

Economic Outlook

Mark Vitner, Managing Director & Senior Economist April 22, 2020

Together we'll go far



Economic Outlook

The U.S. economy had strong momentum at the start of the year but has likely fallen into recession due shutdowns related to the COVID-19 outbreak. Real GDP is expected to plunge in the second quarter.

Quantifying the Contraction

■ There were few obvious imbalances prior to the COVID-19 outbreak, which should help insulate the U.S. economy from a severe downturn. There is some risk of financial contagion from the equity selloff and corporate debt.

Notable Impacts

With the leisure & hospitality industry abruptly shut down, layoffs have soared. Job losses extend will beyond the hospitality sector, however, and unemployment is likely to spike over the new few months.

What Kind of Recovery?

■ The abrupt shutdown of economic activity combined with the absence of imbalances in the most cyclical parts of the economy has given rise to hopes of a V-shaped recovery. It may now be that simple, however.

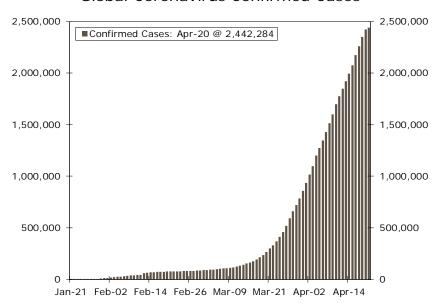
North Carolina

North Carolina is poised to lose 426,000 jobs in 2020, the bulk of which will be lost in the second quarter. A recovery should take hold this summer and the state should recoup 60% of its job losses by year-end 2021.

The U.S. saw a spike in cases as testing ramped up, but new cases have now levelled off. Attention is beginning to shift to when the economy can 're-open'.

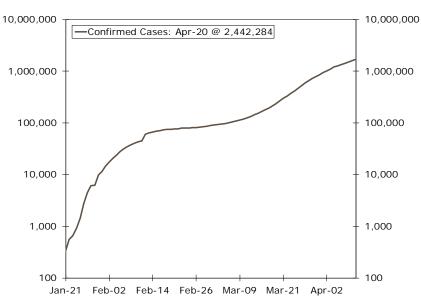
Linear Scale

Global Coronavirus Confirmed Cases



Log Scale

Global Coronavirus Confirmed Cases



Source: Bloomberg LP and Wells Fargo Securities

22 million people have already filed unemployment claims, over just the past four weeks.

Initial Jobless Claims Millions, SA 8 ■ Initial Claims: Apr-11 @ 5.2M 7 6 5 4 3 2 1 Jan-19 Mar-19 May-19 Aug-19 Oct-19 Dec-19 Feb-20 Source: U.S. Department of Labor and Wells Fargo Securities

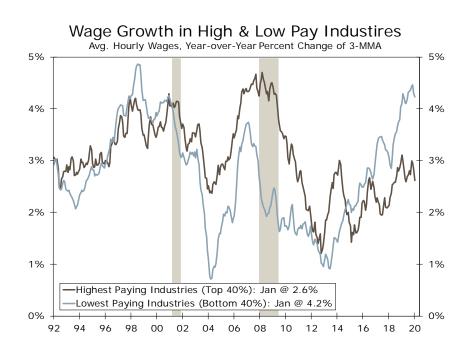
Employment Situation

The job market was strong before the outbreak, but the March employment report revealed that employers cut back on hiring earlier than most had expected. The claims data are the best indication of what to expect for nonfarm employment, and they are pointing to massive losses.

Nonfarm Employment

U.S. Employment Change Monthly Change, Thousands 400 400 200 200 -200 -200 -400 -400 -600 -600 NFP: Mar @ -701K NFP 12-MMA: Mar @ 125K QCEW 12-MMA: Sep @ 140K -800 -800 14 15 16 17 18 19 20 13

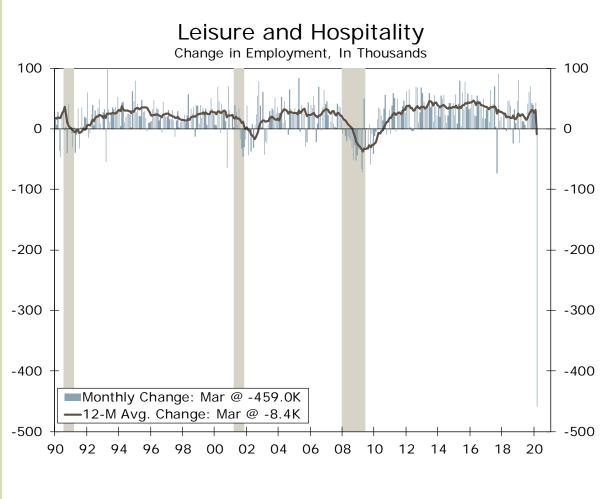
Wages



 $Source: U.S.\ Department\ of\ Labor\ and\ Wells\ Fargo\ Securities$

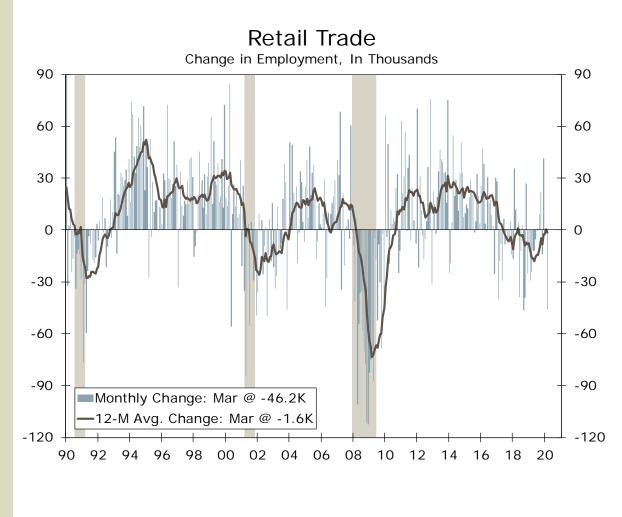
Leisure & Hospitality

The bulk of losses in March were in leisure & hospitality, but the losses in April will be widespread.



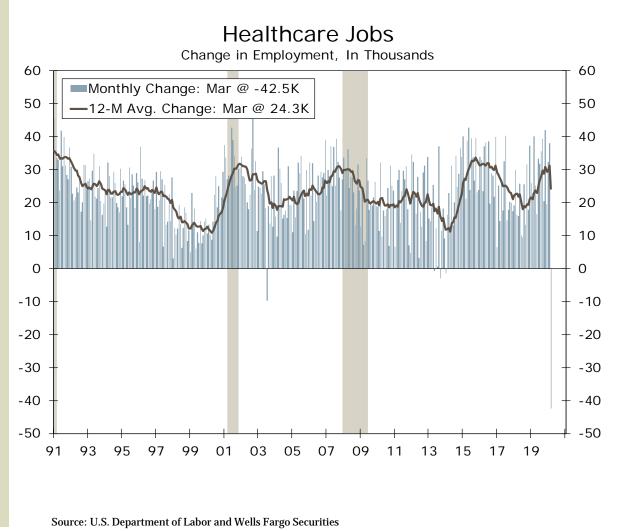
Source: U.S. Department of Labor and Wells Fargo Securities

Major retail chains have announced significant layoffs and furloughs.



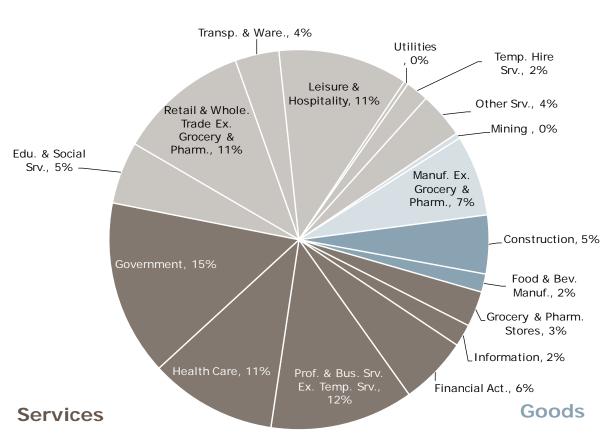
Source: U.S. Department of Labor and Wells Fargo Securities

Healthcare is hurting due to the postponement of elective operations.



U.S. Employment

A sizeable share of the workforce is in industries exposed to disruptions in activity due to the virus.



^{*}Darker blue and gray shades represent less exposed categories of employment

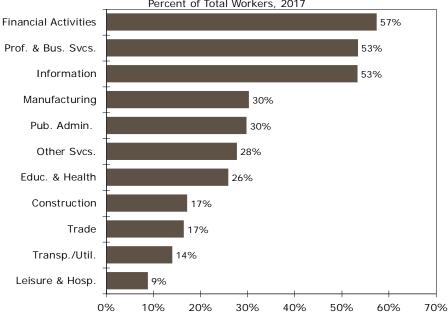
Source: U.S. Department of Labor and Wells Fargo Securities

Many workers in some of the hardest hit industries are unable to work from home and/or do not have access to paid leave and medical benefits.

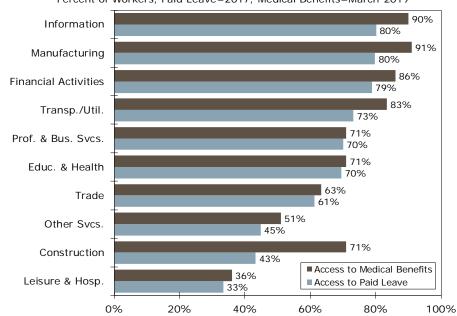
Job Flexibility

Job Benefits

Capability to Work from Home Percent of Total Workers, 2017



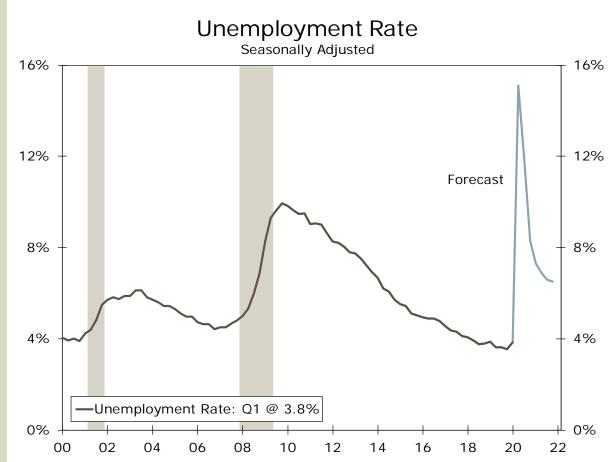
Paid Leave Access & Employer-Sponsored Medical Benefits Percent of Workers, Paid Leave=2017, Medical Benefits=March 2019



Source: U.S. Department of Labor and Wells Fargo Securities

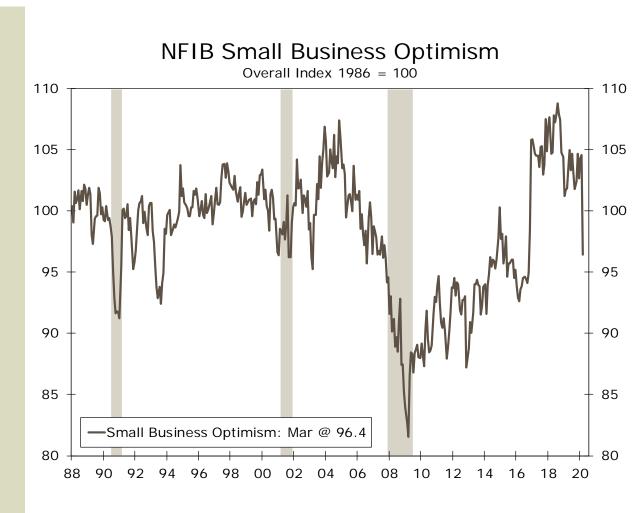
Unemployment

The unemployment rate is likely already in the double digits.



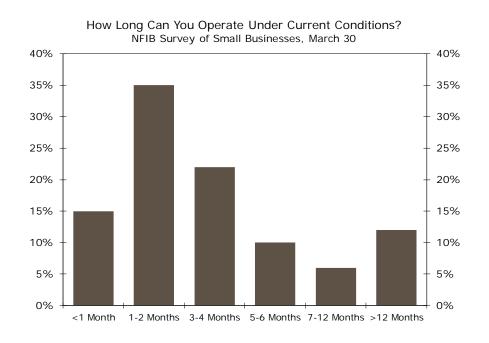
Source: U.S. Department of Labor and Wells Fargo Securities

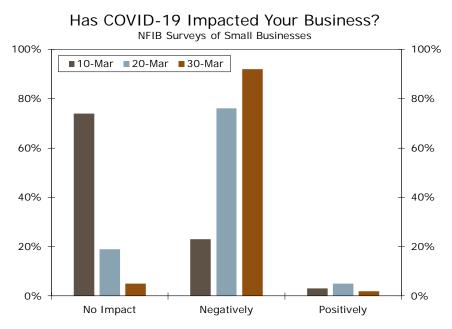
The NFIB Small Business Optimism Index plunged in March.



Source: NFIB and Wells Fargo Securities

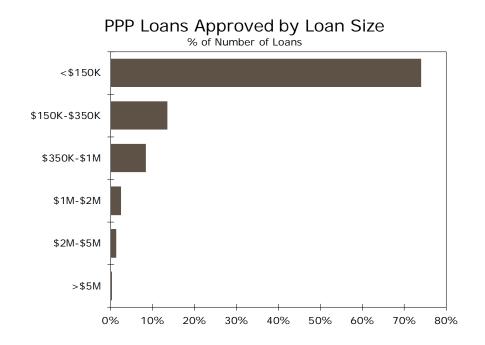
Most small businesses report only being able to last for a couple months under current conditions.

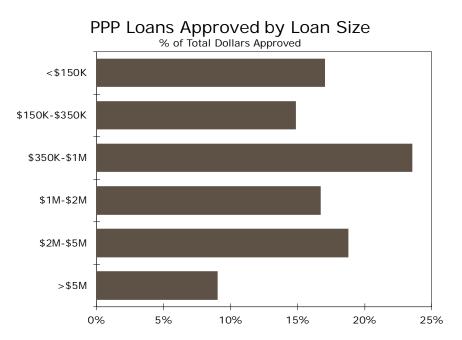




Source: NFIB and Wells Fargo Securities

The initial \$349 billion in PPP loans was exhausted by Thursday. North Carolina businesses received 39,520 loans totaling \$8.0 billion,



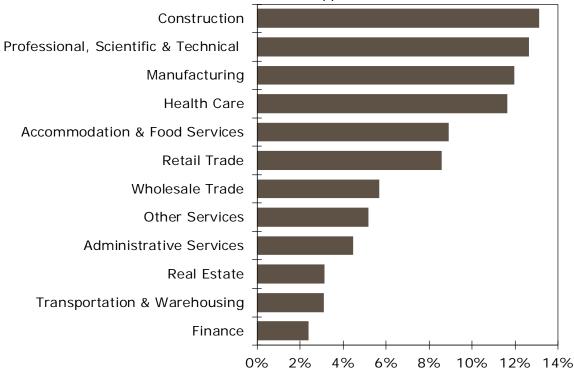


Source: Small Business Association and Wells Fargo Securities

Nationwide, construction received the most loans by dollar value.

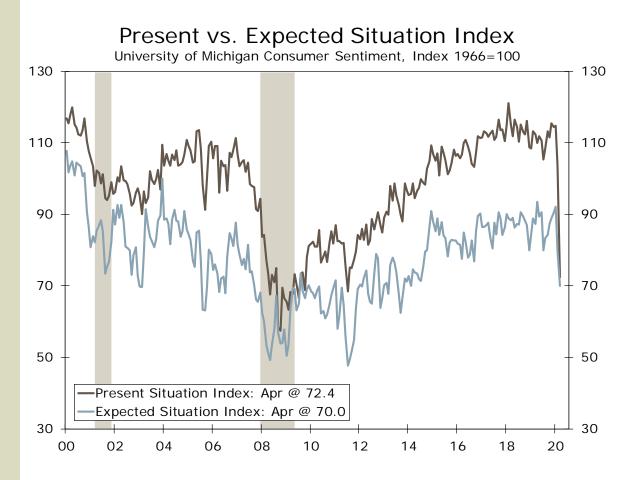
PPP Loans Approved by Industry

% of Total Dollars Approved



 $Source: Small\ Business\ Administration\ and\ Wells\ Fargo\ Securities$

Consumer confidence also posted its largest one-month drop in history.

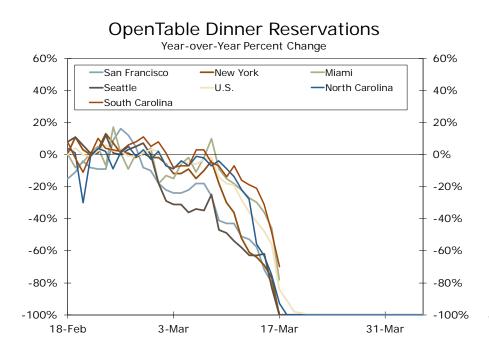


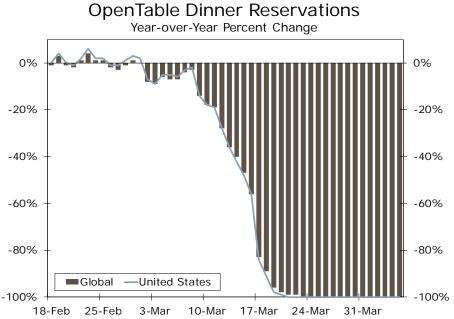
Source: University of Michigan and Wells Fargo Securities

U.S. Consumer Spending

Consumers pulled back on discretionary spending, even before restaurants were closed across much of the country. Take-out and delivery will offset a portion of this drop but we expect the drop in restaurant dining to be more than 80% in April.



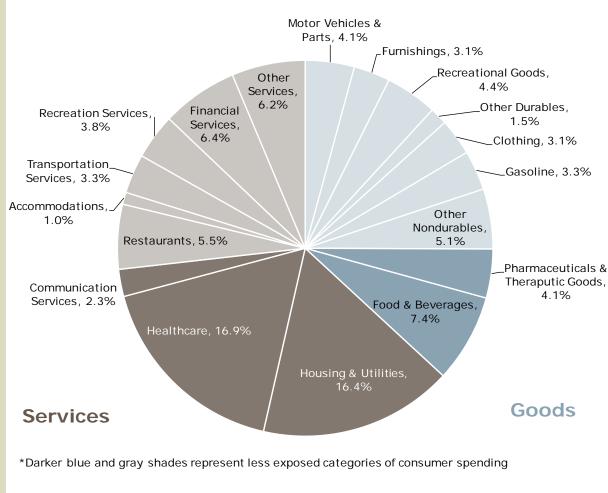




Source: OpenTable and Wells Fargo Securities

U.S. Consumer Spending

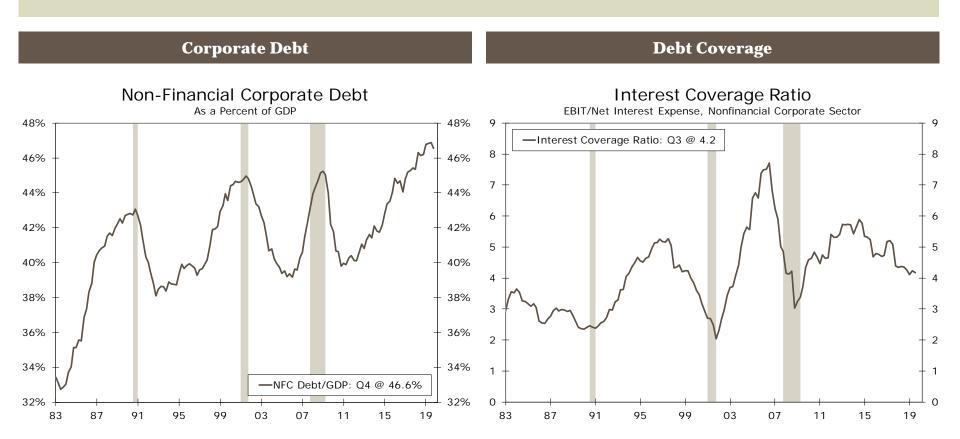
Categories expected to see a pullback in spending due efforts to contain the novel coronavirus account for about half of consumer spending.



Source: U.S. Department of Commerce and Wells Fargo Securities

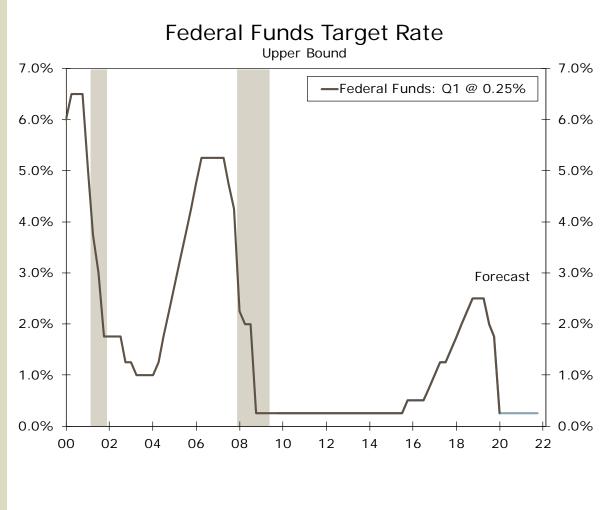
Corporate Finances

Corporate debt has been a worry for most of this expansion. While debt is historically high relative to GDP, interest expense remains relatively low relative to earnings.



Source: Federal Reserve Board, U.S. Department of Commerce and Wells Fargo Securities

The Fed has been aggressive and used a wide variety of tools to ease financial market stress.

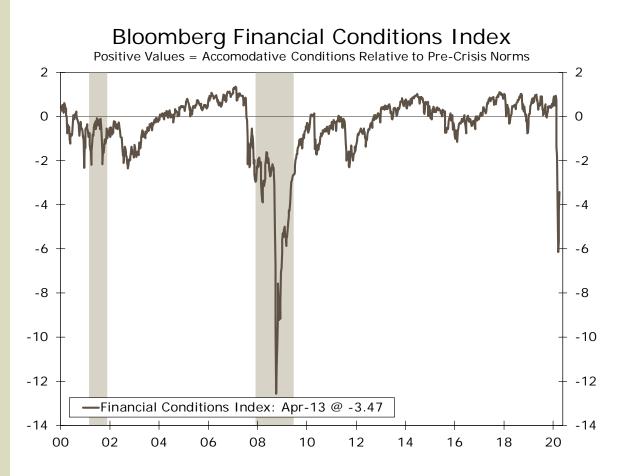


Source: Bloomberg LP and Wells Fargo Securities

Financial Conditions

That is partially why equity markets have retraced a good bit of their declines.

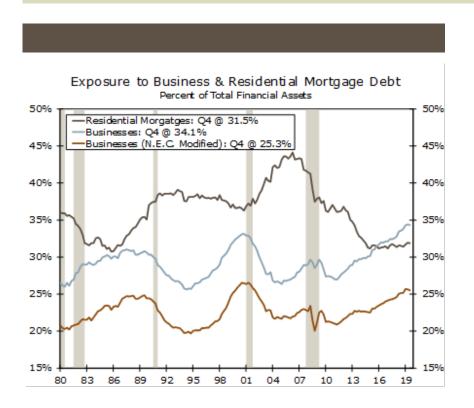
Investors are also trying to guess the shape of the recovery.

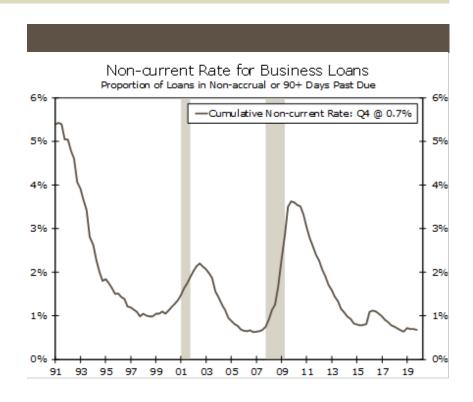


Source: Bloomberg LP and Wells Fargo Securities

Banking Sector

The banking sector was strong and well-capitalized heading into the crisis.





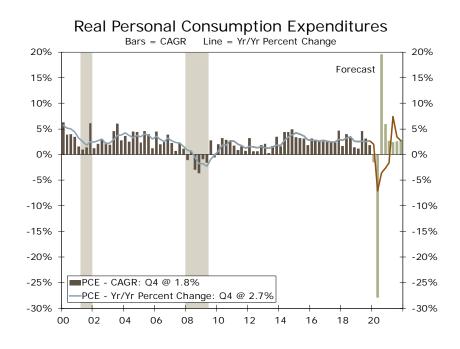
 $Source: Federal\ Reserve\ Board,\ Federal\ Deposit\ Insurance\ Corporation\ and\ Wells\ Fargo\ Securities$

The sudden stop in economic activity is difficult to quantify. First-order effects include supply chain disruptions and demand destruction emanating from massive shutdowns throughout the economy. Second-order effects will emanate from the financial disorder and weakening of corporate, household and public sector credit. Restarting growth may prove problematic.

GDP

U.S. Real GDP Bars = CAGR Line = Yr/Yr Percent Change 10% 10% Forecast 5% 5% -5% -5% -10% -10% -15% -15% -20% -20% ■GDP - CAGR: Q4 @ 2.1% GDP - Yr/Yr Percent Change: Q4 @ 2.3% -25% -25% 80 10 12 16 18 20

Personal Consumption



Source: U.S. Department of Commerce and Wells Fargo Securities

In the short term, the shock to aggregate demand is far greater than any pressures resulting from disruptions to supply chains. Longer-term, the hit to global supply chains is likely to produce at least modest inflationary pressures.

Jay Powell has said he is not concerned with inflation.

PCE Deflator vs. Core PCE Deflator Year-over-Year Percent Change 5% 5% -PCE Deflator: Feb @ 1.8% -Core PCE Deflator: Feb @ 1.8% 4% 4% - - FOMC's 2.0% Inflation Target 3% 3% 2% 2% 1% 1% 0% 0% -1% -1%

Source: U.S. Department of Commerce and Wells Fargo Securities

09

10

11

12

13

14

15

16

17

18

19

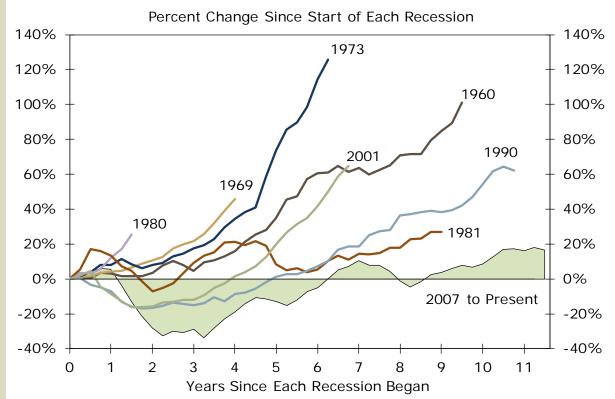
07

08

-2%

Overall building has remained relatively subdued this cycle.

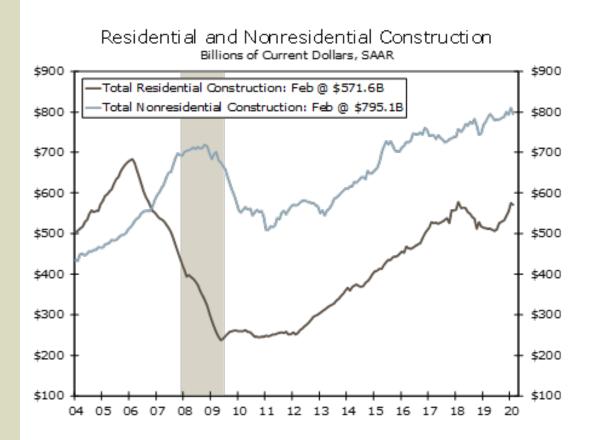
Nonresidential Structures Investment



Source: U.S. Department of Commerce and Wells Fargo Securities

Construction

Residential construction had been primed to pick-up even further.

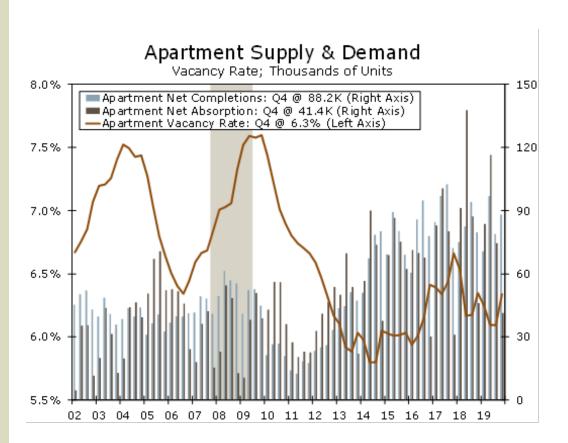


Source: U.S. Department of Commerce and Wells Fargo Securities

Apartment

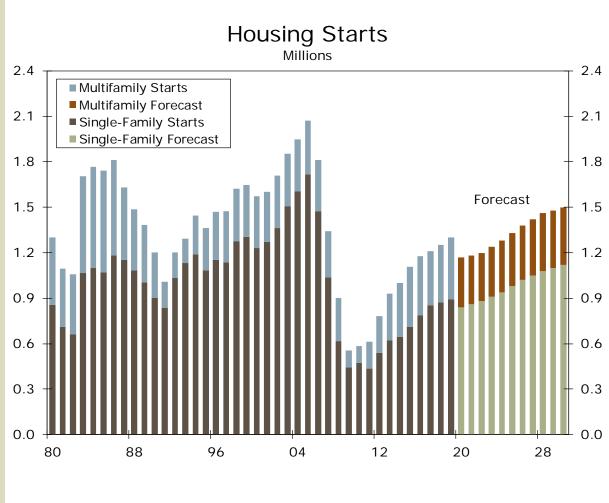
The number of multifamily units currently under construction will lead to an avalanche of new supply later this year and in early 2021.

We expect an abrupt slowing in multifamily starts later this year and in 2021.



Source: CoStar, Inc. and Wells Fargo Securities

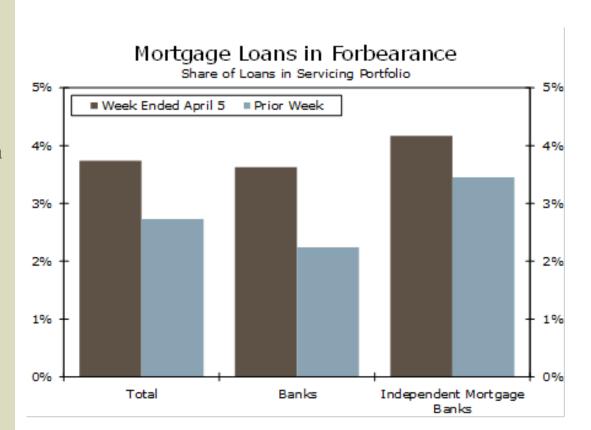
COVID-19 took the air out of the housing recovery.



Mortgage Market

Forbearance is placing stress on mortgage servicers, who are calling for greater assistance from the government.

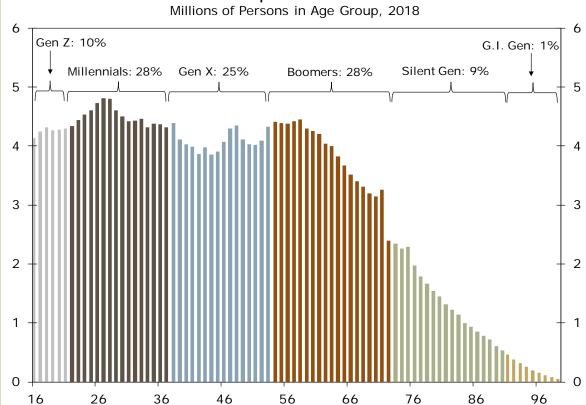
We expect some sort of relief—possibility a liquidity facility—fairly soon.



Source: Mortgage Bankers Association and Wells Fargo Securities

Demographics should be supportive of housing activity over the long-term, as Millennials form families and increasingly look to relocate to the suburbs.

U.S. Adult Population Distribution

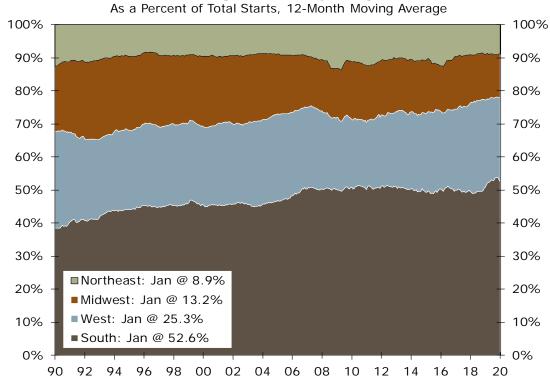


Source: U.S. Department of Commerce and Wells Fargo Securities

Housing Starts

A growing share of new homes are being built in the South.

Housing Starts by Region



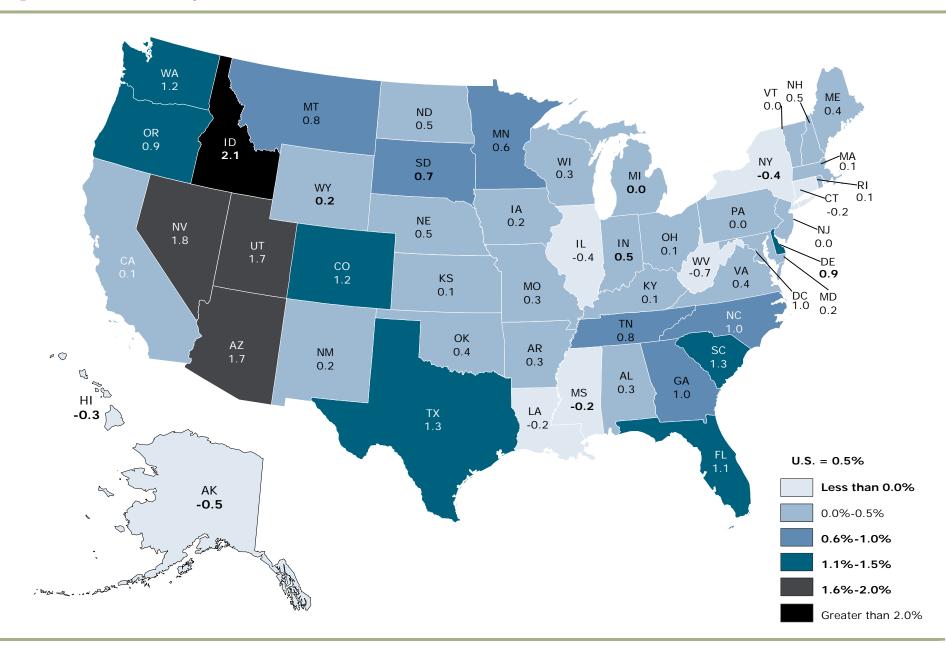
Source: U.S. Department of Commerce and Wells Fargo Securities $\,$



Regional Commentary

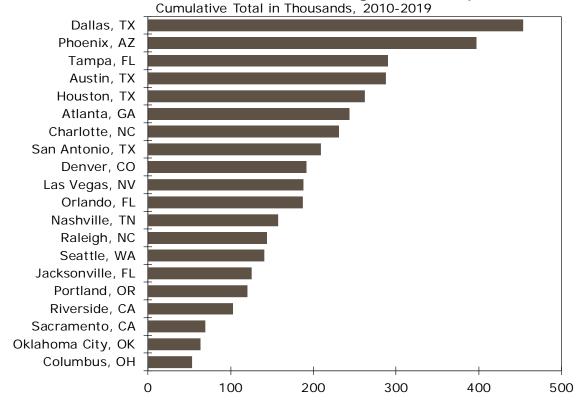
Together we'll go far





A handful of large urban areas accounted for a disproportionate share of economic growth this past decade, with creative jobs clustering in urban areas. The COVID-19 outbreak may challenge this growth model going forward but we suspect the trend toward urbanization will retain strong momentum in the coming decade.

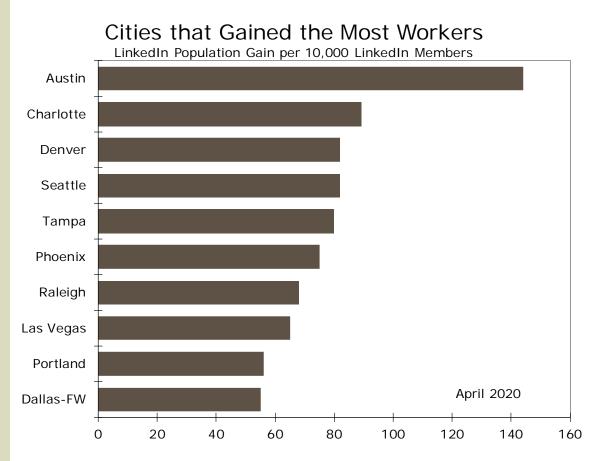
Metro Area Net Domestic Migration: Top 20



Source: U.S. Department of Commerce and Wells Fargo Securities

LinkedIn Gainers

For every 10,000 LinkedIn members in Charlotte, around 90 arrived in the last 12 months.



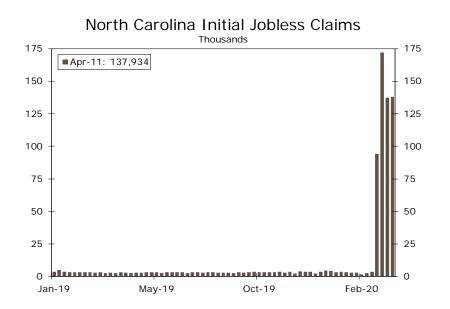
Source: LinkedIn Workforce Report and Wells Fargo Securities

North Carolina's economy was "strong" but losing momentum prior to COVID-19. More than 540,000 jobless claims have been filed in 4 weeks.

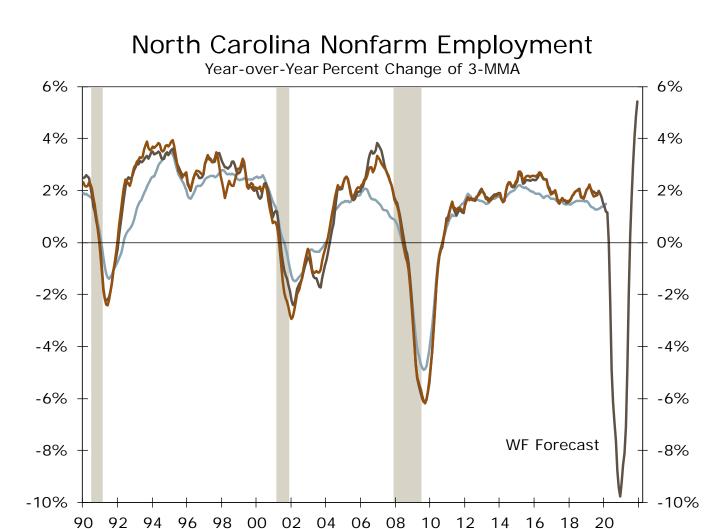
Employment Growth

North Carolina Employment Growth Year-over-Year Percent Change of 3-MMA 4% 4% 2% 2% 0% 0% -2% -2% -4% -4% -6% -6% North Carolina: Mar @ 0.9% -U.S.: Mar @ 1.3% 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20

Claims



 $Source: U.S.\ Department\ of\ Labor\ and\ Wells\ Fargo\ Securities$



Source: U.S. Department of Labor and Wells Fargo Securities

Population growth has been moderating a bit, but remains strong.

Components of Population Change: North Carolina In Thousands ■ Natural Increase: 2019 @ 24.9K ■ International Migration: 2019 @ 14.2K ■ Domestic Migration: 2019 @ 67.3K

Source: U.S. Department of Commerce and Wells Fargo Securities

Unemployment Rates

Both states' unemployment rates will surge in April.

Unemployment Rate Seasonally Adjusted 12% 12% South Carolina: Mar @ 2.6% -North Carolina: Mar @ 4.4% **-**U.S.: Mar @ 4.4% 10% 10% 8% 8% 6% 6% 4% 2% 92 96 98 00 02 04 06 80 10 12 14 16 18 20

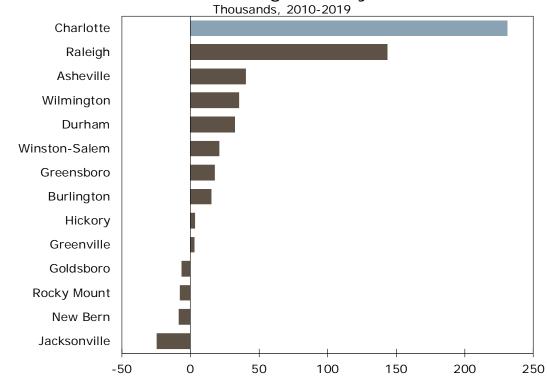
Source: U.S. Department of Labor and Wells Fargo Securities

MSA Domestic Migration

Charlotte and Raleigh account for the vast majority of net migration to North Carolina.

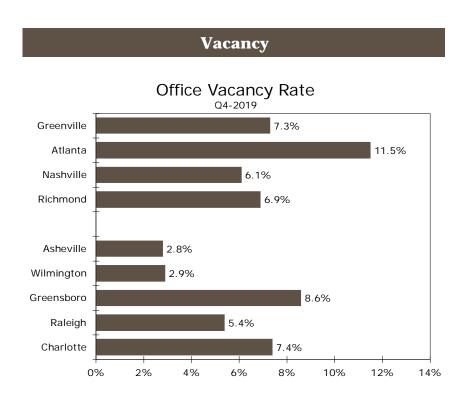
Much of Eastern North Carolina continues to lose population.

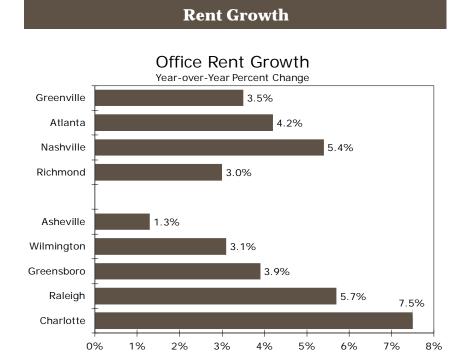
Net Domestic Migration by NC MSA



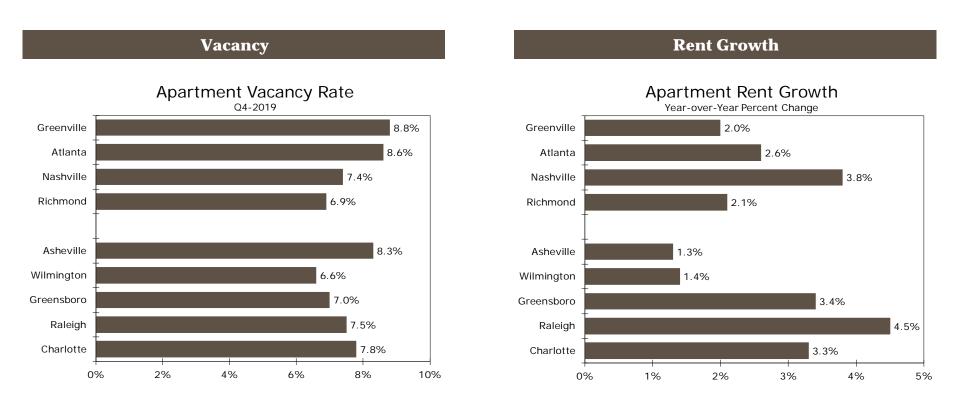
Source: U.S. Department of Commerce and Wells Fargo Securities

Charlotte had the fastest rising office rents in the nation prior to the outbreak.

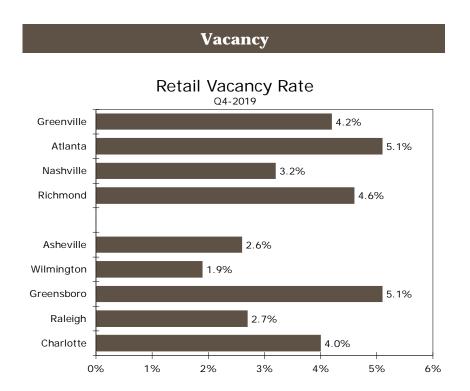




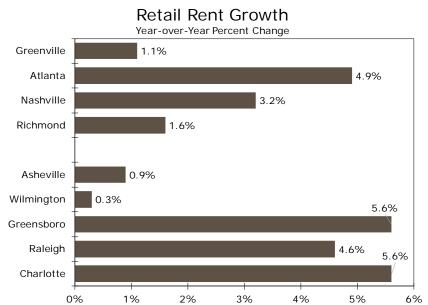
We expect apartment development to slow.



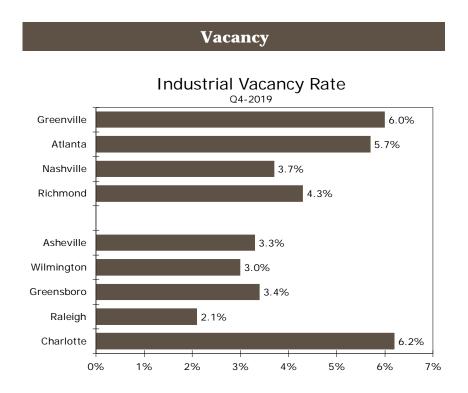
The shift to online retail will likely accelerate.



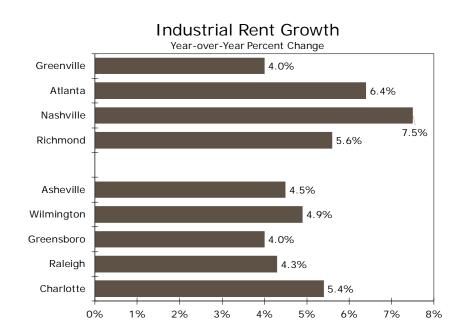




Warehousing and distribution should remain fairly strong.



Rent Growth



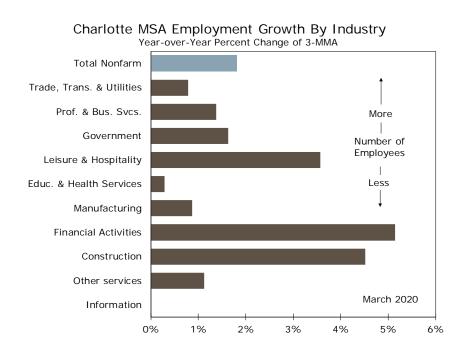
Charlotte Employment

Charlotte job growth was leading the nation and the rest of the state. Nearly every industry in the metro area was growing.

Nonfarm Employment

Nonfarm Employment Growth Year-over-Year Percent Change of 3-MMA 6% 6% 4% 4% 2% 2% 0% 0% -2% -2% -4% -4% -Charlotte: Mar @ 1.8% -6% North Carolina: Mar @ 1.0% United States: Mar @ 1.4% 03 05 07 09 11 13 15 17 19 97 99 01

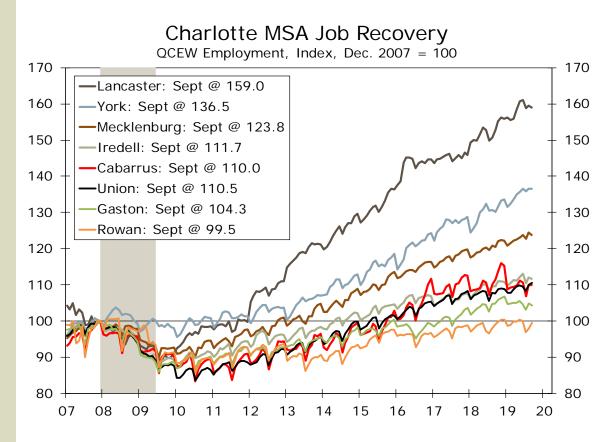
Employment by Industry



 $Source: U.S.\ Department\ of\ Labor\ and\ Wells\ Fargo\ Securities$

Charlotte Recovery

The strongest growth has been in South Carolina.



Source: U.S. Department of Labor and Wells Fargo Securities

U.S. Economic Forecast

						Well	ls Farg	o U.S. I	Econom	ic Fore	cast									
	Actual							Forecast							Actual		Forecast			
	2018				2019				2020			2021				2018	2019	2020	2021	
	10	2Q	3Q	40	10	2Q	3Q	40	10	2Q	3Q	40	10	2Q	3Q	40				
Real Gross Domestic Product ¹	2.6	3.5	2.9	1.1	3.1	2.0	2.1	2.1	-1.2	-22.3	7.2	4.8	2.8	2.5	2.2	2.4	2.9	2.3	-3.0	1.7
Personal Consumption	1.7	4.0	3.5	1.4	1.1	4.6	3.1	1.8	-1.5	-27.9	19.6	6.0	2.7	2.5	2.6	2.8	3.0	2.6	-2.8	2.9
Business Fixed Investment	8.8	7.9	2.1	4.8	4.4	-1.0	-2.3	-2.4	-6.8	-22.5	-9.3	3.0	2.9	5.1	4.9	4.9	6.4	2.1	-8.0	0.2
Equipment	6.6	3.4	2.9	7.4	-0.1	0.8	-3.8	-4.3	-16.8	-33.0	-10.8	15.0	4.6	4.6	4.0	4.0	6.8	1.3	-12.9	1.3
Intellectual Property Products	9.7	11.9	4.1	11.7	10.8	3.6	4.7	2.8	4.4	-6.5	-2.8	-4.4	3.7	7.4	6.9	6.7	7.4	7.5	0.5	1.9
Structures	12.1	11.0	-2.1	-9.0	4.0	-11.1	-9.9	-7.2	-7.0	- 25.5	-19.0	-7.5	-3.0	1.5	2.5	3.0	4.1	-4.3	-12.9	-5.9
Residential Investment	-5.3	-3.7	-4.0	-4.7	-1.0	-3.0	4.6	6.5	12.0	-30.0	-14.0	-5.0	3.0	5.0	6.0	6.5	-1.5	-1.5	-4.3	-2.4
Government Purchases	1.9	2.6	2.1	-0.4	2.9	4.8	1.7	2.5	2.2	1.8	1.5	1.2	1.0	0.2	-0.5	-0.9	1.7	2.3	2.1	0.7
Net Exports ²	0.0	0.7	-2.1	-0.4	0.7	-0.7	-0.1	1.5	2.1	2.2	-5.2	-2.0	-0.1	-0.1	-0.2	-0.1	-0.4	-0.2	0.5	-1.0
Inventories ²	0.1	-1.2	2.1	0.1	0.5	-0.9	0.0	-1.0	-1.9	-0.4	1.3	2.2	0.3	0.0	-0.1	-0.2	0.1	0.1	-0.6	0.6
Nonfarm Payroll Change ³	234	211	153	172	139	159	203	210	-71	- 7000	3900	800	500	300	230	130	193	178	-593	290
Unemployment Rate	4.1	3.9	3.8	3.8	3.9	3.6	3.6	3.5	3.8	15.1	11.7	8.3	7.3	6.9	6.6	6.5	3.9	3.7	9.7	6.8
Consumer Price Index ⁴	2.2	2.7	2.7	2.2	1.6	1.8	1.8	2.0	2.1	1.0	0.8	0.7	0.9	1.9	2.1	2.0	2.4	1.8	1.2	1.7
Quarter-End Interest Rates ⁵																				,
Federal Funds Target Rate	1.75	2.00	2.25	2.50	2.50	2.50	2.00	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.96	2.25	0.25	0.25
Conventional Mortgage Rate	4.44	4.57	4.63	4.64	4.28	3.80	3.61	3.72	3.45	2.90	2.90	2.95	3.00	3.05	3.15	3.20	4.54	3.94	3.05	3.10
2 Year Note	2.27	2.52	2.81	2.48	2.27	1.75	1.63	1.58	0.23	0.35	0.40	0.50	0.65	0.75	0.85	0.95	2.53	1.97	0.37	0.80
10 Year Note	2.74	2.85	3.05	2.69	2.41	2.00	1.68	1.92	0.70	1.00	1.15	1.25	1.30	1.35	1.45	1.50	2.91	2.14	1.03	1.40

Forecast as of: April 08, 2020

Source: IHS Global Insight and Wells Fargo Securities

¹ Compound Annual Growth Rate Quarter-over-Quarter

² Percentage Point Contribution to GDP

³ Average Monthly Change

⁴ Year-over-Year Percentage Change

⁵ Annual Numbers Represent Averages

Economic Outlook Group Publications

To view any of our past research please visit:
http://www.wellsfargo.com/economics

To join any of our research distribution lists please visit: http://www.wellsfargo.com/economicsemail

A Sampling of Our Recent Special, Regional & Industry Commentary

	Recent Special Commentary	
Date	Title	Authors
	U.S. Macro	
April-14	Will Mortgage Servicing Hurdles Impede a Housing Recovery?	Vitner, Dougherty & Honnold
April-08	Home Economics	Quinlan & Seery
March-31	COVID-19: A Black Swan or a Group of Black Swans?	Iqbal & Mathews
March-25	Social Distance Dating Advice	Quinlan, House & Seery
March-25	Forecast Update: A Much Deeper Contraction	Bryson
	U.S. Regional	
April-17	COVID-19 Shut Down Seattle's Red-Hot Economy in March	Vitner, Dougherty & Honnold
April-17	California's Economy Succumbs to COVID-19 Cutback	Vitner & Dougherty
April-17	Texas Payrolls Sharply Decline Amid COVID-19 Crisis	Vitner & Dougherty
April-17	Florida's Economy Takes a Hit as Tourists Stay Home	Vitner & Dougherty
April-17	COVID-19 Shutdowns Led To Job Losses Across North Carolina	Vitner, Dougherty & Honnold
April-10	Arizona Economy Takes A Hit From COVID-19	Vitner, Dougherty & Honnold
March-27	How will the Texas Economy Handle the Coming Storm?	Vitner & Dougherty
March-27	Widespread Closures Bring End to Florida's Economic Boom	Vitner & Dougherty
March-27	California Had Solid Momentum Prior to COVID-19	Vitner, Dougherty & Honnold
March-27	The Minnesota Economy and COVID-19	Vitner, Dougherty & Honnold
March-23	COVID-19 Puts Las Vegas on Lockdown	Vitner, Dougherty & Honnold
	Global Economy	
April-17	InternationI Growth Outlook Continues to Darken	Bennenbroek, McKenna & Licis
April-06	Australia's Exceptional Expansion: All Good Things Must Come to an End	Licis & Bennenbroek
March-31	Mexico: More Trouble in Store	Mc Kenna
March-27	Canada Fighting Economic War on Multiple Fronts	Licis & Bennenbroek
March-25	COVID-19 Creating a Risk for EM Corporates	McKenna, Nelson & Bennenbroek
	Interest Rates/Credit Market	
April-09	The Fed Goes Nuclear: Part II	Bryson
April-09	What Might a "Phase 4" Fiscal Package Include?	Pugliese & Mathews
April-06	The Animal Spirits Index Drops into Negative Territory	Igbal
April-06	Get Ready for SOFR: What's Up With LIBOR?	Bryson, Pugliese and Mathews
March-31	Where Will That \$2 Trillion Come from Anyway?	Bryson & Pugliese
	Real Estate & Housing	
April-01	Commercial Real Estate Chartbook	Vitner & Dougherty
March-26	COVID-19 Undercuts The Houseing Recovery	Vitner, Dougherty & Honnold
January-09	Housing Chartbook: January 2020 & Outlook	Vitner, Dougherty & Honnold
December-18	Commerical Real Estate Chartbook	Vitner, Dougherty & Honnold
December- 05	Housing Maintains Solid Momentum Headed into 2020	Vitner, Dougherty & Honnold
December-05	riousing maintains solid momentum neaded into 2020	VILLIEI, Dougherty & Honnold

Wells Fargo Securities Economics Group

Economists & Macro Strategists

Jay H. Bryson, Acting Chief Economist
Mark Vitner, Senior Economist
Sam Bullard, Senior Economist
Nick Bennenbroek, Macro Strategist
Tim Quinlan, Senior Economist
Azhar Iqbal, Econometrician
Sarah House, Senior Economist
Charlie Dougherty, Economist
Michael Pugliese, Economist
Brendan McKenna, Macro Strategist

jay.bryson@wellsfargo.com
mark.vitner@wellsfargo.com
sam.bullard@wellsfargo.com
nicholas.bennenbroek@wellsfargo.com
tim.quinlan@wellsfargo.com
azhar.iqbal@wellsfargo.com
sarah.house@wellsfargo.com
charles.dougherty@wellsfargo.com
michael.d.pugliese@wellsfargo.com
brendand.mckenna@wellsfargo.com

Economic Analysts

Shannon Seery, Economic Analyst Matthew Honnold, Economic Analyst Jen Licis, Economic Analyst Hop Mathews, Economic Analyst shannon.seery@wellsfargo.com matthew.honnold@wellsfargo.com jennifer.licis@wellsfargo.com hop.mathews@wellsfargo.com

Administrative Assistants

Coren Burton, Administrative Assistant coren.burton@wellsfargo.com

Wells Fargo Securities Economics Group publications are produced by Wells Fargo Securities, LLC, a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission, the Financial Industry Regulatory Authority, and the Securities Investor Protection Corp. Wells Fargo Securities, LLC, distributes these publications directly and through subsidiaries including, but not limited to, Wells Fargo & Company, Wells Fargo Bank N.A., Wells Fargo Clearing Services, LLC, Wells Fargo Securities International Limited, Wells Fargo Securities Canada, Ltd., Wells Fargo Securities Asia Limited and Wells Fargo Securities (Japan) Co. Limited. Wells Fargo Securities, LLC. is registered with the Commodities Futures Trading Commission as a futures commission merchant and is a member in good standing of the National Futures Association. Wells Fargo Bank, N.A. is registered with the Commodities Futures Trading Commission as a swap dealer and is a member in good standing of the National Futures Association. Wells Fargo Securities, LLC. and Wells Fargo Bank, N.A. are generally engaged in the trading of futures and derivative products, any of which may be discussed within this publication. Wells Fargo Securities, LLC does not compensate its research analysts based on specific investment banking transactions. Wells Fargo Securities, LLC's research analysts receive compensation that is based upon and impacted by the overall profitability and revenue of the firm which includes, but is not limited to investment banking revenue. The information and opinions herein are for general information use only. Wells Fargo Securities, LLC does not guarantee their accuracy or completeness, nor does Wells Fargo Securities, LLC assume any liability for any loss that may result from the reliance by any person upon any such information or opinions. Such information and opinions are subject to change without notice, are for general information only and are not intended as an offer or solicitation with respect to the purchase or sales of any securi

Important Information for Non-U.S. Recipients

For recipients in the EEA, this report is distributed by Wells Fargo Securities International Limited ("WFSIL"). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Conduct Authority. For the purposes of Section 21 of the UK Financial Services and Markets Act 2000 ("the Act"), the content of this report has been approved by WFSIL, an authorized person under the Act. WFSIL does not deal with retail clients as defined in the Directive 2014/65/EU ("MiFID2"). The FCA rules made under the Financial Services and Markets Act 2000 for the protection of retail clients will therefore not apply, nor will the Financial Services Compensation Scheme be available. This report is not intended for, and should not be relied upon by, retail clients.

SECURITIES: NOT FDIC-INSURED/NOT BANK-GUARANTEED/MAY LOSE VALUE