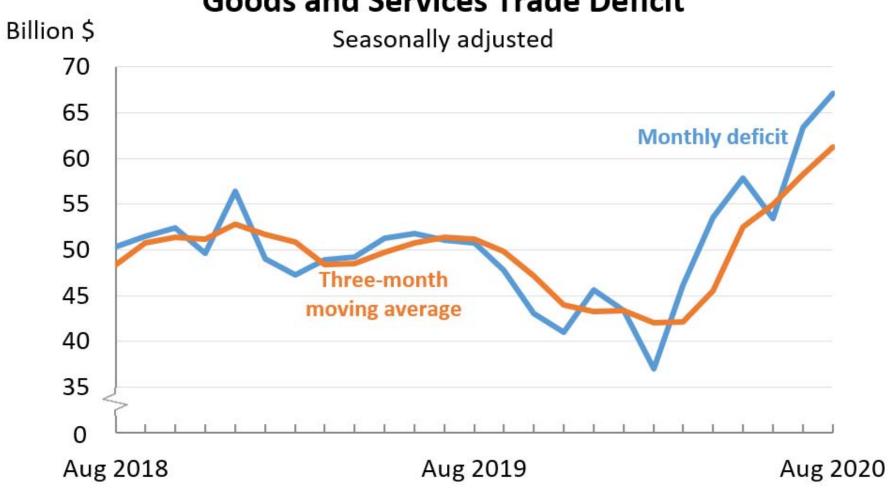
## Consequences of Increasing National Debt

- Risk of Government Default
  - More and more tax revenues spent on debt
- Forced Coupon Increases on New Corporate Debt
  - If T-Bill/Bond Coupon increases, Corporate Debt Likely to Increase
- Higher borrowing costs for consumers
- Loss of investment in private debt
- Hyper inflation



#### **U.S Trade Deficit**

#### **Goods and Services Trade Deficit**



U.S. Bureau of Economic Analysis

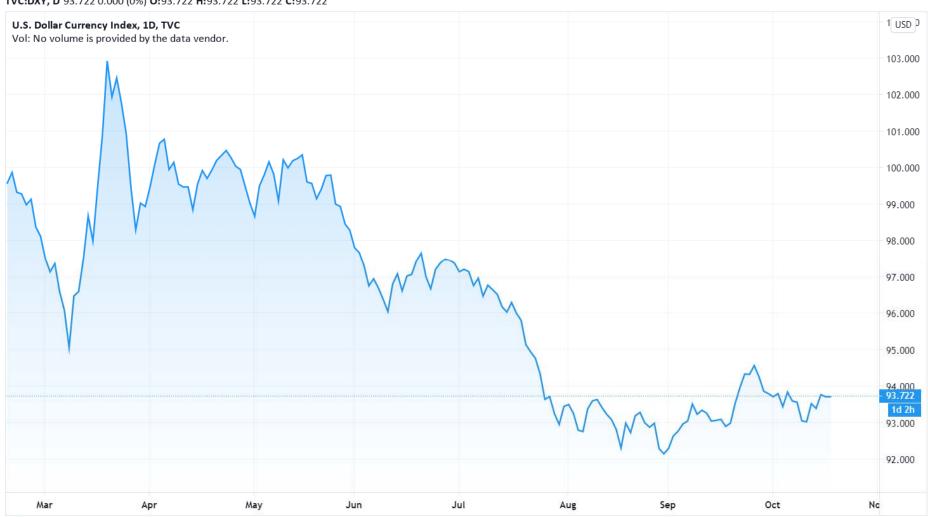
U.S. Census Bureau

U.S. International Trade in Goods and Services October 6, 2020

# Dollar Index Declines over 2<sup>nd</sup> and 3<sup>rd</sup> Quarter's of 2020

Published on TradingView.com, October 18, 2020 21:41:51 UTC

TVC:DXY, D 93.722 0.000 (0%) 0:93.722 H:93.722 L:93.722 C:93.722





#### Concluding Comments

- Forced shutdowns across the U.S. resulted in record unemployment rates
  - Job losses and continued unemployment persists though not nearly as great as the early months of 2020
- There has been a sharp economic rebound and the initial recession is likely over
  - Though it may take years before what was lost will be recovered
- Low interest rates and a lack of options for alternative investment have helped support home values and the equity markets
- Government debt at the federal level has grown dramatically
  - Assistance programs for individuals, businesses, states and health facilities (among others) were deemed necessary to help mitigate the recession



#### Concluding Comments Cont.

- Agricultural assistance, though large by historical standards, makes up a very small portion of the current spending
- Though not a crisis yet, an ever increasing debt does have consequences
  - Crowding out private investment
  - More tax dollars devoted to servicing the debt
  - Possible inflation

