# Return of the Economist



COVID-19 Economic Update

By: Anirban Basu Sage Policy Group, Inc.

On Behalf of The National Insulation Association

November 5<sup>th</sup>, 2020



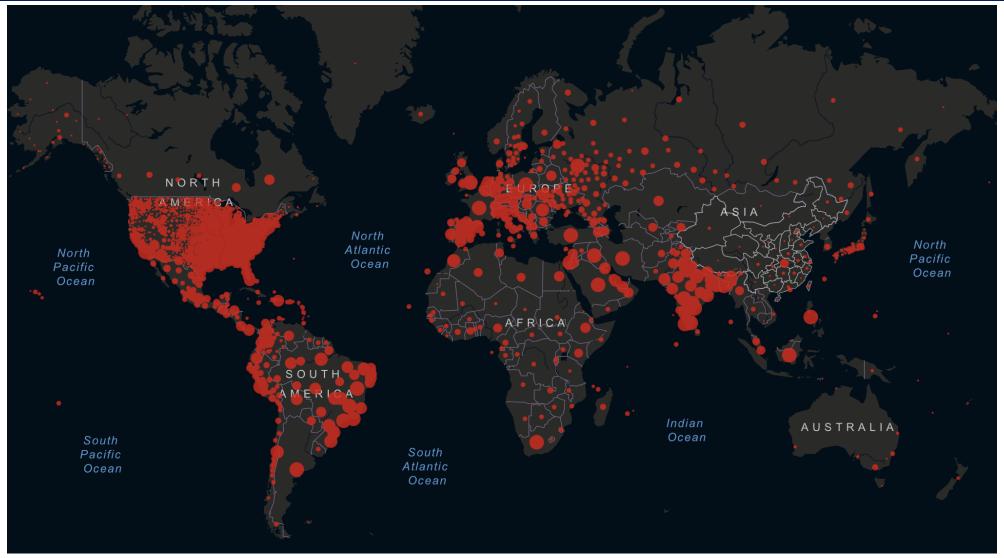
#### Ring Verse

Three Rings for the Elven-kings under the sky, Seven for the Dwarf-lords in their halls of stone. Nine for Mortal Men doomed to die. One for the Dark Lord on his dark throne. In the Land of Mordor where the Shadows lie. One ring to rule them all, one ring to find them, One ring to bring them all and in the darkness bind them



#### Coronavirus COVID-19 Global Cumulative Confirmed Cases

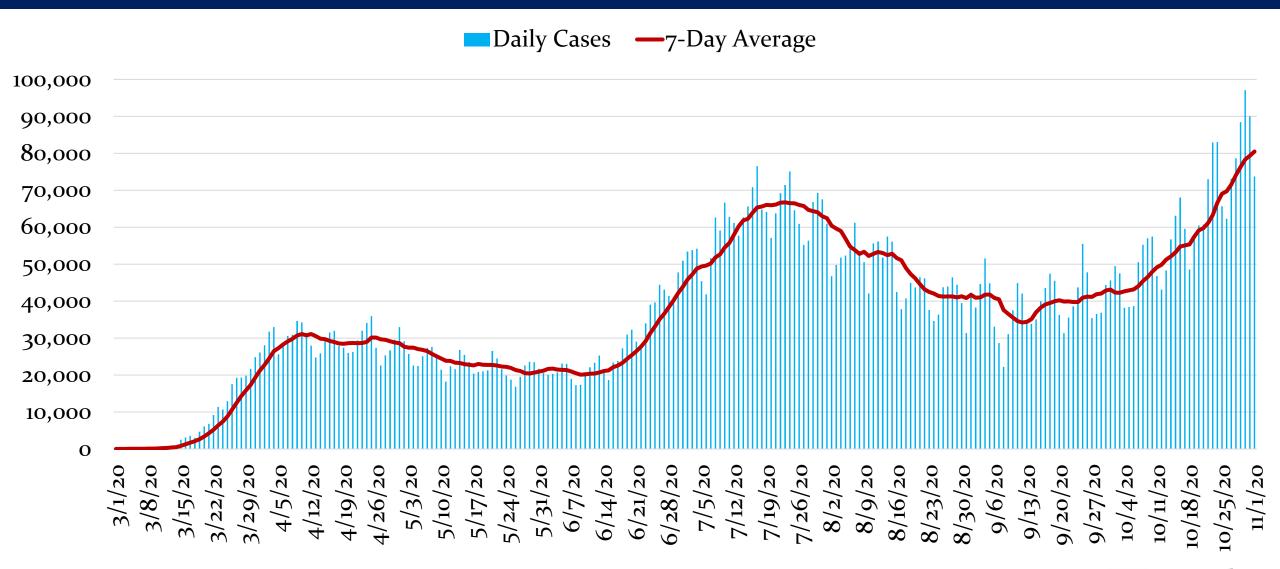
As of 11/2/2020



Total Confirmed: 46,618,804 | Total Deaths: 1,201,833



#### U.S. COVID-19 Daily Cases, March - November 2020



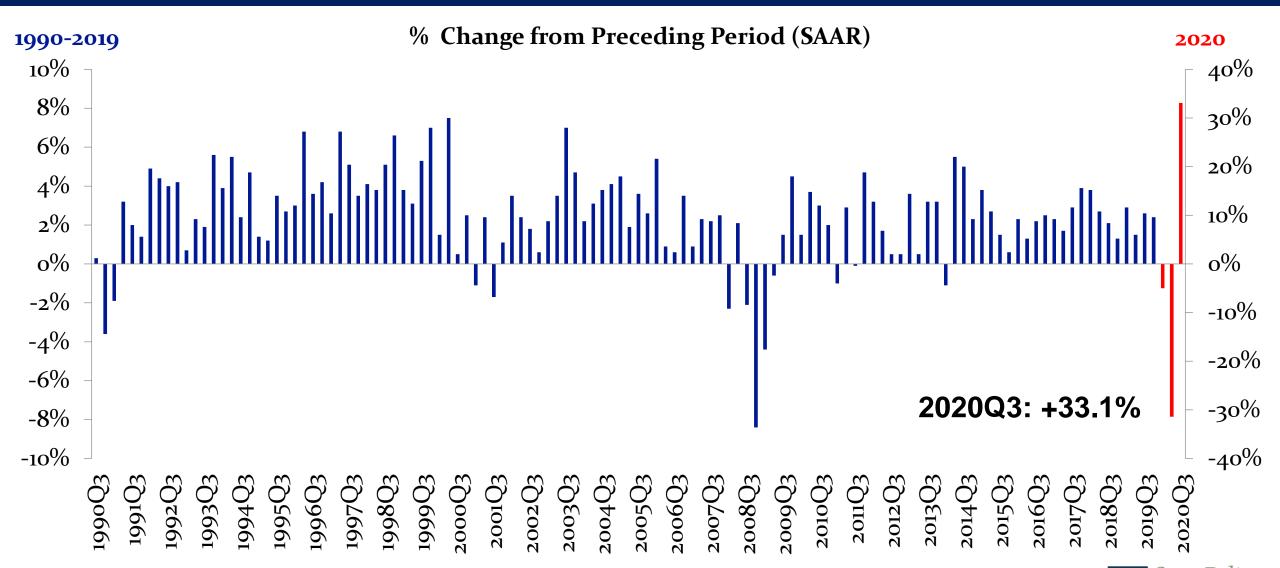


#### Which Workers Face the Highest Unemployment Risk?

	Total Employment	Share of Total Employment
All Occupations	144,731,220	_
Employed in Occupations at "Low Risk" of Layoff	77,944,910	54%
Employed in "Essential" Occupations	24,840,280	17%
Employed in Occupations Possible to Work from Home	48,204,920	33%
Employed in Other Salaried Occupations	4,899,710	3%
Employed in Occupations at "High Risk" of Layoff	66,786,310	46%
Food Preparation and Serving-Related Occupations	13,374,170	9%
Sales and Related Occupations	10,443,460	7%
Production Occupations	8,313,750	6%
Installation, Maintenance and Repair Occupations	5,628,890	4%
All Other "High-Risk" Occupations	29,026,040	20%



## Gross Domestic Product 1990Q3 through 2020Q3\*



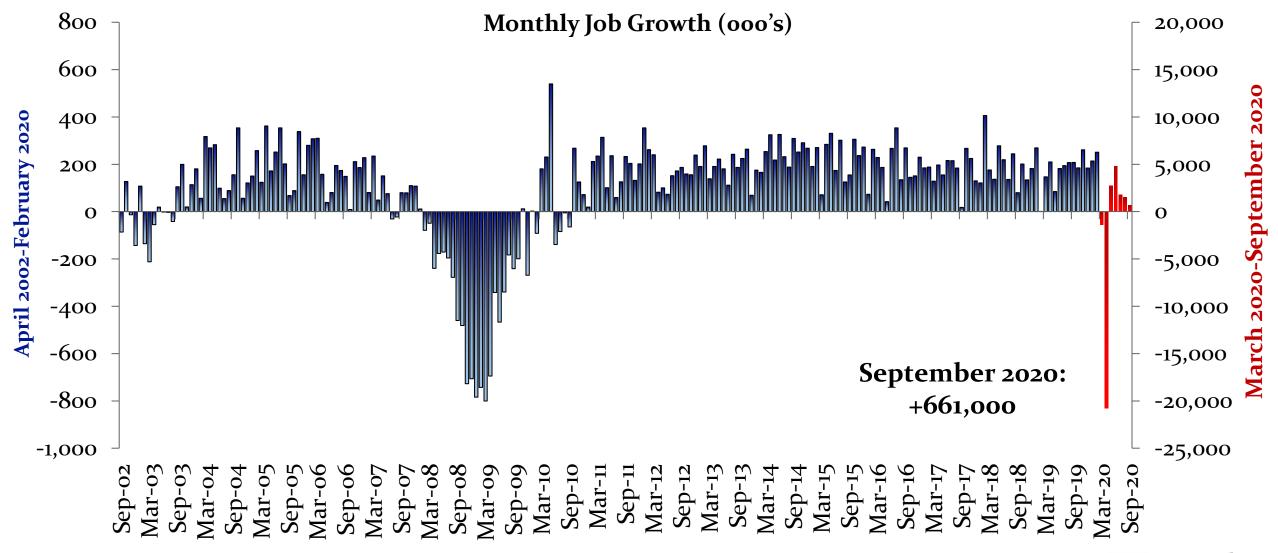
# Nine Reasons for Hope in the Kingdom of Men (& Women)





#### I. There was Plenty of Job Growth on Middle Earth (OK, America)

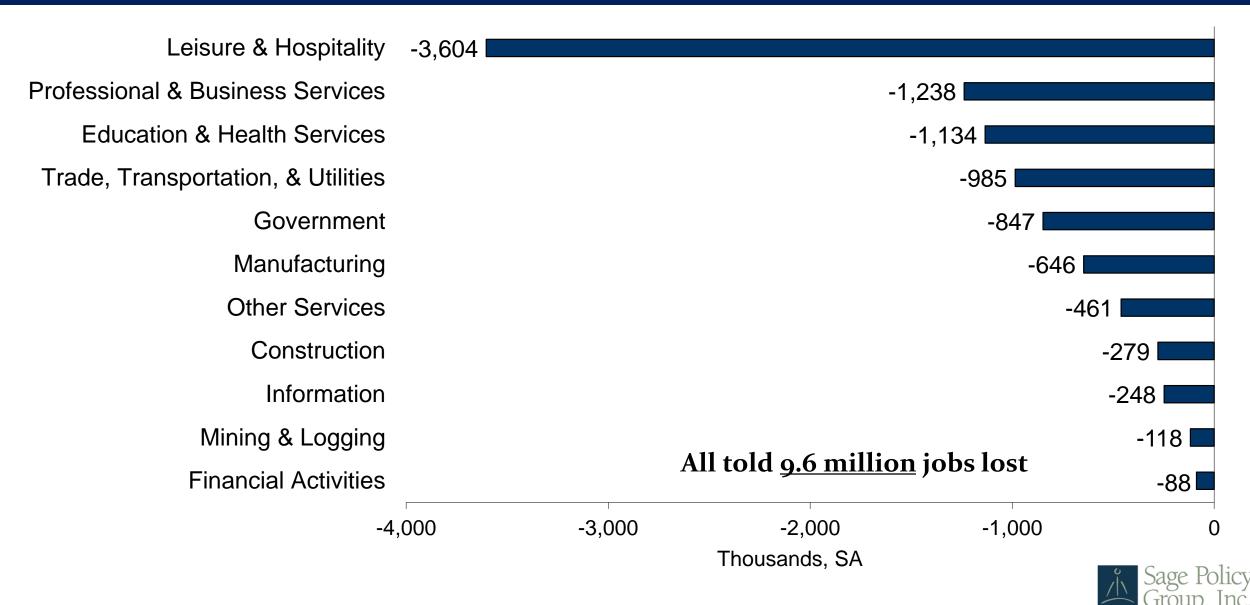
Net Change in U.S. Jobs, September 2002 - September 2020





#### National Nonfarm Employment

by Industry Sector, September 2019 v. September 2020



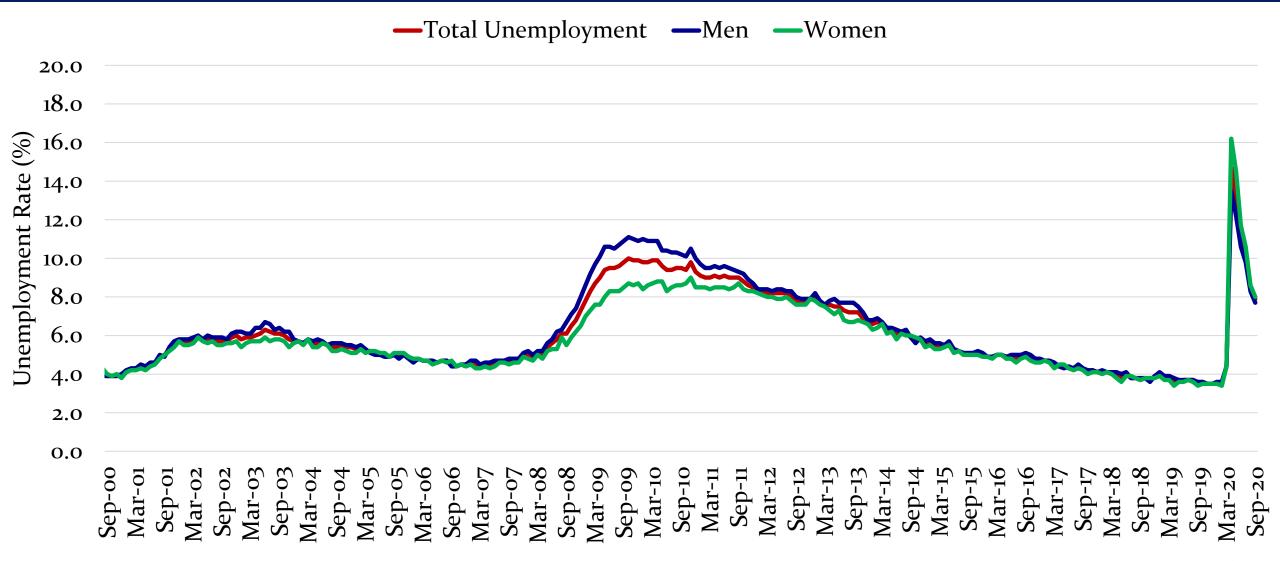
#### **Employment Growth, 25 Largest Metros (NSA)**

September 2019 v. September 2020 Percent Change

Rank	MSA	%	Rank	MSA	%
1	Phoenix-Mesa-Scottsdale, AZ	-2.9	13	Miami-Fort Lauderdale-West Palm Beach, FL	-7.0
2	Dallas-Fort Worth-Arlington, TX	-3.5	13	Seattle-Tacoma-Bellevue, WA	-7.0
3	Atlanta-Sandy Springs-Roswell, GA	-3.7	15	Chicago-Naperville-Elgin, IL-IN-WI	-7.2
4	Denver-Aurora-Lakewood, CO	-3.8		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	-7.4
5	San Antonio-New Braunfels, TX	-4.2	17	Portland-Vancouver-Hillsboro, OR-WA	-7.7
6	Tampa-St. Petersburg-Clearwater, FL	-4.3	18	San Diego-Carlsbad, CA	-7.8
7	Houston-The Woodlands-Sugar Land, TX	-5.1	19	Riverside-San Bernardino-Ontario, CA	-8.0
	Washington-Arlington-Alexandria, DC-VA-MD-WV	-5.7	20	Boston-Cambridge-Nashua, MA-NH	-9.5
			20	Orlando-Kissimmee-Sanford, FL	-9.5
9	St. Louis, MO-IL	-5.9	22	Los Angeles-Long Beach-Anaheim, CA	-9.6
10	Baltimore-Columbia-Towson, MD	-6.3	23	Detroit-Warren-Dearborn, MI	-9.8
11	Charlotte-Concord-Gastonia, NC-SC	-6.7	24	San Francisco-Oakland-Hayward, CA	-10.6
11	Minneapolis-St. Paul-Bloomington, MN-WI	-6.7	25	New York-Newark-Jersey City, NY-NJ-PA	-10.8



## II. Fewer Idle in the Shire (pre-COVID-19) U.S. Unemployment Rate, September 2000 - September 2020





#### Unemployment Rates, 25 Largest Metros (NSA)

September 2020

Rank	MSA	%	Rank	MSA	%
1	St. Louis, MO-IL	5.5	13	San Antonio-New Braunfels, TX	7.8
2	Minneapolis-St. Paul-Bloomington, MN-WI	5.9	1 4	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	7.9
3	Tampa-St. Petersburg-Clearwater, FL	6.1	15	San Francisco-Oakland-Hayward, CA	8.6
4	Phoenix-Mesa-Scottsdale, AZ	6.3	16	San Diego-Carlsbad, CA	9.0
5	Baltimore-Columbia-Towson, MD	6.5	17	Boston-Cambridge-Nashua, MA-NH	9.2
5	Denver-Aurora-Lakewood, CO	6.5	18	New York-Newark-Jersey City, NY-NJ-PA	9.5
7	Atlanta-Sandy Springs-Roswell, GA	6.7	19	Houston-The Woodlands-Sugar Land, TX	9.6
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	6.7	20	Detroit-Warren-Dearborn, MI	9.8
			20	Orlando-Kissimmee-Sanford, FL	9.8
9	Charlotte-Concord-Gastonia, NC-SC	7.0	22	Miami-Fort Lauderdale-West Palm Beach, FL	10.1
10	Seattle-Tacoma-Bellevue, WA	7.4	23	Riverside-San Bernardino-Ontario, CA	10.4
11	Dallas-Fort Worth-Arlington, TX	7.5	24	Chicago-Naperville-Elgin, IL-IN-WI	10.5
12	Portland-Vancouver-Hillsboro, OR-WA	7.7	25	Los Angeles-Long Beach-Anaheim, CA	13.6



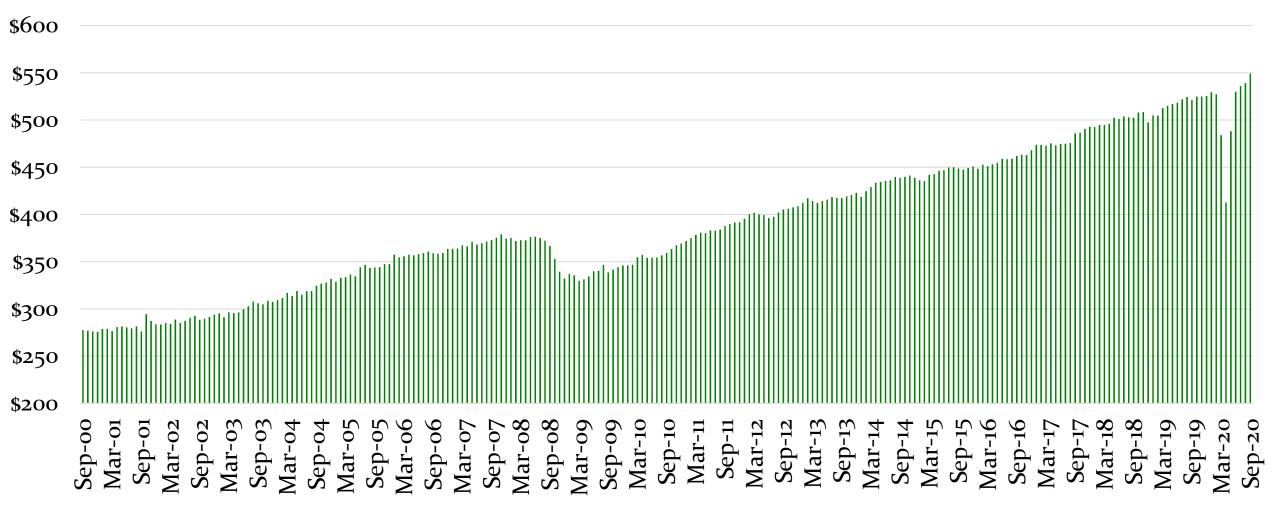
#### III. Gold Aplenty

Growth in Wages & Salaries, U.S. Employment Cost Index (ECI), 2001Q3-2020Q3



## IV. In the Baggins! U.S. Retail Sales, September 2000 - September 2020

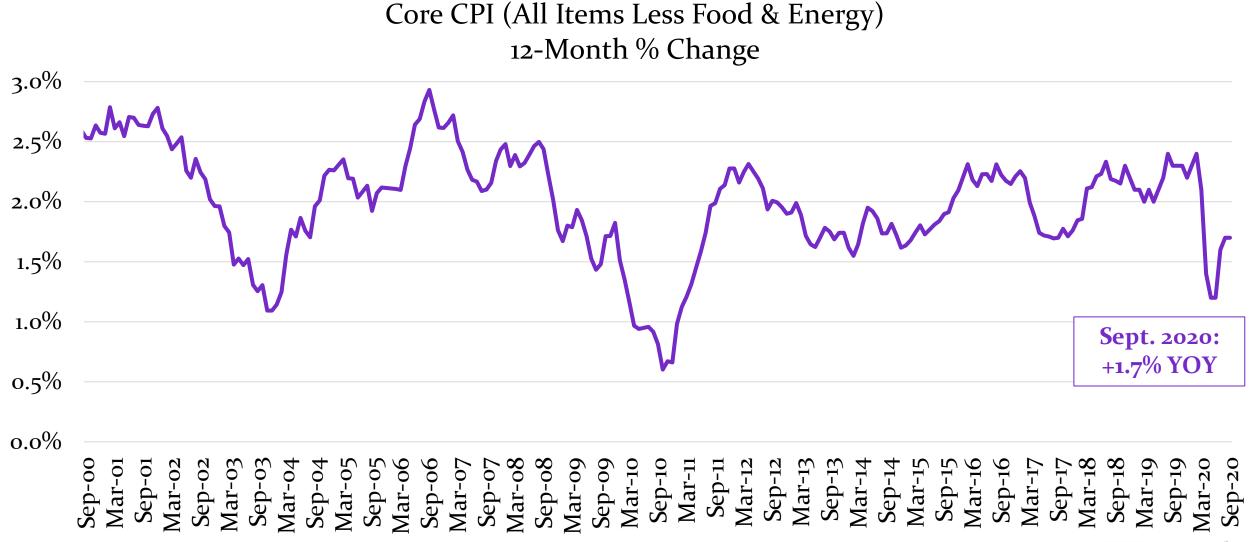
#### Retail Sales (\$Billions)





#### V. Your Gold Coins Go Further

Consumer Price Index: All Items Less Food & Energy, September 2000 - September 2020





## VI. Interest Rates are Hobbit-Sized U.S. 10-Year Treasury Constant Maturity Rate, 1962 - 2020\*



#### VII. Property Values Rise in Middle Earth

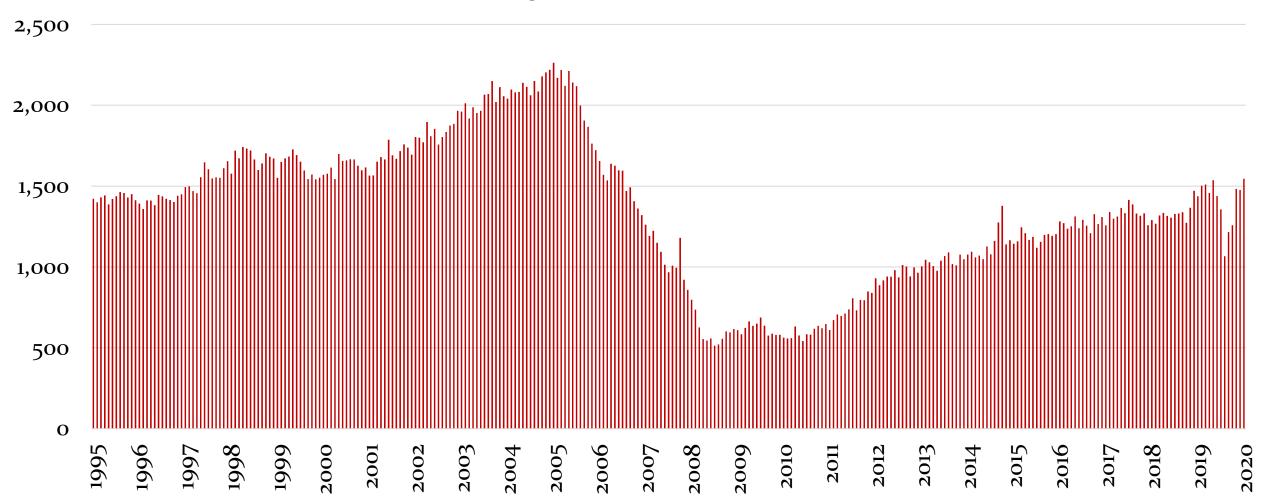
S&P Case-Shiller U.S. National Home Price Index, August 1995 - August 2020



#### VIII. The Kingdom is Under Construction

U.S. Residential Building Permits, September 1995 - September 2020

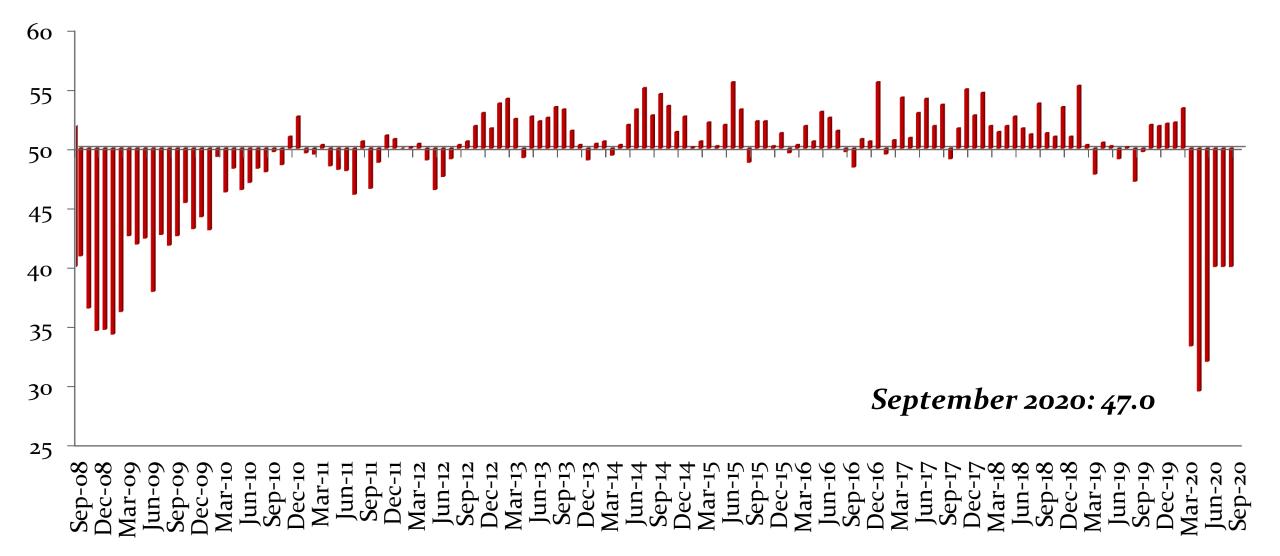
Building Permits (ooo's of Units)





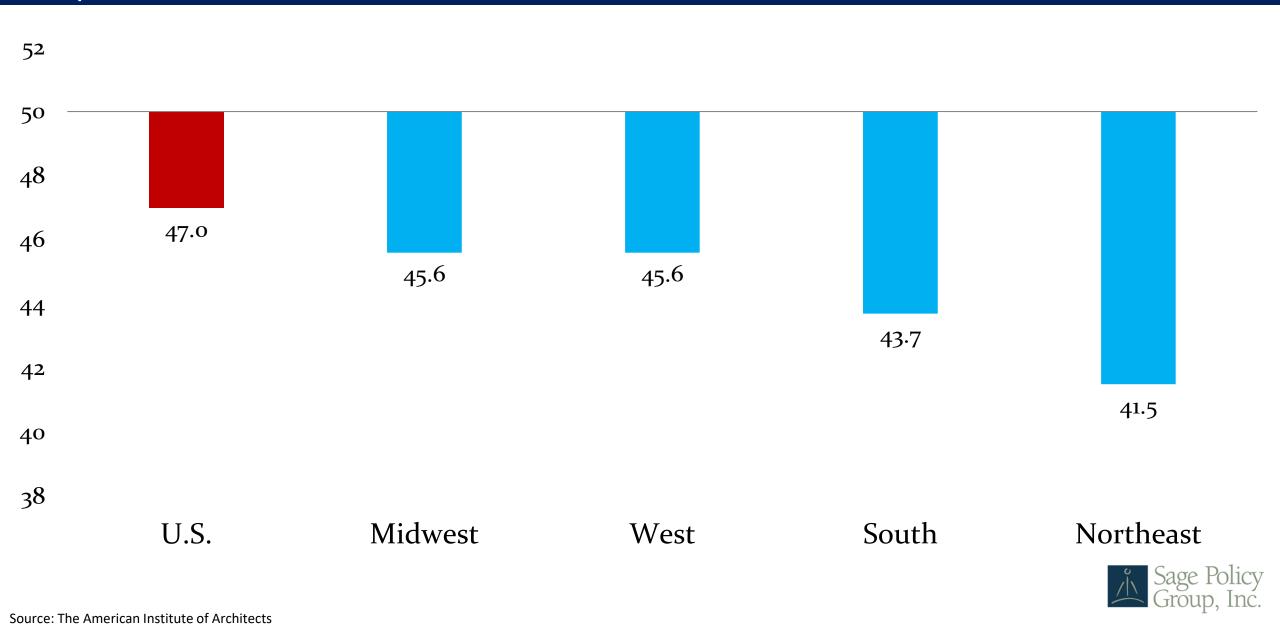
#### Architecture Billings Index

September 2008 – September 2020

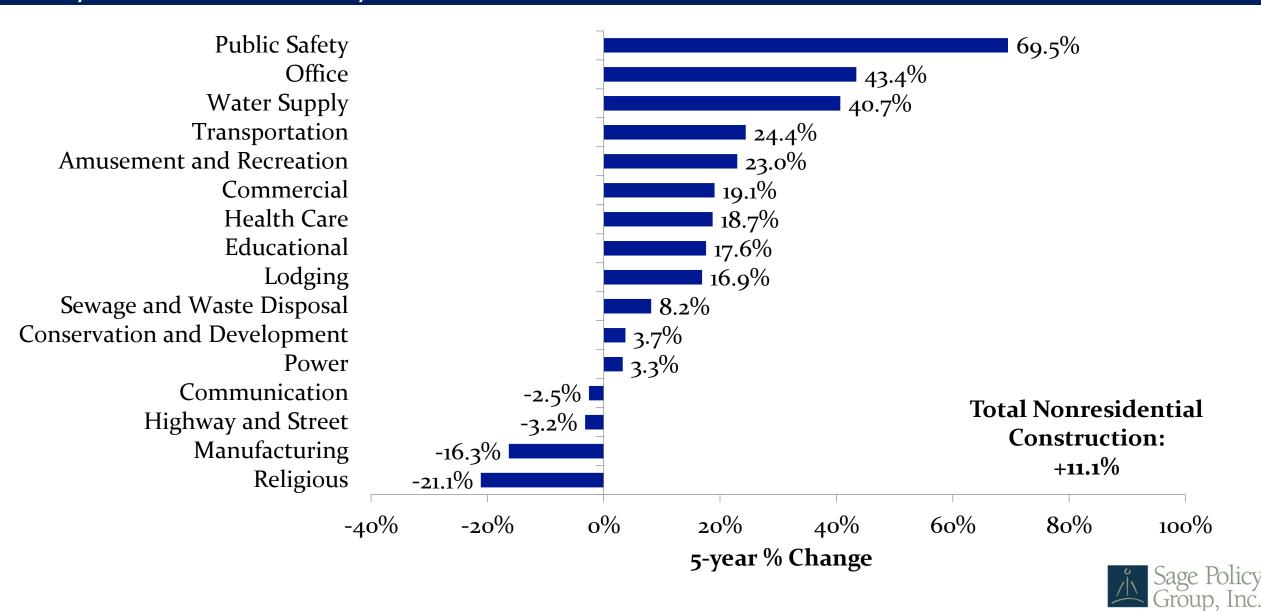




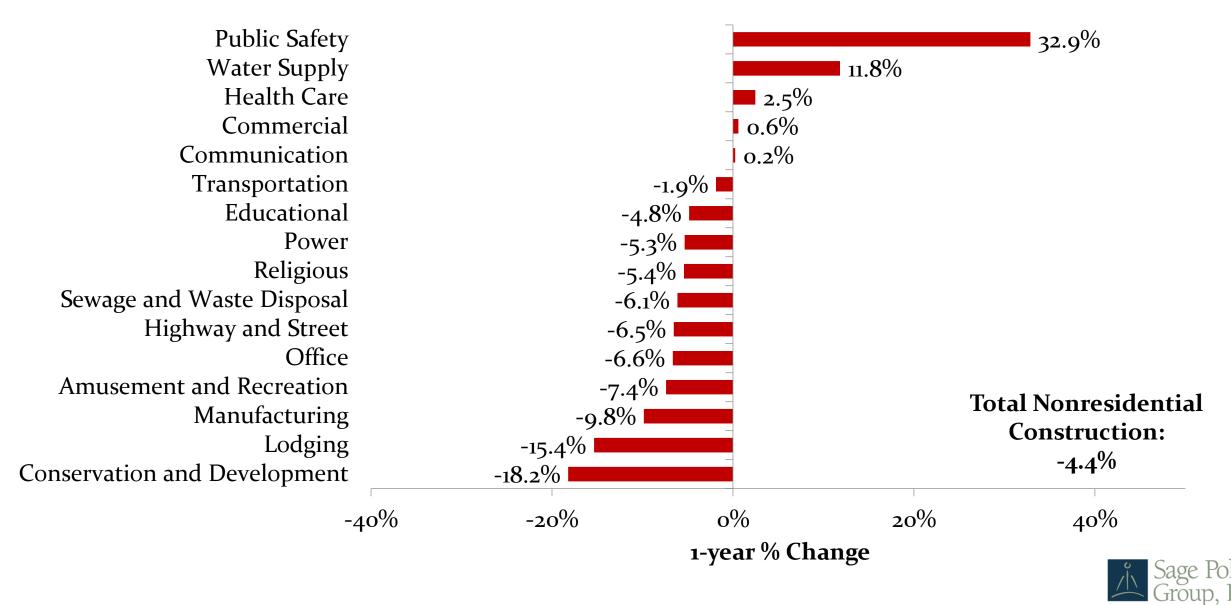
## Architecture Billings Index by U.S. Region September 2020



## National Nonresidential Construction Spending by Subsector September 2015 v. September 2020

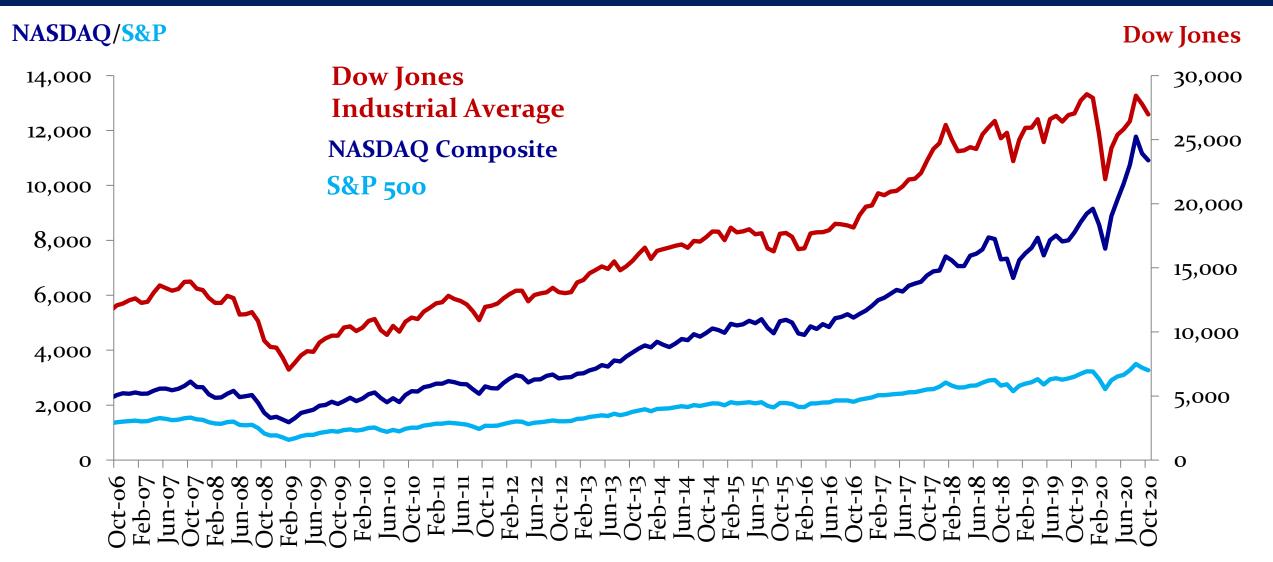


## National Nonresidential Construction Spending by Subsector September 2019 v. September 2020



#### IX. But It Goes to Elven

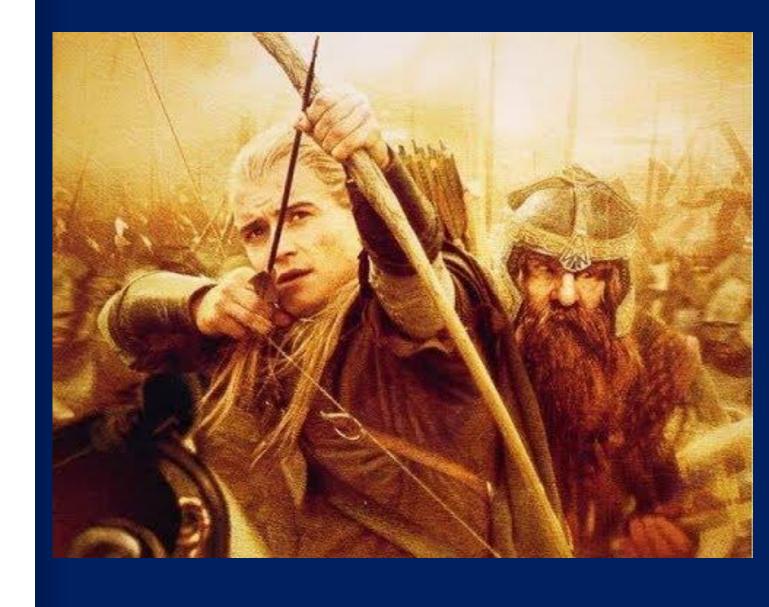
U.S. Stock Markets, October 2006 - October 2020\*



\*Week ending 10/30/2020



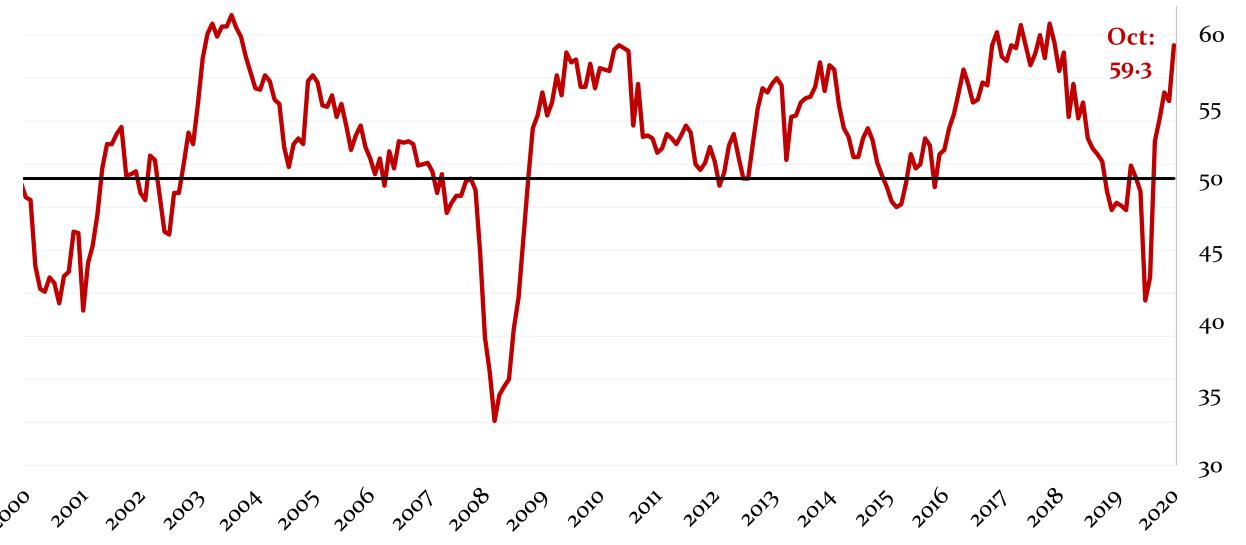
## Seven **Factors** Dwarfing Hope





#### I. Manufacturing Doth Decline

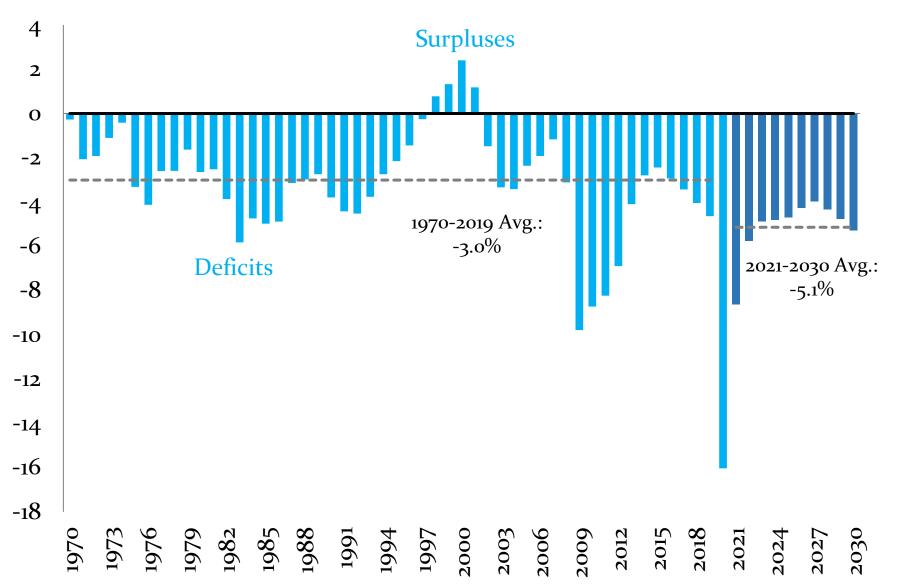
Institute of Supply Management: Purchasing Managers Index (PMI), 2000 - 2020



<sup>\*</sup>A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting.



## II. A Tower of National Debt U.S. Federal Deficit, % of GDP

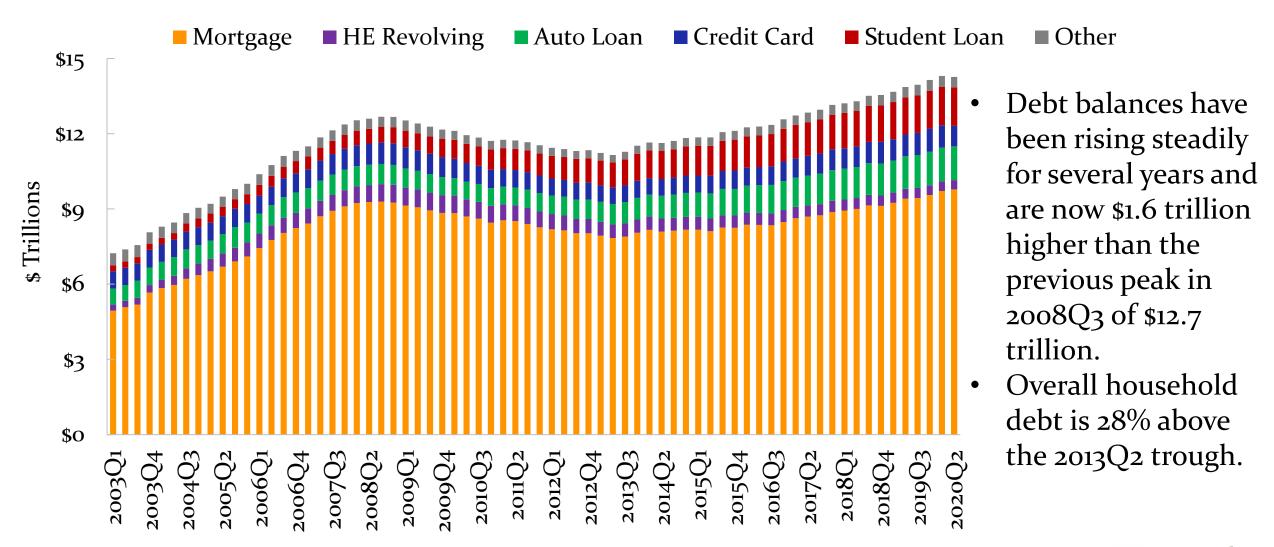


- Over the 2021–2030 period, deficits are projected to average 5.1% of GDP, totaling \$13.0 trillion.
- Over the past 50
  years, deficits
  averaged just 3.0% of
  GDP.

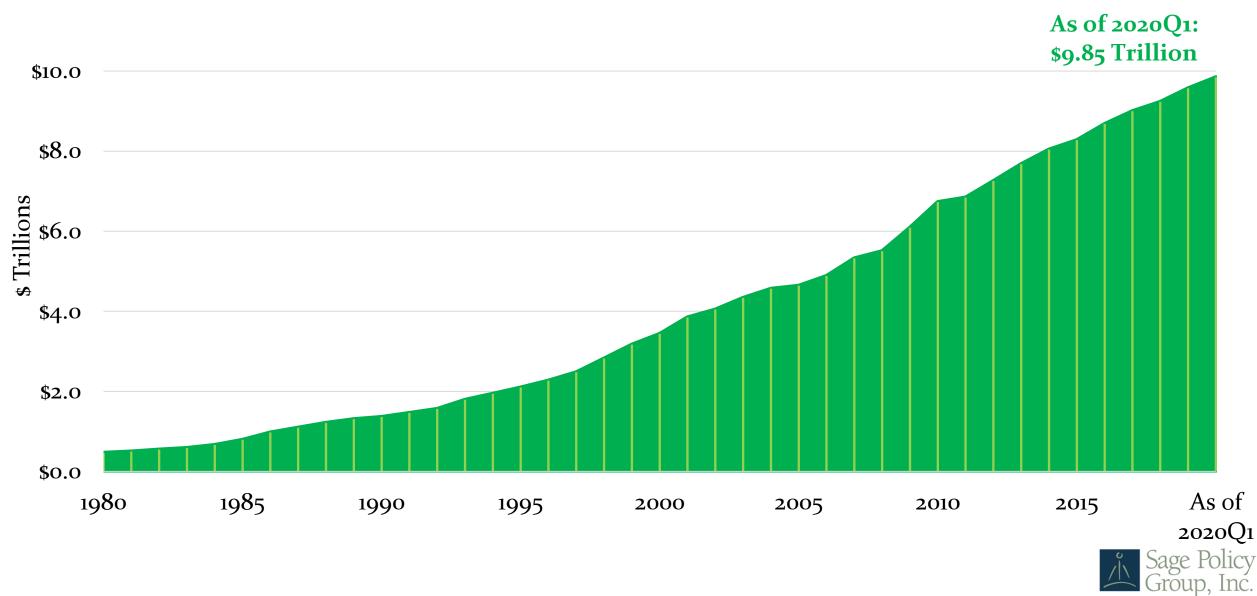


#### III. A Mountain of Consumer Debt, Too

Total U.S. Household Debt, 2003 - 2020

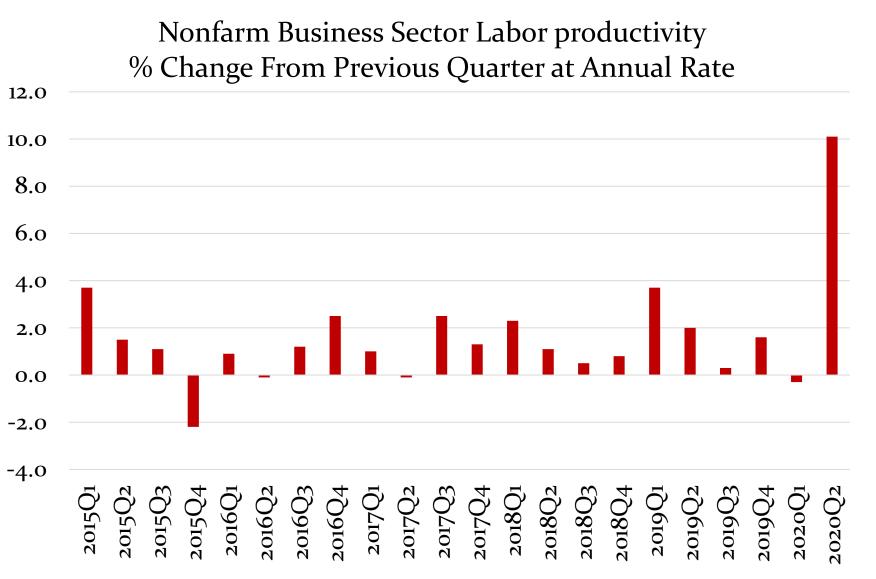


## IV. How Did It Come to This? U.S. Corporate Bond Debt Outstanding, 1980 - 2020



#### V. Entish: U.S. Nonfarm Business Sector:

Labor Productivity Growth, 2000-2020

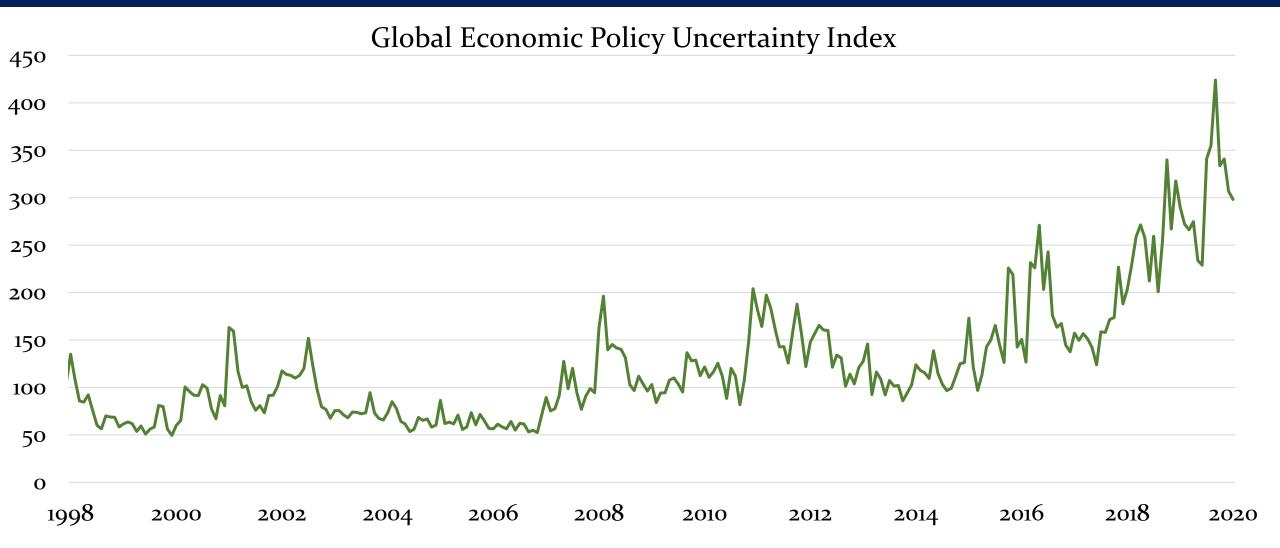


- In 2020Q1 nonfarm business sector labor productivity fell by 0.3%—the first decline since 2017.
- In 2020Q2, productivity rose by 10.1%.
- U.S. productivity has risen at an average rate of 1.6% since 2007, compared with a 2.2% average since the end of WWII.



#### VI. Uncertainty Across the Realm:

Global Economic Policy Uncertainty Index, 1998 - 2020



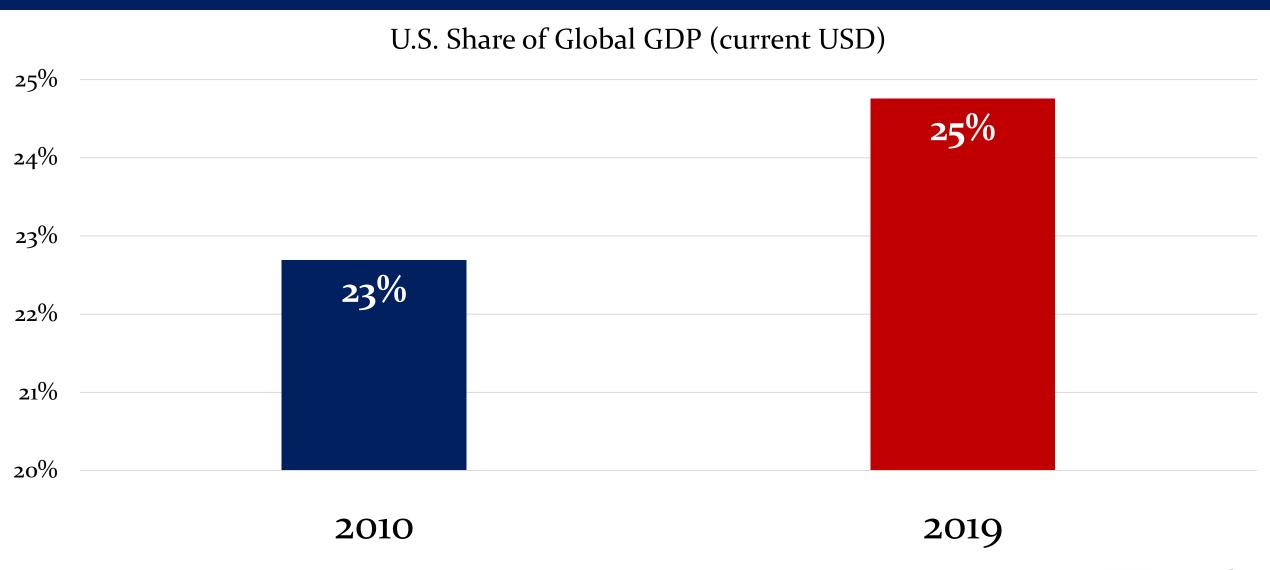


#### VII. The Eye is on Asset Prices: Shiller Price-Earnings Ratio, 1980 - 2020



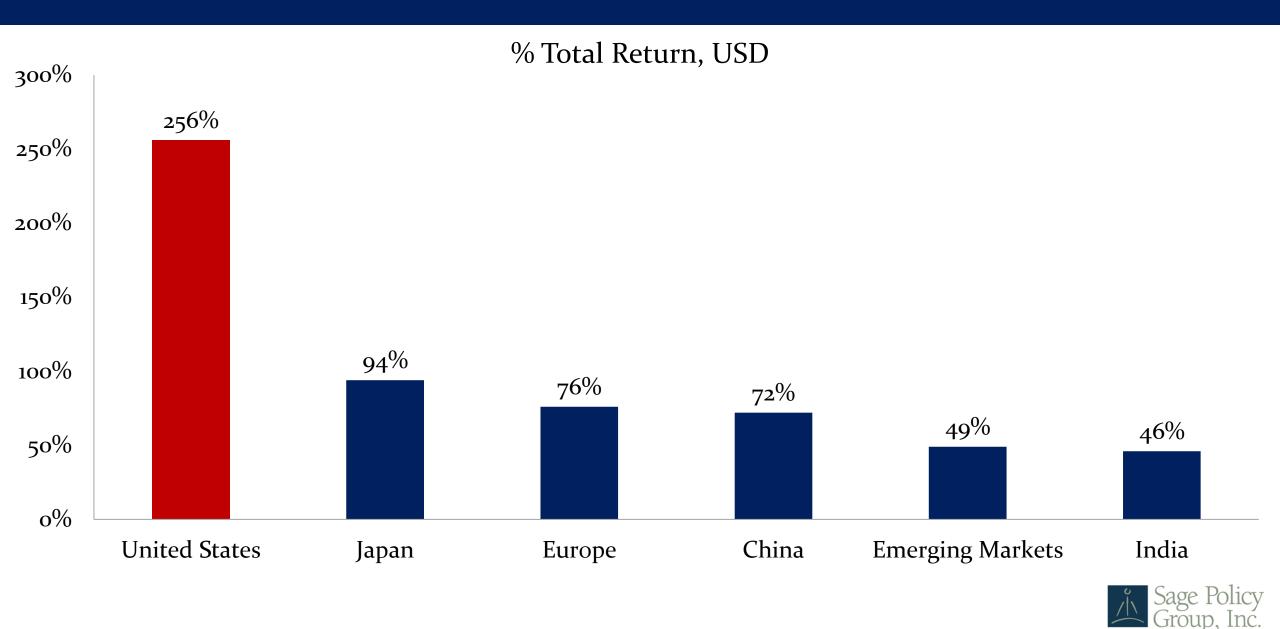


#### U.S. Share of Global GDP, 2010 v. 2019

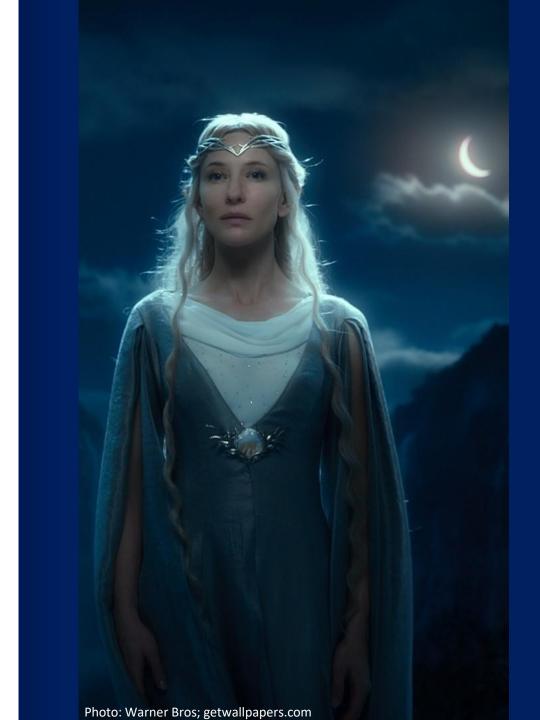




#### Stock Market Returns by Country, 2010 - 2019



# Three Things that Make COVID-19 Different, Economically





#### I. A Supply Shock of a Caliber Unknown in Modern Times

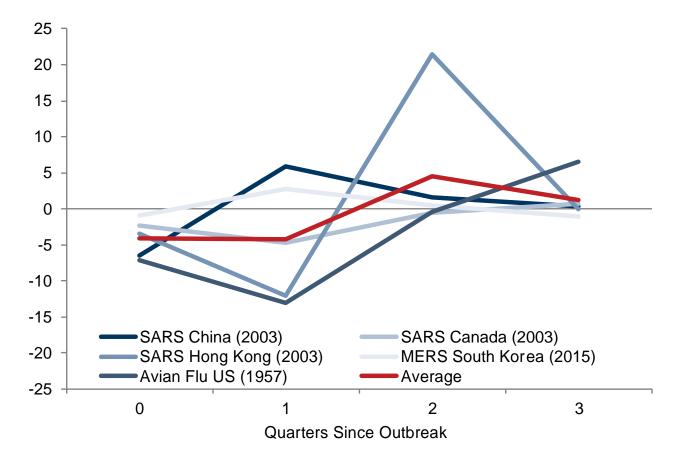
Containment **Supply Demand** measures Factory closures Loss of confidence Quarantines Travel bans and Cutbacks in service Business and tourism restrictions provisions travels Supply chain **Education** and Closure of public disruption entertainment services places



#### II. Economic Impact of Past Pandemics – This One Will be Worse

- Goldman Sachs analyzed GDP changes during other pandemics, including the 2003 SARS episodes in China, Hong Kong, and Canada, the 1957 Avian Flu in the U.S., and the 2015 MERS episode in South Korea.
- The average episode saw a GDP hit of 4-5% in the 1-2 quarters after the outbreak, though the variation was substantial.

Real GDP growth minus average growth over year before outbreak, pp

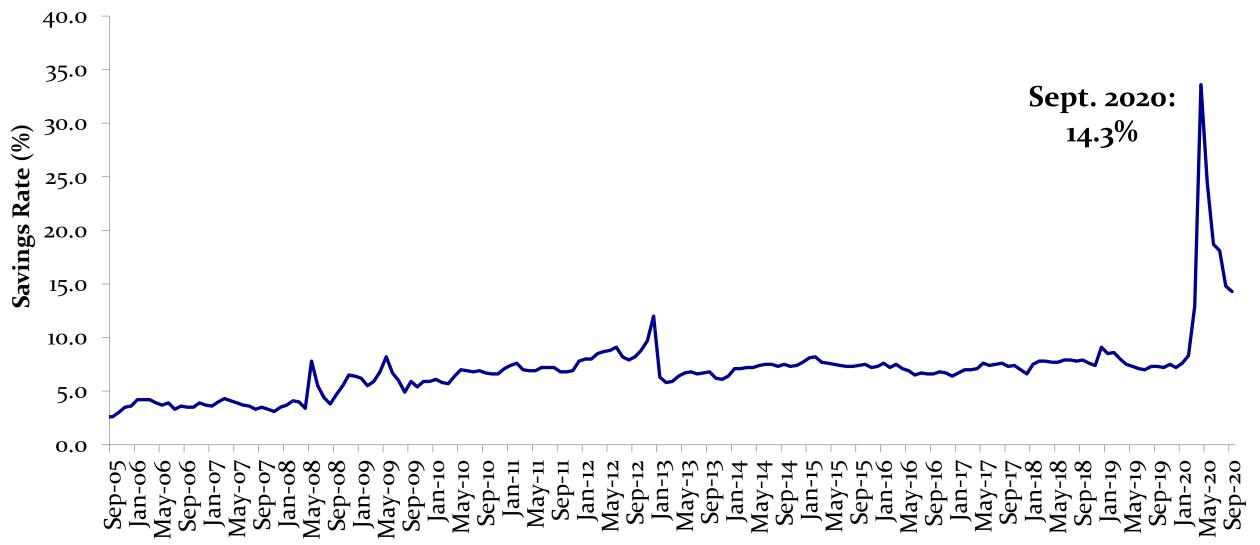




## III. The Cure is Just Oh, So Different: U.S. Government Legislative Actions

- **Phase 1** (3/6/2020)—Coronavirus Preparedness and Response Supplemental Appropriations *Act*: **\$8.3 billion** in emergency funding.
- Phase 2 (3/18/2020)—Families First Coronavirus Response Act: \$192 billion
  - Provided paid sick leave, tax credits, and free COVID-19 testing; expanded food assistance and unemployment benefits; and increased Medicaid funding.
- **Phase 3** (3/27/2020)—*Coronavirus Aid, Relief, and Economic Security (CARES) Act*: **More than \$2 trillion** (expected to increase the deficit by \$1.7 trillion)
  - Direct payments to Americans; scaled up unemployment insurance program; loans and grants for small and large businesses and governments; aid to state and local governments, business tax cuts; other health and safety related spending provisions.
- Phase 4 (4/24/2020)—Paycheck Protection Program and Health Care Enhancement Act: \$483 billion
  - Additional funding for Paycheck Protection Program, hospitals, testing efforts, and emergency disaster loans and grants.

## U.S. Saving Rate, September 2005 – September 2020 (Savings as Percentage of Personal Disposable Income)





#### The One



#### Forecast

- The initial phase of recovery from the crisis will be sharp, profound and most welcome -- interest rates are still low, pent-up demand high, there is a need to rebuild inventories, and people are anxious to meet again, go to restaurants, casinos, see a movie, watch the Orioles, and engage in other most wonderful of human activities.
- May's jobs report was an absolute stunner. One way to look at this is to say economists missed the mark by 10.5 million jobs. Another way to look at it is that economists missed it by 2 weeks. June was even better, but July-September has been increasingly soft...
- While recovery has begun, these remain treacherous times (obviously we haven't earned an enduring v-shaped recovery).

### Thank You

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