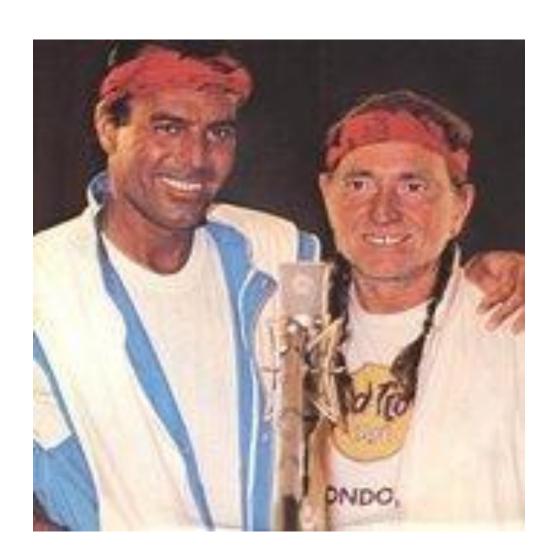
To All The Economists I've Loved Before



By: Anirban Basu Sage Policy Group, Inc.

On Behalf of
Colorado CFMA
Regional Conference

October 1st, 2019

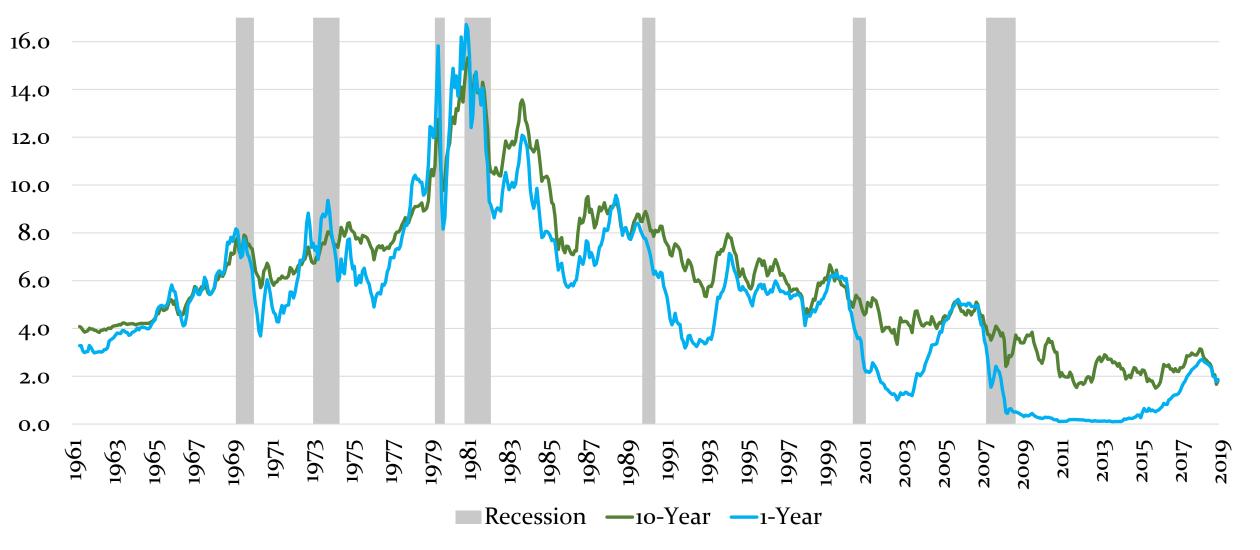


"There is always some chance of recession in any year. But the evidence suggests that expansions don't die of old age." -Janet Yellen



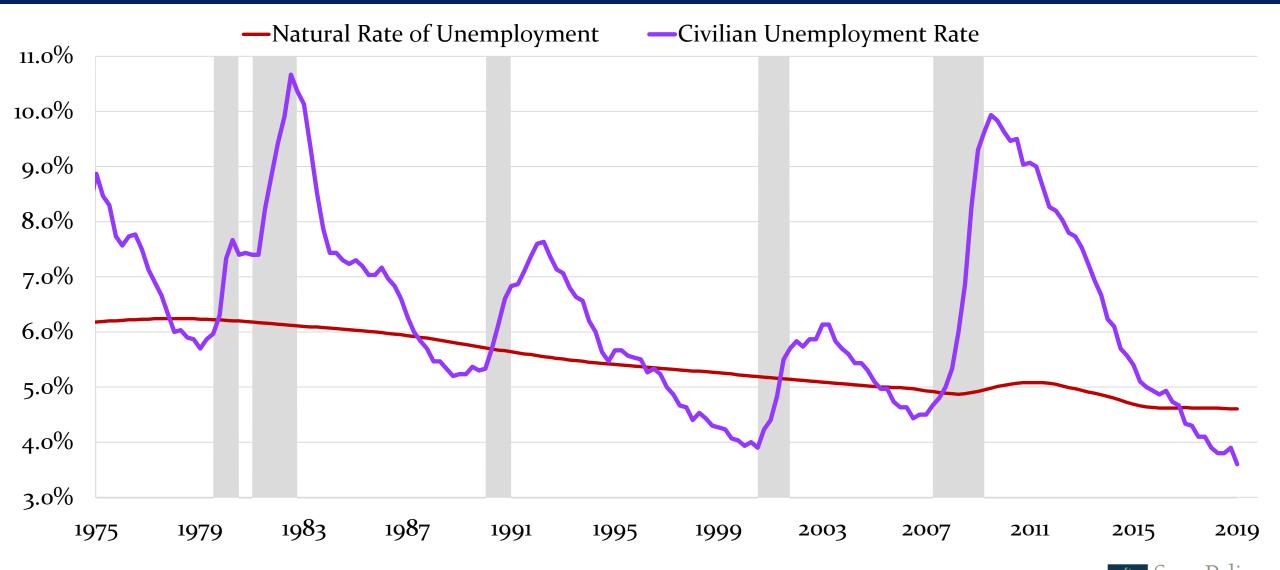


Historical U.S. Treasury Yield Curve Inversions 10-Year v. 1-Year



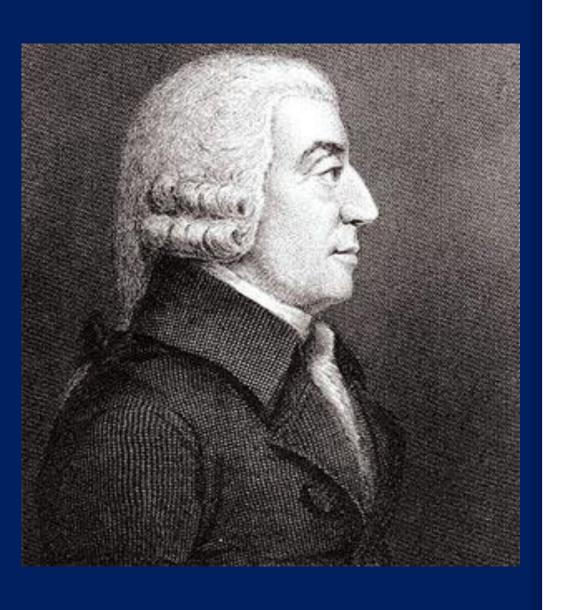


U.S. Unemployment & Natural Rate of Unemployment



Shaded areas indicate U.S. Recessions

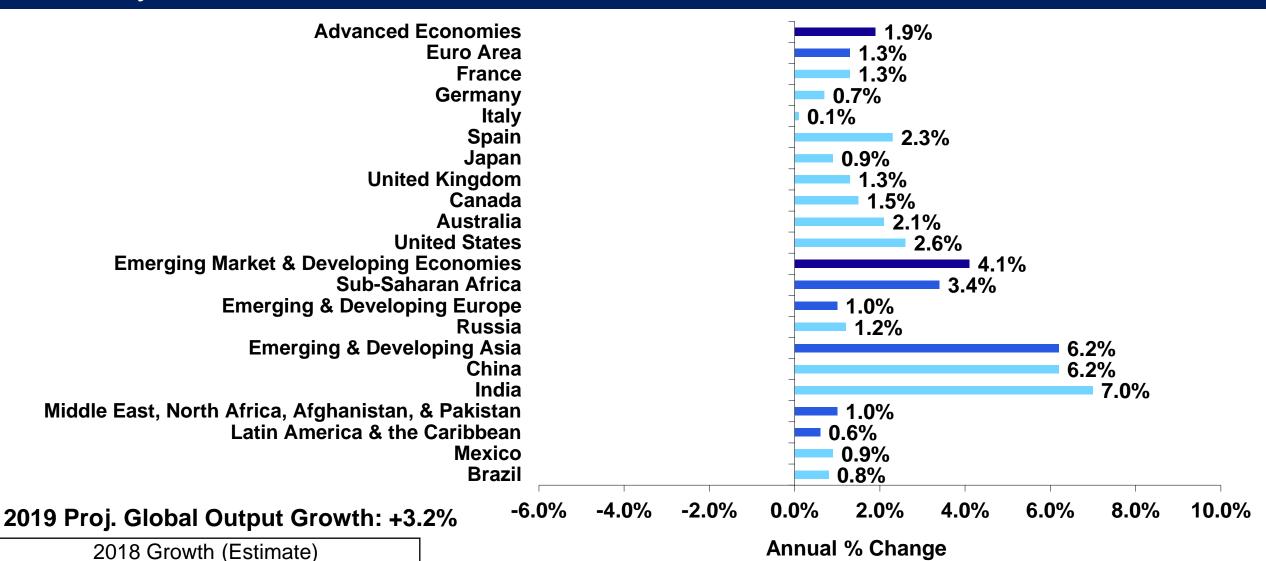
Sage Policy Group, Inc.



"No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable." -Adam Smith



Estimated Growth in Output by Select Global Areas 2019 Projected



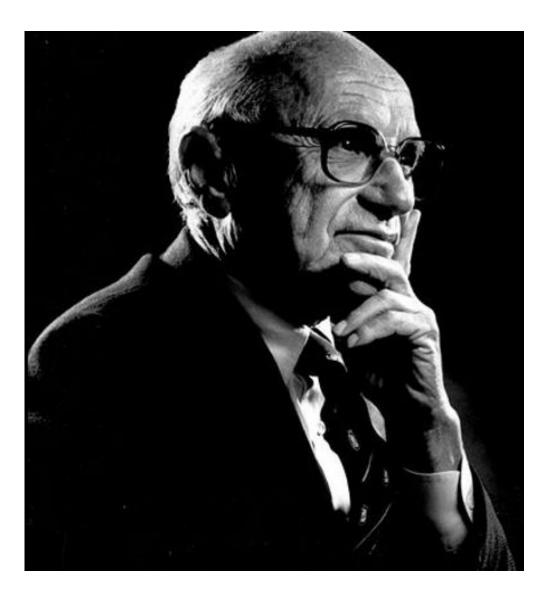
Source: International Monetary Fund: World Economic Outlook Update, July 2019

Euro Area: 1.9%

Japan: 0.8%

World: 3.6%

United States: 2.9%

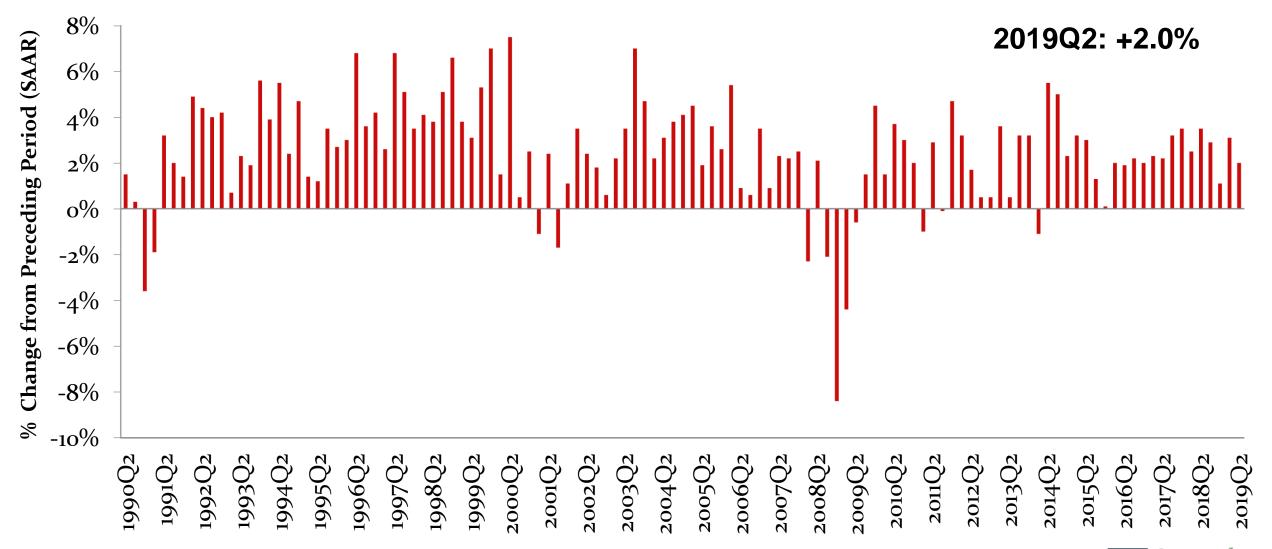


"Inflation is the one form of taxation that can be imposed without legislation."

-Milton Friedman

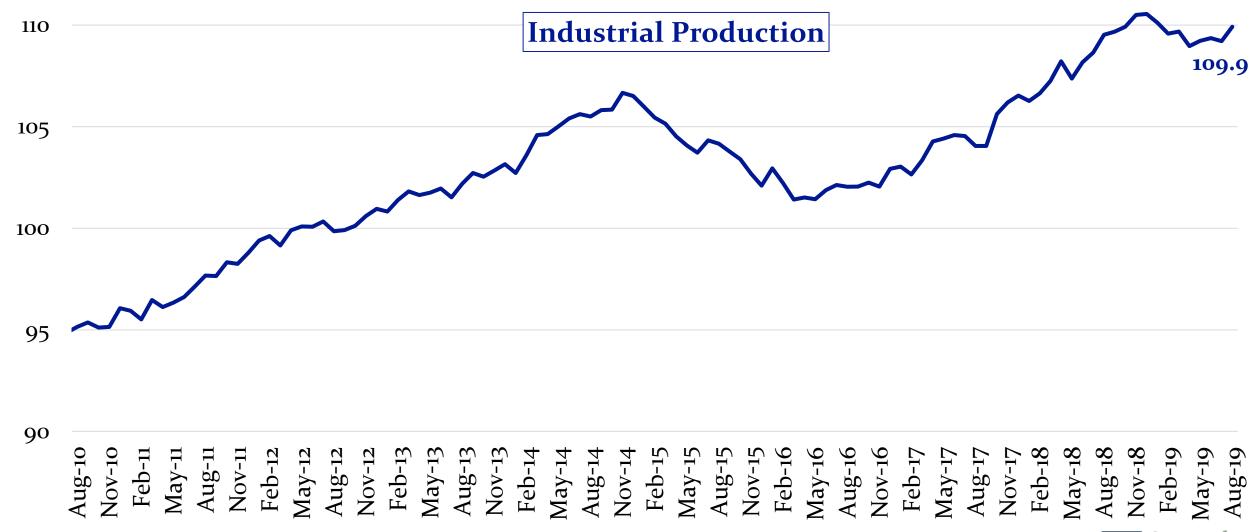


Gross Domestic Product 1990Q2 through 2019Q2*



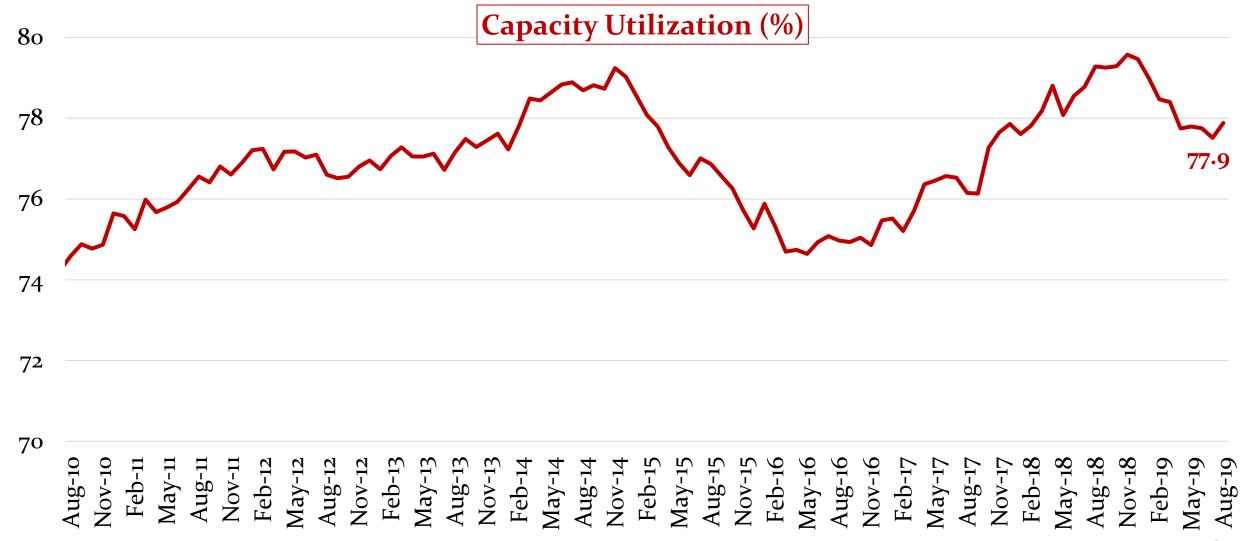
U.S. Industrial Production Index

August 2010 – August 2019



U.S. Capacity Utilization Index

August 2010 – August 2019





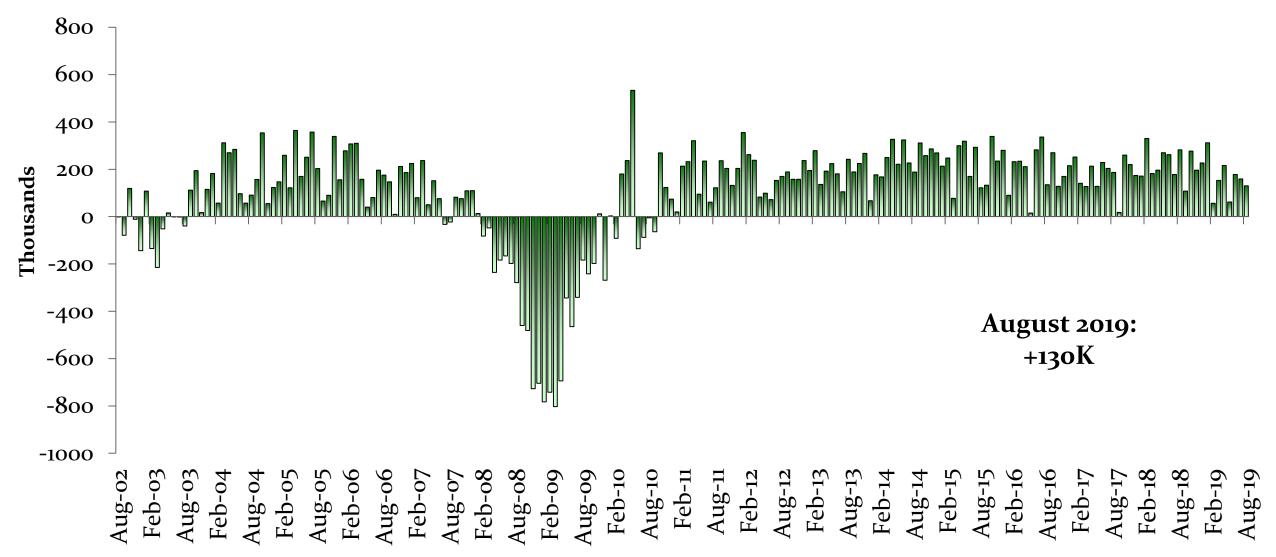
U.S. Job Openings July 2001 through July 2019





Net Change in U.S. Jobs

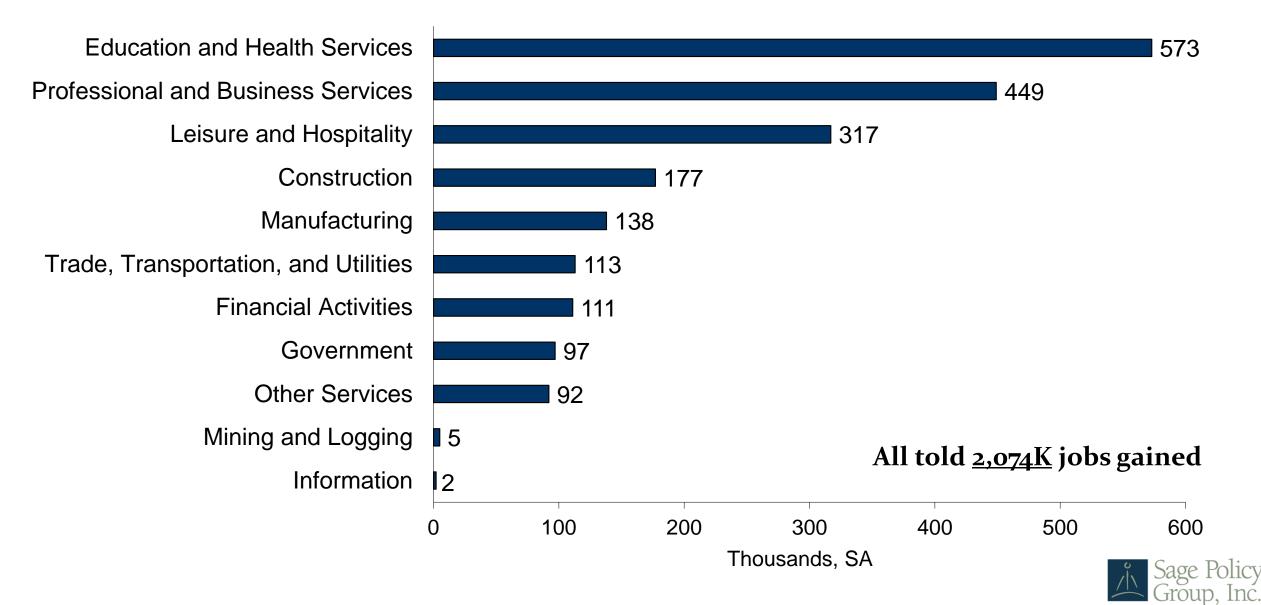
August 2002 through August 2019



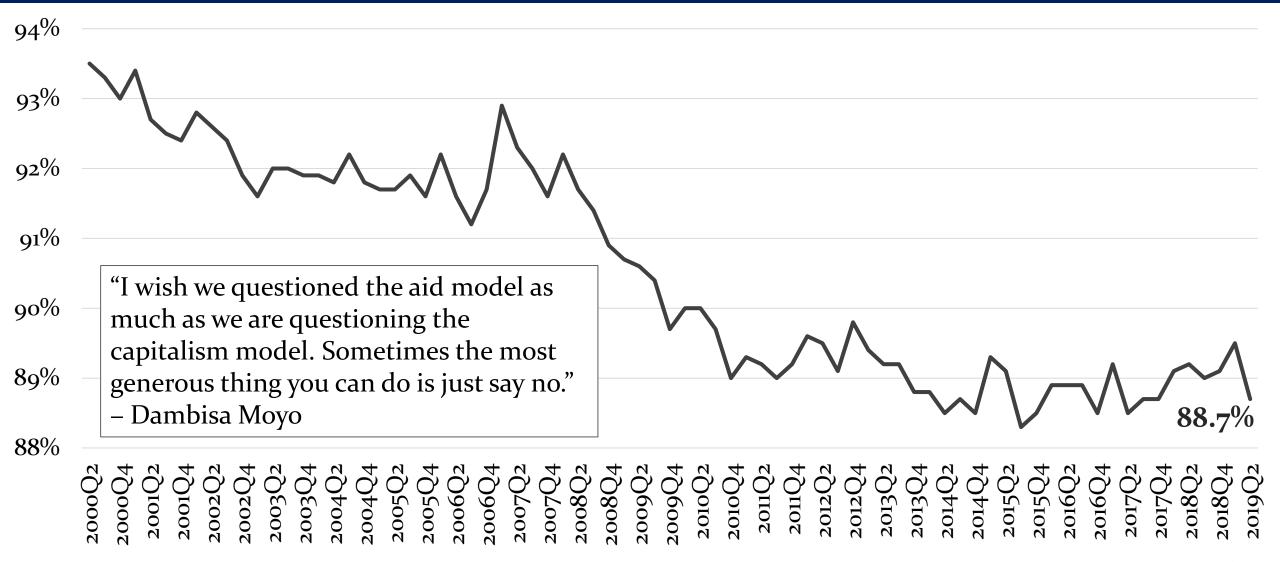


National Nonfarm Employment

by Industry Sector, August 2018 v. August 2019



U.S. Labor Force Participation: Men Ages 25-34 2000 – 2019

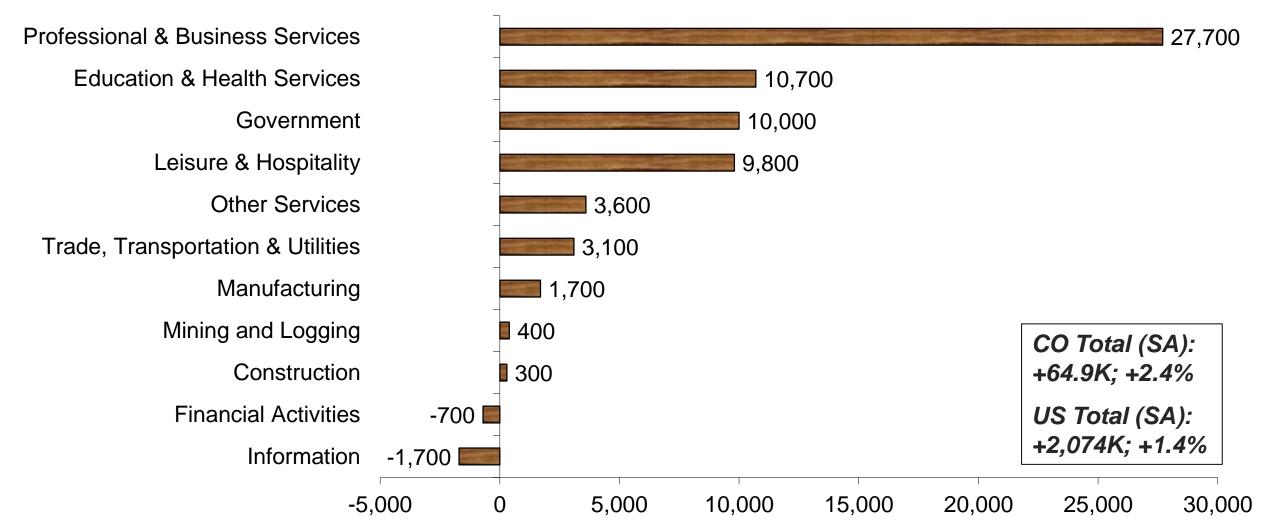




Colorado Nonfarm Employment

by Industry Sector Groups (SA)

August 2018 v. August 2019 Absolute Change



^{*}According to the Local Area Unemployment Statistics (LAUS) series CO added 62,781 jobs between August 2018 and August 2019.

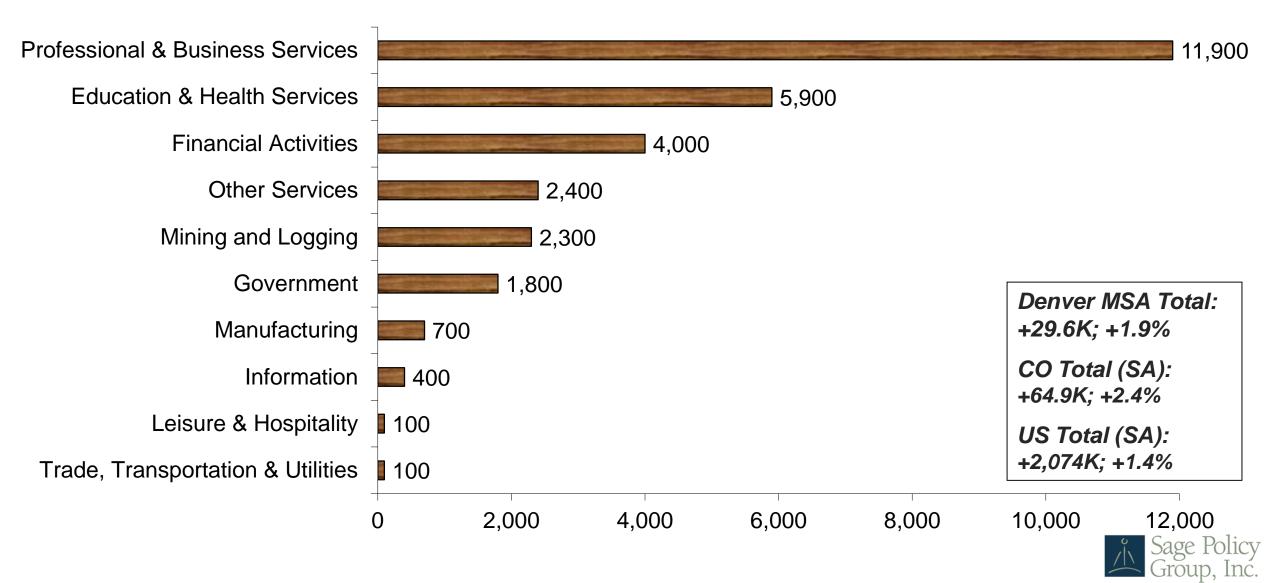


Source: U.S. Bureau of Labor Statistics

Denver-Aurora-Lakewood, CO Nonfarm Employment

by Industry Sector Groups (SA)

August 2018 v. August 2019 Absolute Change



Employment Growth, U.S. States (SA)

August 2018 v. August 2019 Percent Change

RANK	STATE	%	RANK	STATE	%	RANK	STATE	%
1	NEVADA	3.0	17	SOUTH CAROLINA	1.5	35	VIRGINIA	0.9
2	UTAH	2.8	17	TENNESSEE	1.5	36	IOWA	8.0
3	WASHINGTON	2.6	20	MISSISSIPPI	1.3	36	NEBRASKA	8.0
4	ARIZONA	2.5	20	MISSOURI	1.3	38	WEST VIRGINIA	0.7
4	FLORIDA	2.5	20	MONTANA	1.3	39	INDIANA	0.6
6	COLORADO	2.4	20	WYOMING	1.3	39	NORTH DAKOTA	0.6
6	TEXAS	2.4	24	ARKANSAS	1.2	39	PENNSYLVANIA	0.6
8	IDAHO	2.1	24	DISTRICT OF COLUMBIA	1.2	42	CONNECTICUT	0.4
8	NEW MEXICO	2.1	24	MASSACHUSETTS	1.2	42	MICHIGAN	0.4
10	ALABAMA	2.0	27	ALASKA	1.1	42	OHIO	0.4
11	GEORGIA	1.9	27	DELAWARE	1.1	45	OKLAHOMA	0.3
11	NEW HAMPSHIRE	1.9	27	ILLINOIS	1.1	46	VERMONT	0.2
11	OREGON	1.9	27	KANSAS	1.1	47	HAWAII	0.1
14	CALIFORNIA	1.8	27	MAINE	1.1	47	LOUISIANA	0.1
15	NORTH CAROLINA	1.6	27	NEW JERSEY	1.1	47	MARYLAND	0.1
15	SOUTH DAKOTA	1.6	33	KENTUCKY	1.0	47	MINNESOTA	0.1
17	RHODE ISLAND	1.5	33	NEW YORK	1.0	47	WISCONSIN	0.1



Employment Growth, 25 Largest Metros (NSA)

August 2018 v. August 2019 Percent Change

Rank	MSA	%	Rank	MSA	%
1	Orlando-Kissimmee-Sanford, FL		14	San Diego-Carlsbad, CA	1.8
2	Dallas-Fort Worth-Arlington, TX		15	Tampa-St. Petersburg-Clearwater, FL	1.6
2	Seattle-Tacoma-Bellevue, WA		16	Atlanta-Sandy Springs-Roswell, GA	1.5
4	Houston-The Woodlands-Sugar Land, TX		17	Boston-Cambridge-Nashua, MA-NH	1.4
4	Phoenix-Mesa-Scottsdale, AZ	2.7	17	New York-Newark-Jersey City, NY-NJ-PA	1.4
6	Riverside-San Bernardino-Ontario, CA	2.5		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.4
7	San Francisco-Oakland-Hayward, CA		20	Los Angeles-Long Beach-Anaheim, CA	1.2
8	Charlotte-Concord-Gastonia, NC-SC	2.3	21	Chicago-Naperville-Elgin, IL-IN-WI	1.0
9	Portland-Vancouver-Hillsboro, OR-WA	2.1	21	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.0
9	San Antonio-New Braunfels, TX	2.1	21		
11	Miami-Fort Lauderdale-West Palm Beach, FL		23	Baltimore-Columbia-Towson, MD	0.9
12	Denver-Aurora-Lakewood, CO	1.9	24	Minneapolis-St. Paul-Bloomington, MN-WI	0.0
12	St. Louis, MO-IL	1.9	25	Detroit-Warren-Dearborn, MI	-0.3



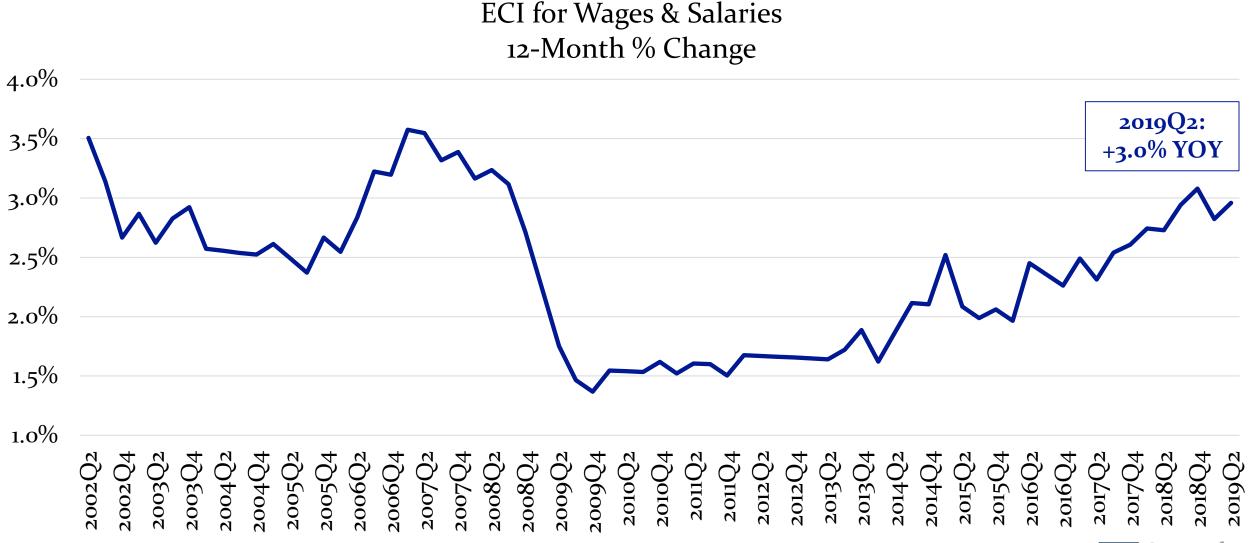
Unemployment Rates, 25 Largest Metros (NSA) *July 2019*

Rank	MSA	UR	Rank	MSA	UR
1	Boston-Cambridge-Nashua, MA-NH		12	Seattle-Tacoma-Bellevue, WA	3.6
1	Denver-Aurora-Lakewood, CO	2.7	12	St. Louis, MO-IL (1)	3.6
3	San Francisco-Oakland-Hayward, CA	2.9	15	New York-Newark-Jersey City, NY-NJ-PA	3.9
4	Minneapolis-St. Paul-Bloomington, MN-WI	3.1	16	Charlotte-Concord-Gastonia, NC-SC	4.0
5	Orlando-Kissimmee-Sanford, FL	3.2	16	Houston-The Woodlands-Sugar Land, TX	4.0
6	San Antonio-New Braunfels, TX	3.3	16	Portland-Vancouver-Hillsboro, OR-WA	4.0
	Washington-Arlington-Alexandria, DC-VA-MD-WV		19	Baltimore-Columbia-Towson, MD	4.1
			19	Chicago-Naperville-Elgin, IL-IN-WI	4.1
8	Dallas-Fort Worth-Arlington, TX	3.4	/ I	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	4.3
8	Miami-Fort Lauderdale-West Palm Beach, FL	3.4	22	Los Angeles-Long Beach-Anaheim, CA	4.6
8	Tampa-St. Petersburg-Clearwater, FL	3.4	22	Riverside-San Bernardino-Ontario, CA	4.6
11	Atlanta-Sandy Springs-Roswell, GA	3.5	24	Phoenix-Mesa-Scottsdale, AZ	4.8
12	San Diego-Carlsbad, CA	3.6	25	Detroit-Warren-Dearborn, MI	5.3

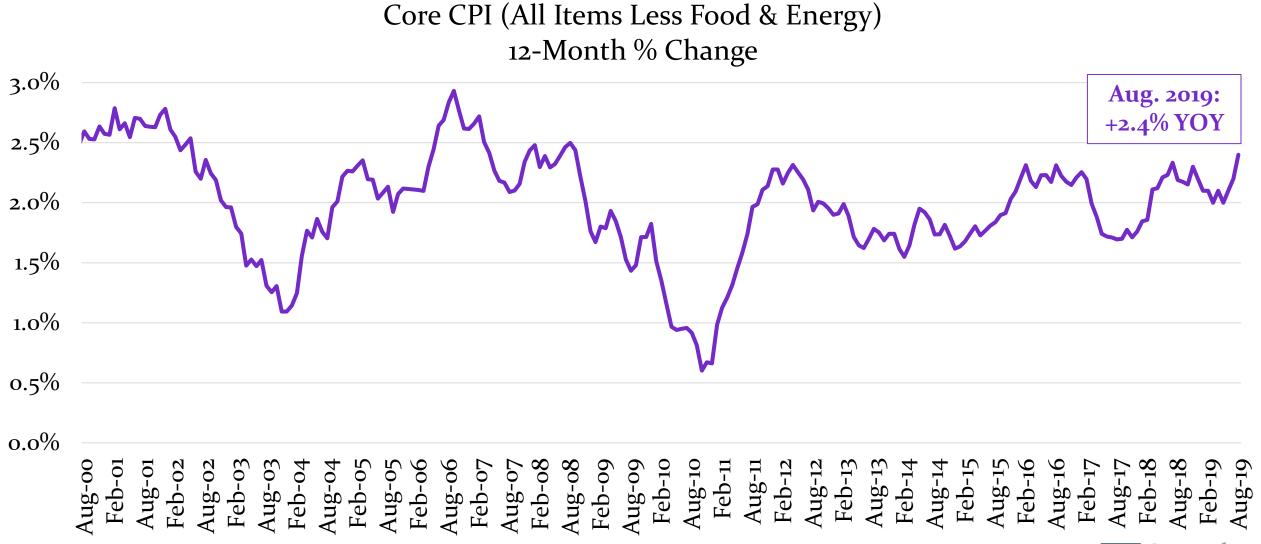


Growth in Wages & Salaries

Employment Cost Index (ECI), 2002Q2-2019Q2

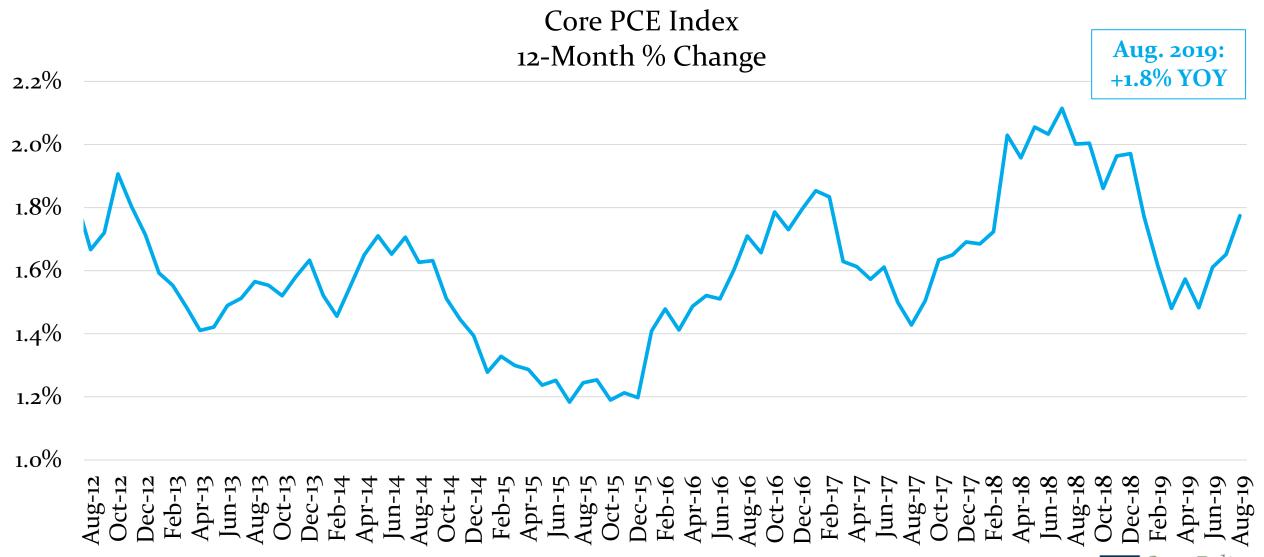


Consumer Price Index: All Items Less Food & Energy *August 2000 – August 2019*



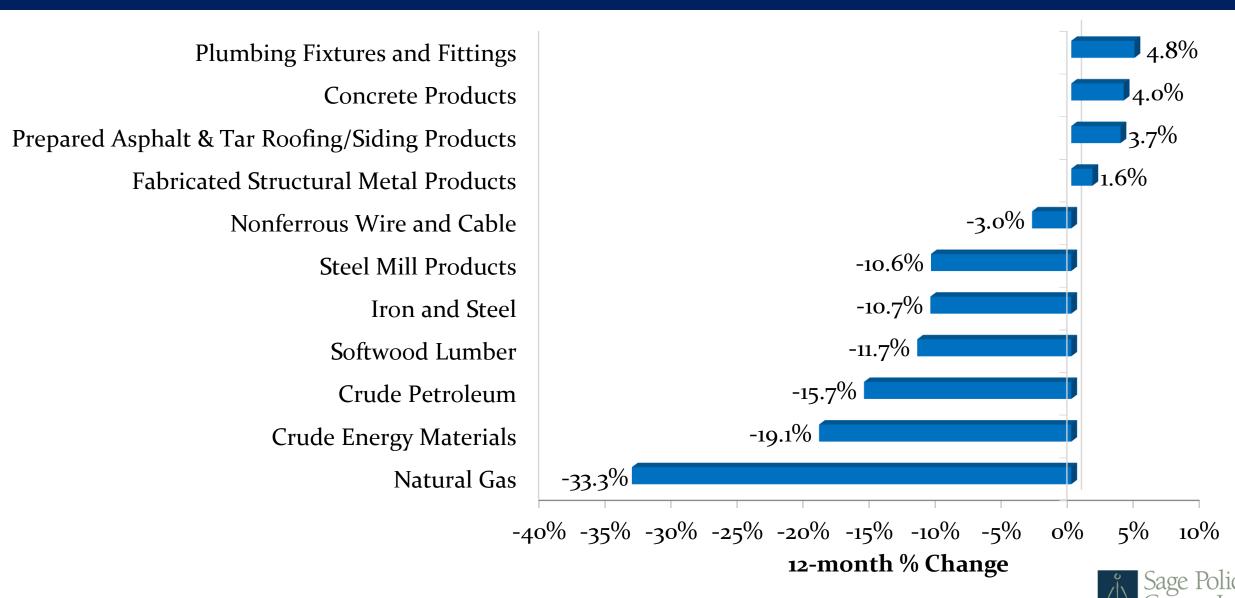
Core PCE Deflator

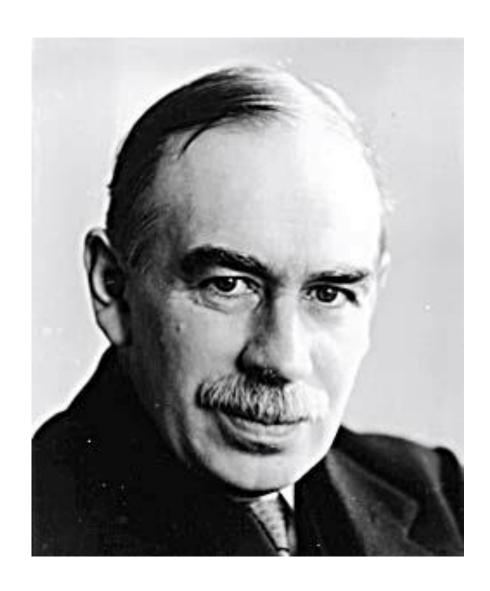
August 2012 through August 2019



Construction Materials PPI (NSA)

12-month % Change as of August 2019





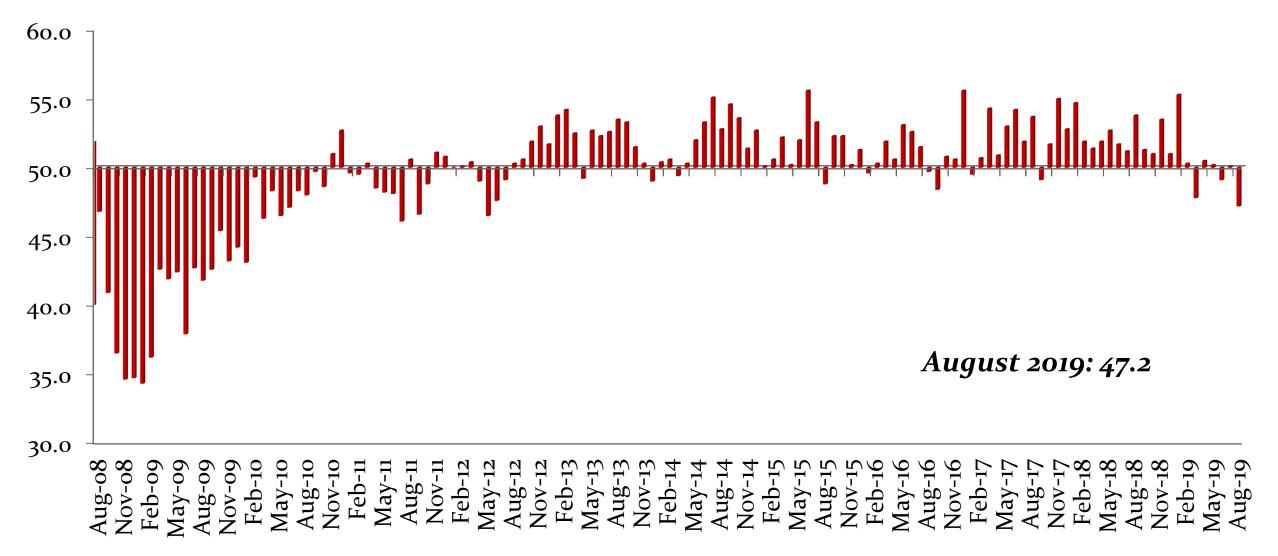
"Most men love money and security more, and creation and construction less, as they get older."

-John Maynard Keynes



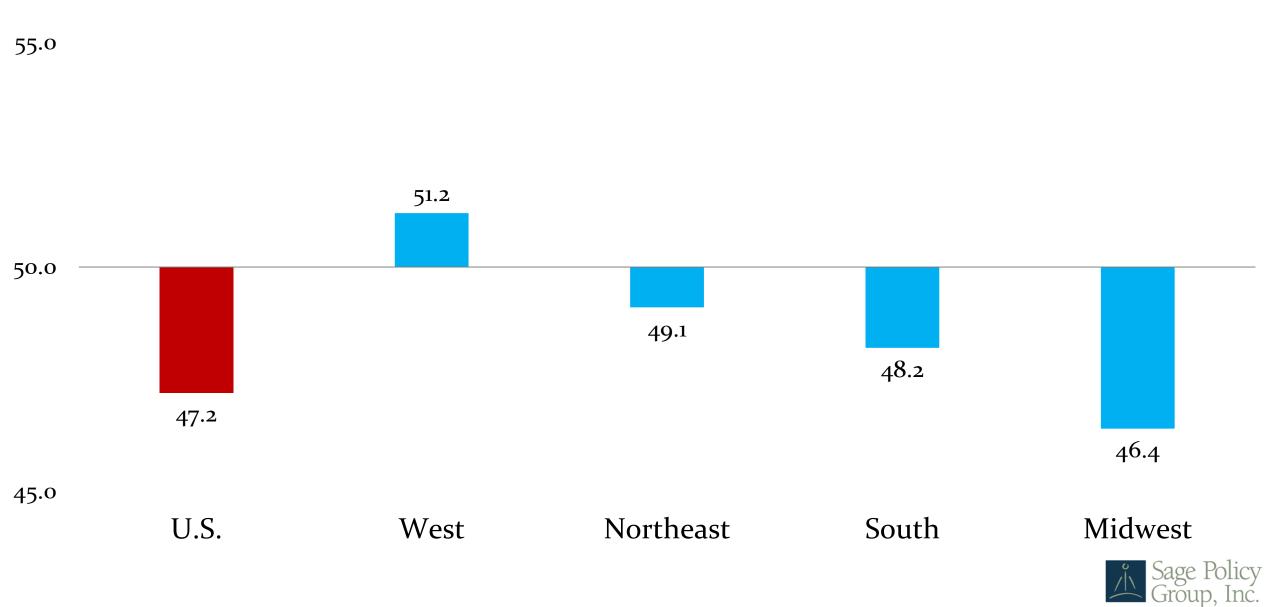
Architecture Billings Index

August 2008 through August 2019

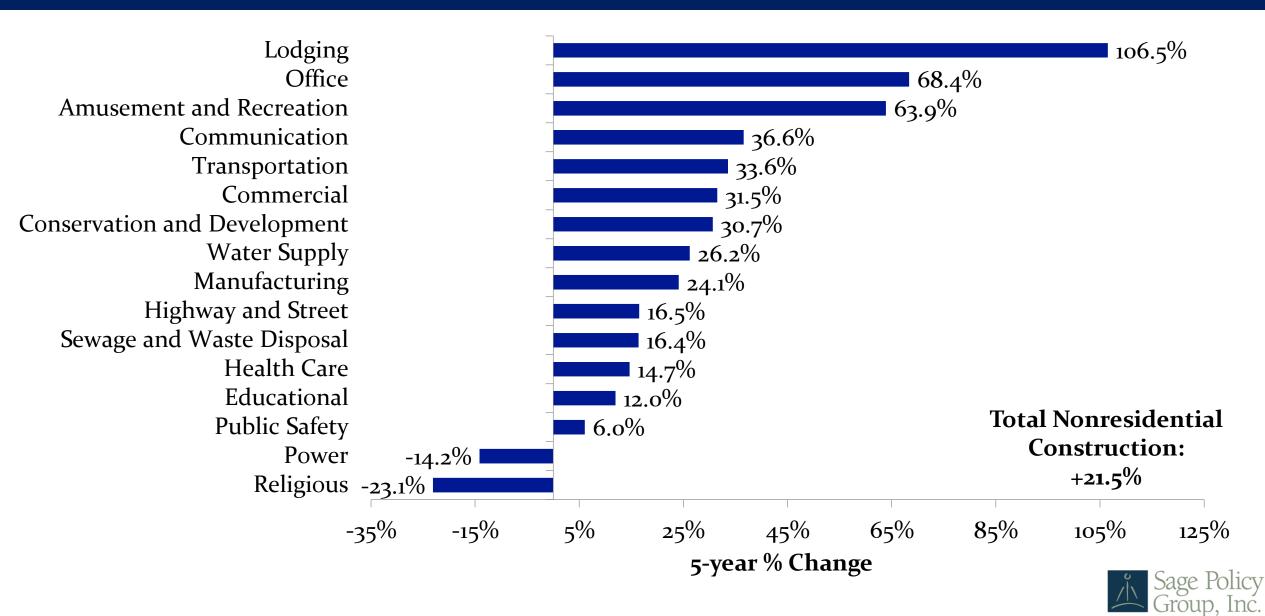




Architecture Billings Index by U.S. Region (Colorado is in the West) *August 2019*

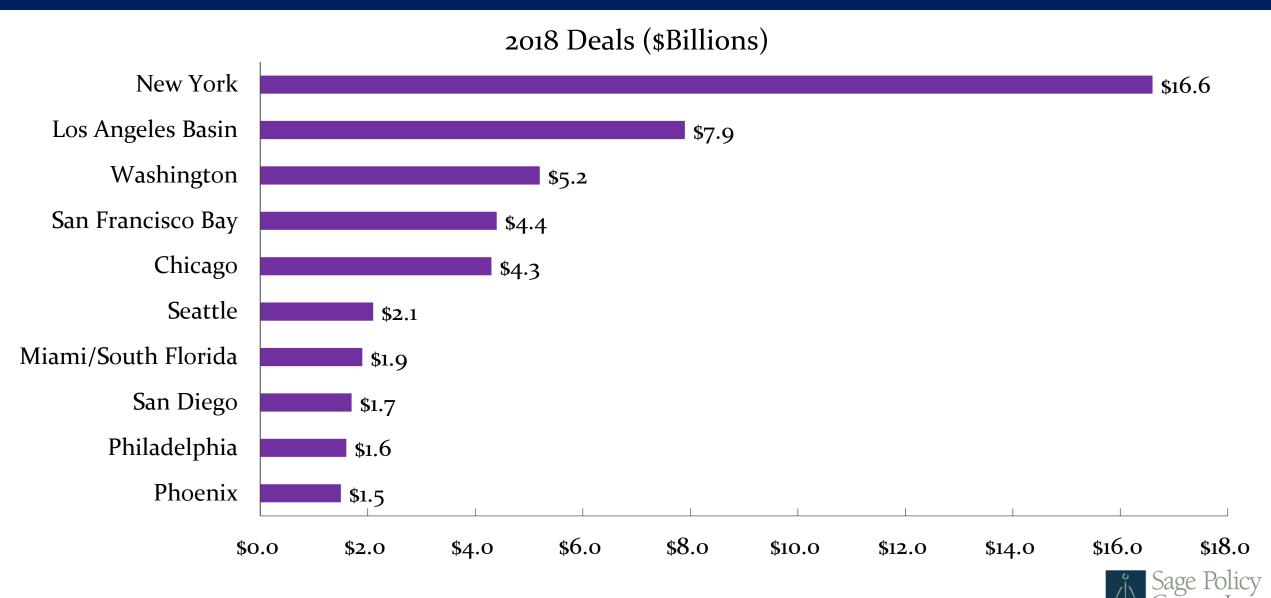


National Nonresidential Construction Spending by Subsector July 2014 v. July 2019

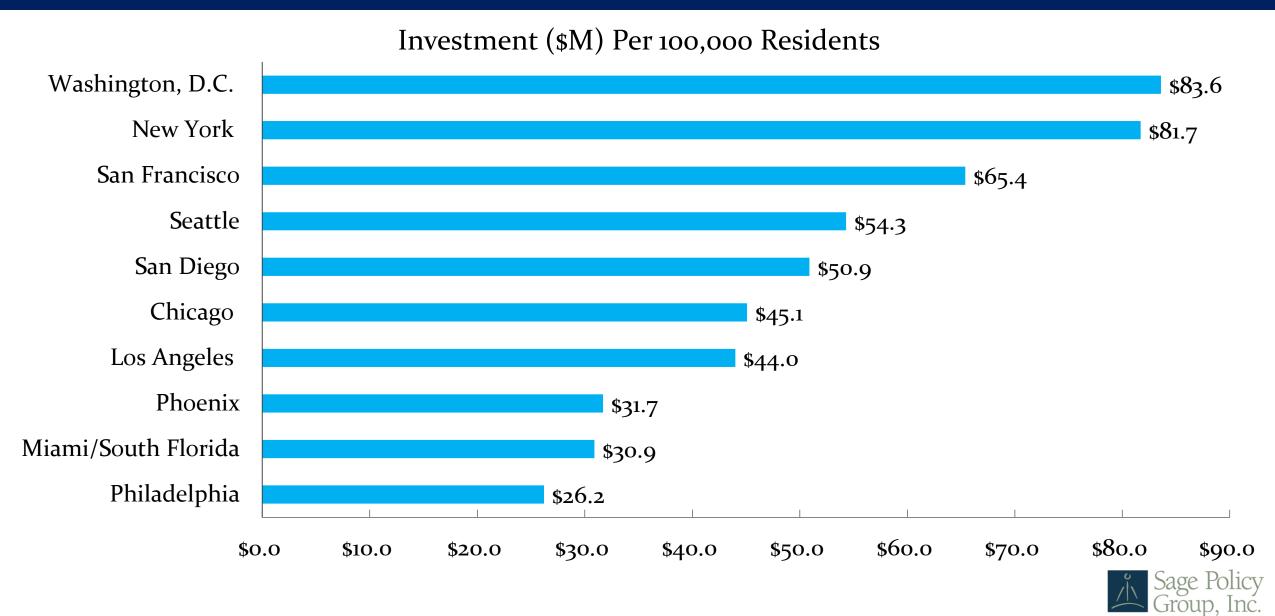


Foreign Investment in U.S. Commercial Real Estate

Top Destination Markets, 2018

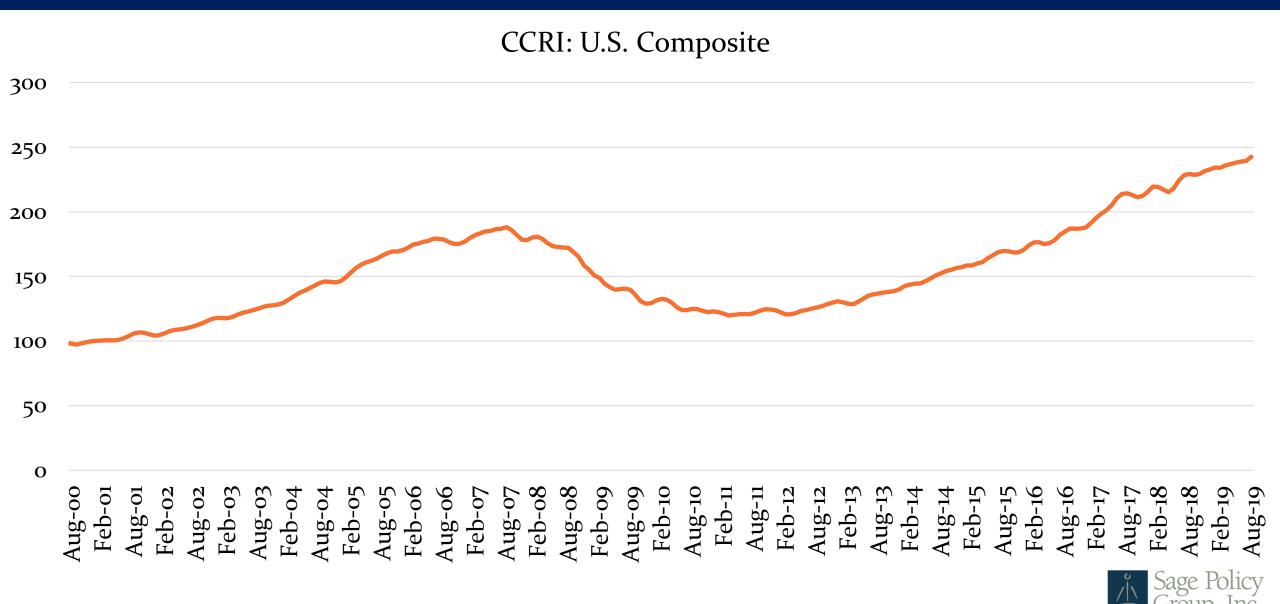


Foreign Investment in U.S. Commercial Real Estate Per 100,000 Residents *Top Destination Markets, 2018*



CoStar Commercial Repeat Sales Index

August 2000 through August 2019

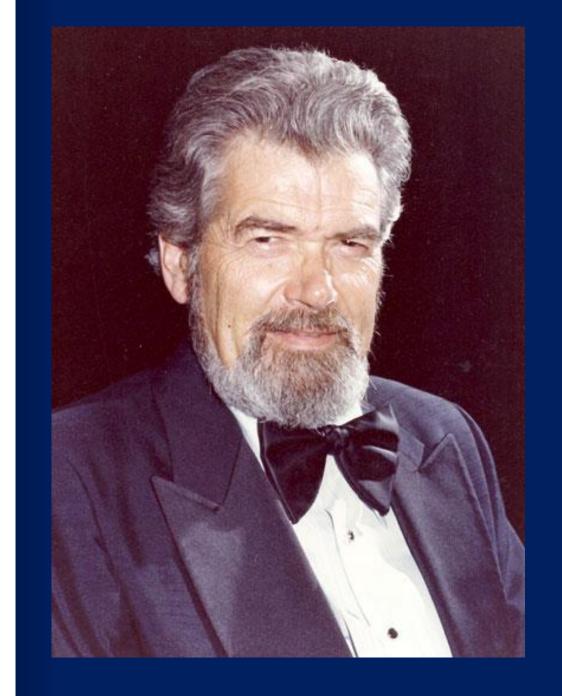


Source: Costar

^{*}Based on 1,274 repeat sale pairs in August 2019 and more than 215,000 repeat sales since 1996.

"An economist is an expert who will know tomorrow why the things he predicted yesterday didn't happen today."

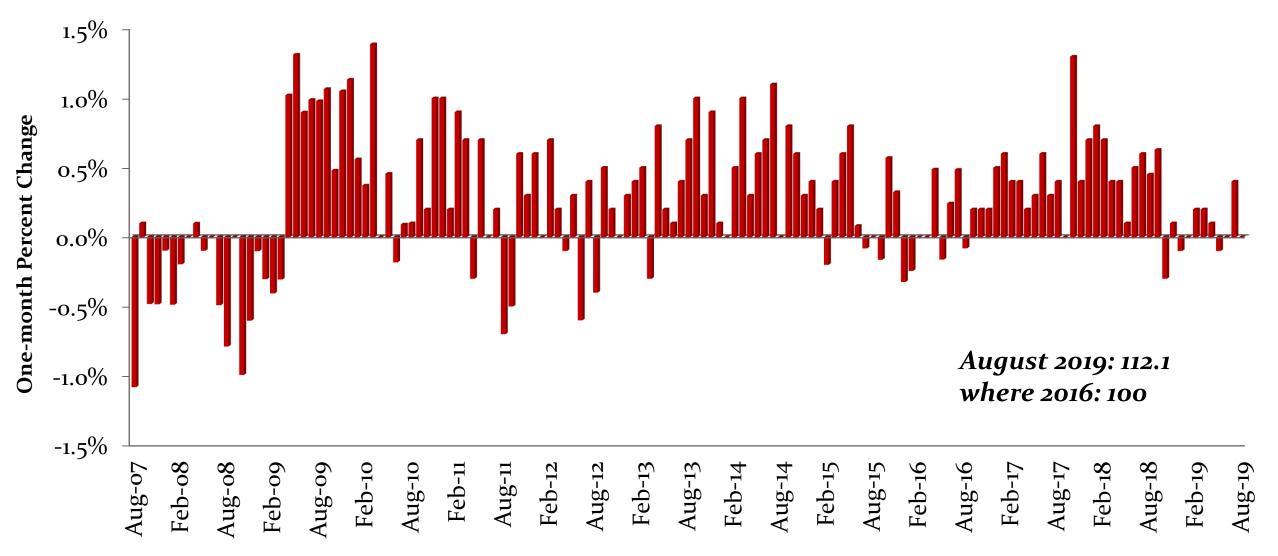
-Laurence J. Peter





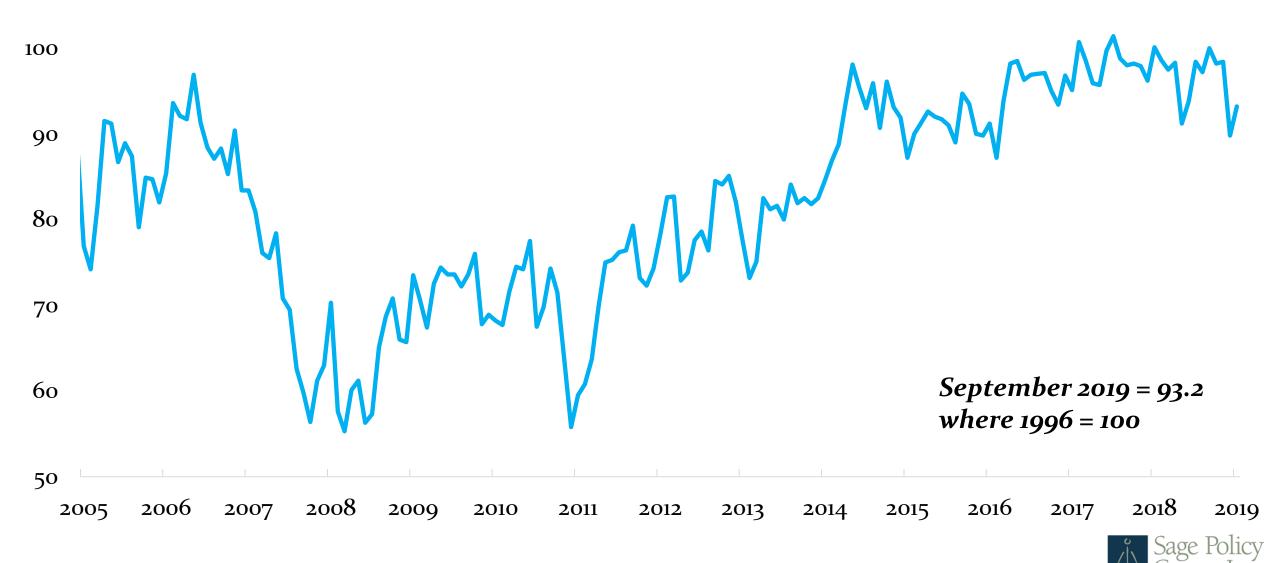
Conference Board Leading Economic Indicators Index

August 2007 through August 2019



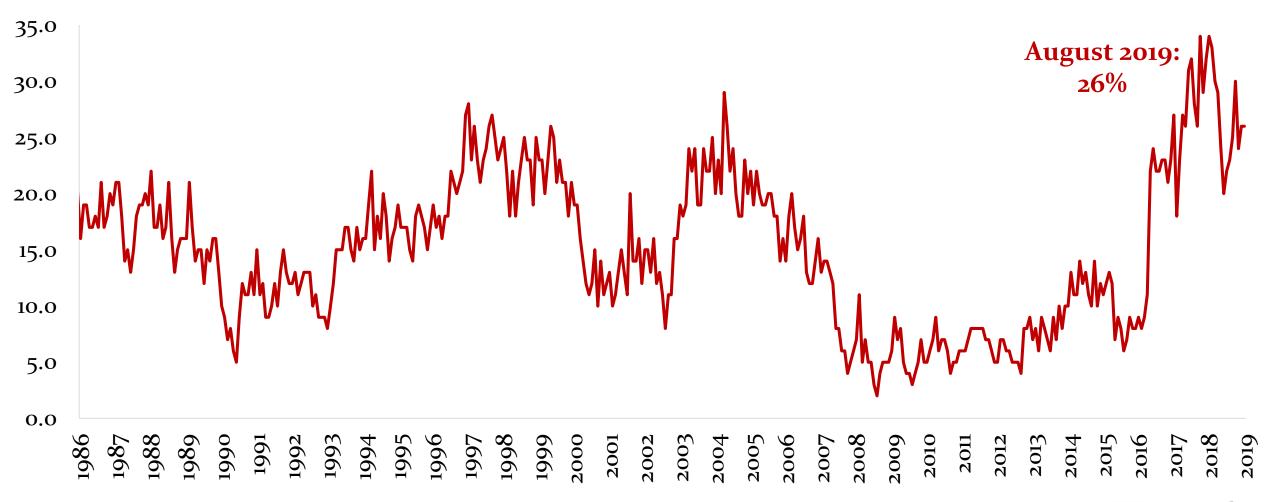


University of Michigan Index of Consumer Sentiment *2005-2019*



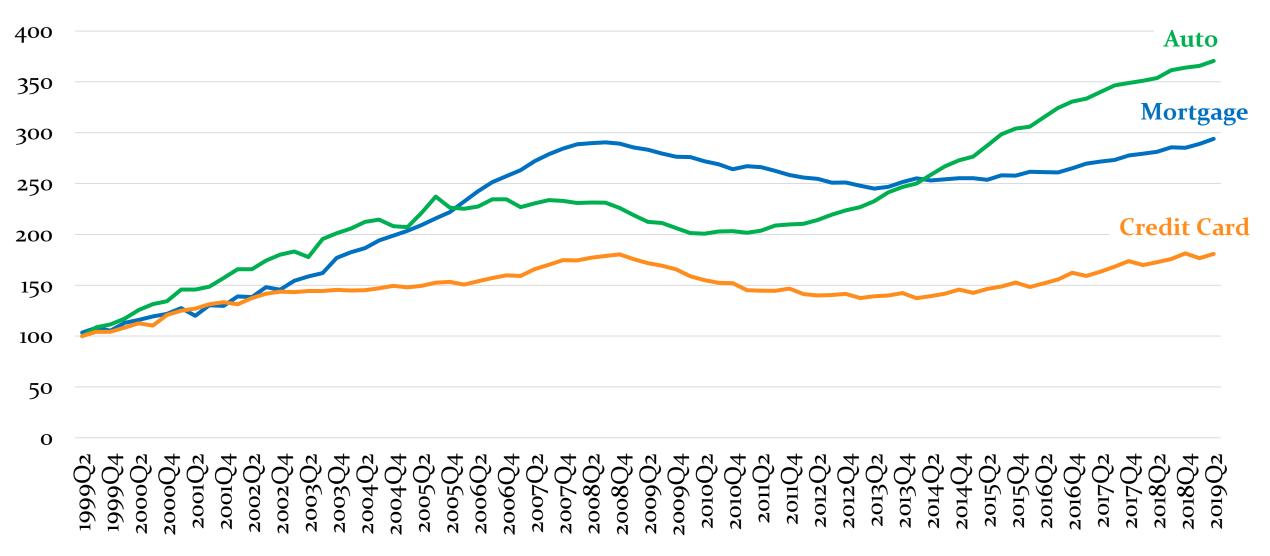
NFIB Index of Small Business Optimism: Good Time to Expand 1986-2019

% of respondents who think the next 3 months will be a good time to for small business to expand



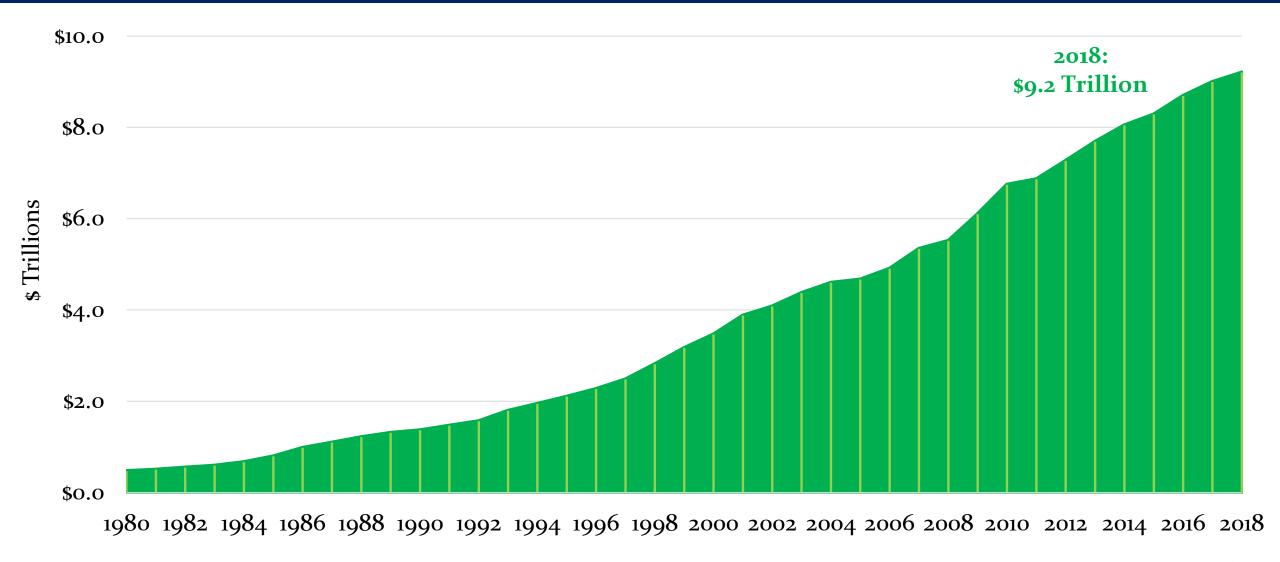
Total U.S. Debt Volume by Select Loan Types

Index 1999Q1=100





U.S. Corporate Bond Debt Outstanding, 1980-2018





Economists do it with Models

- Much of the negativity reflected in forecasts and in financial market volatility relates to things people believe will happen;
- But important parts of the U.S. economy continue to perform well – e.g. consumer, corporate earnings, construction.

- What's more, there is significant upside risk. What if the following happens?
 - ☐ Trade deal with China;
 - ☐ Infrastructure spending plan with revenue sources identified;
 - ☐ Elimination of tariffs on steel, aluminum, etc. &
 - ☐ Fed stops tightening!!!!
 - Hypothesis 2019 will be decent year for economy, but if we don't check some of these boxes, watch out for '20!



Thank You

Please follow me on Twitter -- @sageanirban

Please look for updates of information at www.sagepolicy.com.

Please contact us when you require economic research & policy analysis.

