

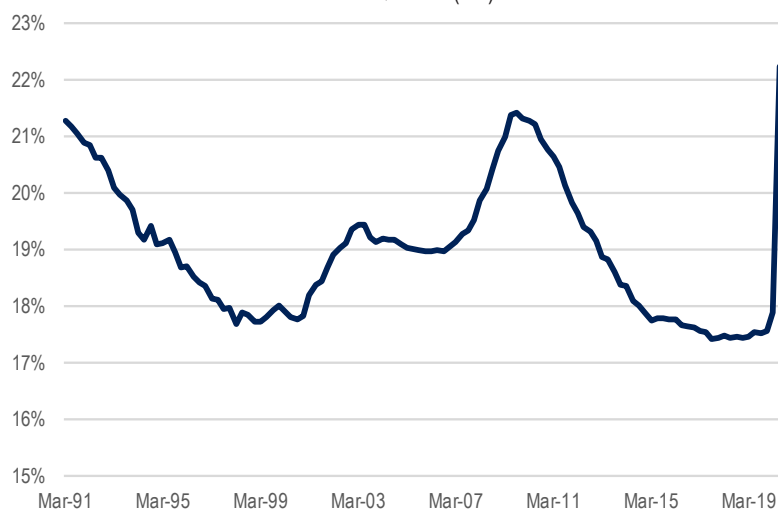
Chair Powell this week made a direct entreaty to Congress to consider more economic stimulus. After noting the tremendous and fast response via the CARES Act and new Fed policies, he said “it may not be the final chapter, given that the path ahead is both highly uncertain and subject to significant downside risks.”

One way to measure fiscal response so far, and capacity to add more, is the percentage of government’s share of GDP. The chart shows automatic stabilizers and specific stimulus that supports the economy during downturns. In the aftermath of the financial crisis, for example, government’s share of GDP rose to 21.4%. Based on estimated timing of CARES Act receipts in the second quarter and a 6.5% quarter/quarter decline in GDP, the ratio this quarter moves above 22%.

Add another \$500 billion in the third quarter over and above estimated CARES Act expenditures and a post lockdown bounce in GDP, the ratio approaches 25%.

Ignore for now whether more support is needed and what form it takes. The real question is “Will more stimulus work the way Powell envisions?” There are diminishing marginal results from added monetary policy stimulus. The EU and Japan have seen it first hand. The US is outside a 3-decade fiscal boundary already. We do not know where the upper limit will be, but it’s definitely worth puzzling over. That would be our question to the Chair when he sits down with “60 Minutes.”

Government Share of US GDP
1991 to Q2 2020 (Est)



Source: BEA, FHN Financial

COVID-19 UPDATE

P. 2

More tests are finding fewer cases per test. That’s quite positive and supports reopening. On the negative side, state officials are just now beginning to act on the appalling number of nursing home deaths that were largely overlooked in the rush to fortify hospitals to treat patients. Last, early reopenings show no immediate signs of endangering the states that made it through the first two months of the pandemic with less impact than the worst 11 states.

INFLATION LAB

P. 9

In March, four of the major CPI sectors fell vs February. In April, six of them fell versus the previous month. Rather than look for breathtaking headline declines in May, investors should pay attention to the breadth of declines among individual components to understand how much disinflation the pandemic can bring.

HOUSEHOLD LEVERAGE

P. 13

A host of Q1 indicators, including new debt, illustrates how strong the consumer economy was until the end of February. Consumers may have been over confident, even without the blow that was about to strike in March. The Federal Reserve released a special survey of the impact of Covid-19 on household finances as of early April. Looking back to Q1 and early April benchmarks the starting point for the damage that has months to run.

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Entering Month Three

America changed two months ago, but too many things remain the same. This Covid-19 roundup offers separate topics, but several themes run through them. And, some of the notes do contrast with each other, because the world is still running in multiple directions at once. Here's a current assessment:

- The “war” analogy applies to the pandemic and the public’s response. There’s constant confusion and horribly bad intelligence about what could happen next. Elected and self-appointed generals attempt to rally the troops and grow angry when people refuse to follow their directives. Leaders spend more time disagreeing with each other than pursuing simple first steps. “I told you so” is one national motto.
- An economy that depends on big data is producing tiny data. Looking through five Covid-19 spreadsheets in process since late January, the raw information still has persistent gaps, mistakes, and what appear to be impossible statistical quirks. The US has one of the worst recovery rates in the world on paper, for example, largely because it seems many states don’t bother to collect and/or report recovery information. ***In a pandemic, data is a first-step miracle drug.***
- Science has been called to rush into a vacuum of information and deliver sound advice. Rather than appreciate how little science can ever know at this point in a crisis, smart people insist we “follow the science” even after doing so in February and March wasted precious time and resources.
- And, naturally, other voices arrive at the opposite conclusion. Because we don’t have sufficient medical information, the country needs to stay dormant until there are workable medical answers, they say. “Only a vaccine allows the economy to function again” is true but misses the key point the post-pandemic economy will be different, requiring changes that cannot be imagined today. Businesses, schools, etc need to take tentative steps forward to see what might work and discover the areas that require complete renovation.

Investors win by identifying patterns and applying hard-learned lessons about interest rates, relative value, inflation, leverage, etc. That’s an invaluable skill set, but markets today rely far too heavily on recognizing price patterns. Then, they find forecasts that fit trendlines and algorithms that absorb real time data to produce a probability-weighted distribution of what the third quarter should look like. Many economists do the same thing as they extrapolate Fed programs into tangible economic results.

Bottom Line: That investment management approach might work in month nine. The odds of sharp turns and volatility entering month three – and four, six, seven, etc. – are high, however. The takeaway from the first two months is i) market overconfidence; ii) governments are two months behind.

Test Results Support Reopening

Thirty-three states are in some stage of reopening. Forty-five states meet at least two of the three “criteria” to begin reopening, according to rough guidance from the White House and the CDC. If you look closely at the first one in the list below, they satisfy all three.

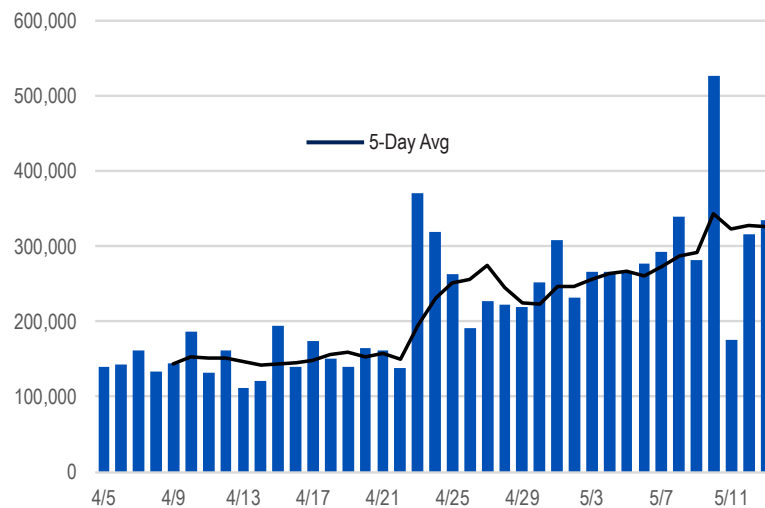
This does not mean each state should reopen; they can add their own criteria. But, many news outlets repeat the refrain that “states are reopening” without meeting the White House’s own criteria. The principal error in that analysis is commentators look at the increase in new cases, without consideration for testing. Also, many reopened states never had that many cases/million to begin with, making it difficult not to see some reversion higher in the number of cases with the passage of time. Here are the criteria, with notes on each.

1. Downward trajectory of covid-like syndromic and flu-like cases reported within a 14-day period. The trajectory in this category should be highly correlated with the case counts for Covid-19 diagnoses themselves. Realistically, #1 is identical to #2; we have not seen separate statistics at any level reporting figures for medical information to satisfy #1.
2. Downward trajectory of documented cases within a 14-day period or downward trajectory of positive tests as a percent of total tests within a 14-day period. The second of the two choices represents the better choice in decision making because increased testing can lead to a rising case count. So far, however, more testing actually has produced more negatives.
3. Treat all patients without crisis care and robust testing program in place for at-risk healthcare workers. Nationwide, hospitalizations have fallen almost every day since April 29. The total count of hospitalized patients is down in 46 states in the last six weeks. There are no published data on testing healthcare workers.

The total number of tests surpassed 10 million this week; there are still tens of millions of tests that will be completed through June. Yet, sampled testing suggests the spread of Covid-19 has dropped significantly in all but a handful of states. First, here is a count of daily tests administered since the first week of April. It ratcheted higher by the last week of April and the daily average is now above 300k.

Covid-19 Tests/Day

April 5 to May 13

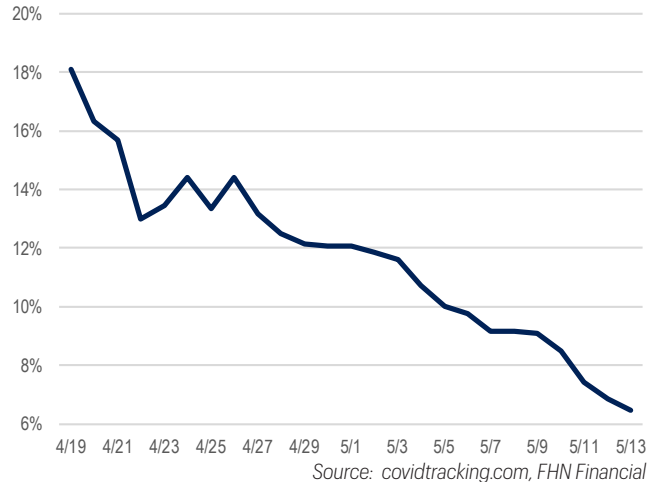


Source: covidtracking.com, FHN Financial

Collecting and scrubbing test data by state is time consuming, but FHN Financial's database now goes back to mid-April when the daily average of positive tests was almost 20%. It is now down to 6.5% on a national level. Eighteen states now report a positive ratio of less than 5%.

Percentage of Positive Tests

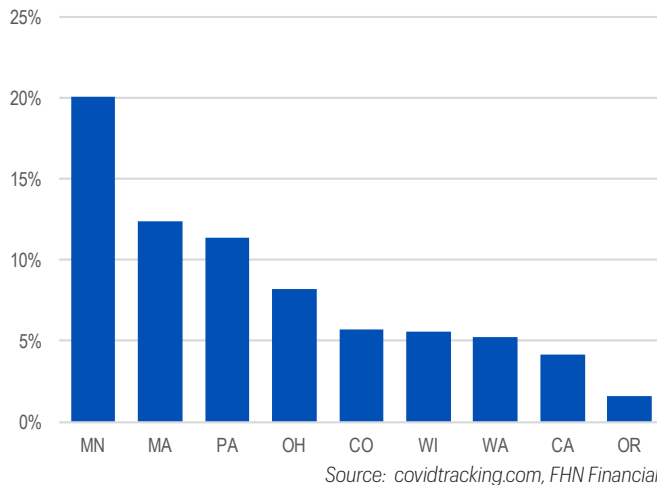
3-Day Moving Average
US States and Territories
April 19 to May 13
Daily



For the three days ended May 13, here are the test ratios for the largest states still largely locked down, excluding New York and New Jersey which are in mass recovery mode. Minnesota is at the top due to the recent increase in cases at meat processing facilities in the southern and western parts of the state.

Positive Test Results/Total: Selected Lockdown States

3-Day Avg ended May 13



Nursing homes account for 30%-35% of US deaths

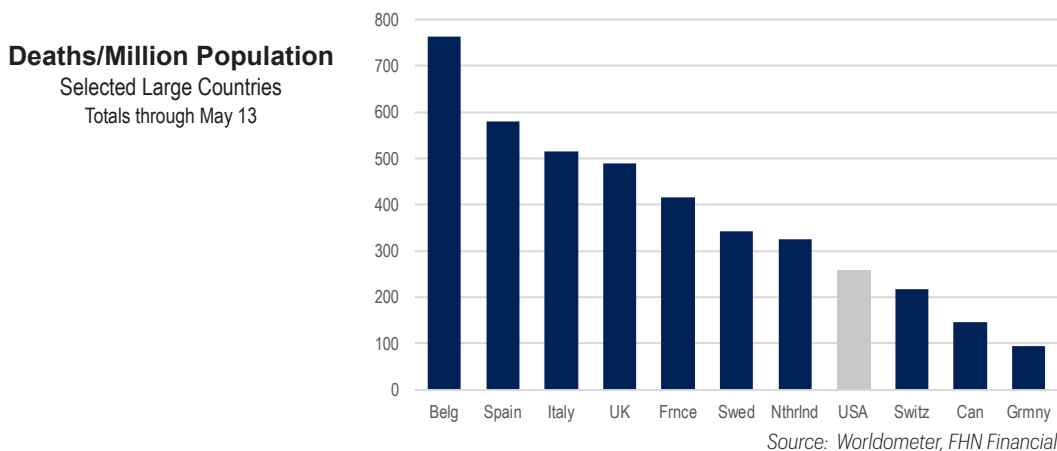
Initial projections about the case burden and death totals from the pandemic put state health officials on emergency status, focusing on acute hospitals. Press tabulations demonstrate the resulting haste – and the “bad” science that predicted hospitals were the weakest link – left nursing homes on the sidelines. The consequences were tragic.

The first estimate by *The New York Times* in April was 20% of deaths nationwide were residents of long-term or nursing care facilities. Updated analysis by *NYTimes* and *The Wall Street Journal* (through May 7 and May 12, respectively) put the tally between 28,000 to 30,000 deaths of the 85,000 fatalities through May 12.

Based on analysis of more than 150,000 nursing home patients who contracted Covid-19, the mortality rate is 19%. Both news sources suggest their fatality rate errs to the low side.

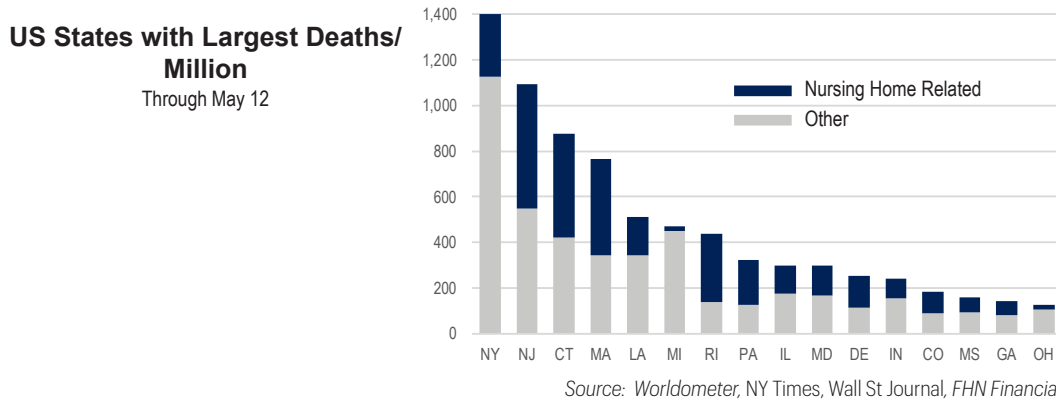
Although data are imperfect in the US, statistics around the world are even less reliable. Many news outlets quote a London School of Economics as the source for estimates in Europe, but the blog post actually referenced the International Long-term Care Policy Network that commissioned academic analysis of available data. From that data, its team found care facility deaths accounted for between 20% of deaths in the most populous European countries to 60% in Canada. Estimates for deaths in “communal facilities” in Germany, that include homes and prisons, account for 35% of its fatalities.

Internationally, the US ranks 8th in total deaths/million. Studies suggest Germany’s figure is so low because the average age of those who contracted the virus were in the low 50s after the pandemic spread from ski vacationers in Italy, Austria and Switzerland. The chart is as of May 13.



Bottom Line: The pandemic has produced uneven tolls around the world and within the EU where borders were permeable. The variance within the United States is remarkable. We carry forward that theme on [page 7](#).

The US death total is skewed high by New York and New Jersey. Versus the average of more than 250/million, the median among all states is 90/million. With the exception of New York, the highest percentage of nursing home deaths are concentrated in the Northeast and the Mid-Atlantic.



The press coverage this month is finally bringing changes in state policies. Per *The WSJ* this week: After mounting criticism and thousands of deaths in New York nursing homes—including several individual facilities that have lost more than 50 residents—the state on Sunday (May 10) reversed the mandate, which said nursing homes couldn't refuse to accept patients from hospitals who had been diagnosed with Covid-19. New York now says hospitals can send patients to nursing homes only if they have tested negative for the virus.

An analyst at the London School of Economics is quoted in *The Guardian* on the topic: "To me it shows we will have to give equal resourcing in dealing with Covid between the NHS and social care. Care homes are places where physical distancing is almost impossible. It's like a perfect storm: a susceptible population, not being able to implement the measures and the staff are not well supported and trained enough. Many of the staff are care assistants with very little medical knowledge."

"If we wait for perfect standards of evidence it will be too late to make any difference," she said.

Pandemic patterns in US remain localized

It was clear from the beginning the pandemic struck selected regions hard and fast. When FHN Financial developed its "high impact" and "low impact" scoring system ([TWR - 4.3.2020.pdf](#)), the broad concern was "it was just a matter of time" before the rest of the country was as bad as the Northeast. Still today, commentators shine their spotlights on individual "spikes" in cases that warn the outbreak isn't over. Fair enough, it's not over but new cases do not represent the right threshold at all.

At this stage, the overwhelming takeaway is persistence of pandemic impact by state. The primary input for this classification is the active number of cases per million. It is followed by severity which rests on the number of deaths, recoveries and current hospitalizations.

Six weeks later, the high impact states are still approximately in the same order even as they demonstrate relative improvement. Bottom Line: **The low impact states generally never got as bad as the high impact locations but still improved after their peak.**

The table contrasts April 2 and May 13.

- Michigan and Washington left the high impact group. Indiana worsened and moved “up.” DC was added in mid-April as its statistics became clearer.
- A number of states, including Ohio and Virginia, moved into the bottom of the high impact states and then gradually righted the ship.
- Some states that still have the strictest lockdowns never came close to the high impact group.

States Categorized by Level of Pandemic Impact on Health			
High Impact States		Low Impact States	
April 2	May 13	April 2	May 13
New York	New York	Indiana	Virginia
New Jersey	New Jersey	Tennessee	Michigan
Louisiana	Connecticut	Florida	Louisiana
Massachusetts	Massachusetts	Utah	Alabama
Connecticut	District of Columbia	Maryland	Ohio
Michigan	Illinois	Wisconsin	Washington
Washington	Pennsylvania	Missouri	Florida
Colorado	Maryland	South Carolina	Mississippi
Illinois	Colorado	California	California
Pennsylvania	Indiana	Alabama	Arizona
Georgia	Georgia	Ohio	Tennessee
		Arizona	Missouri
		Oregon	North Carolina
		Virginia	Kentucky
		North Carolina	Wisconsin
		Texas	Texas
		Wyoming	Minnesota
		Iowa	South Carolina
		Oklahoma	Oregon

Source: FHN Financial

In early April, 67% of the US was in the low impact or low density states. This month, it is 70% -- hardly any change at all. Even though we suspect many high impact states are underreporting their recoveries, the data from the rest of the country raises the same suspicion. Given random error patterns, the scores below – weighted by population among the three designations – are reliable for comparison purposes. In FHN’s system, a high recovery rate enables a negative severity score.

Region	Total Population	Density	Active Cases/ Million	5-Day Growth	1-Day Growth	Severity	# of States
High Impact	94,184,158	516	7,472	8.2%	1.6%	5.3%	11
Low Impact	196,373,931	187	1,311	12.8%	5.0%	2.1%	19
Low Density	32,381,418	46	1,104	10.7%	6.6%	-9.1%	16

Source: FHN Financial

Note: New England is still its own category, but not listed here.

Although we’ve said this several times in daily notes, it’s worth repeating with this table. An important metric in the early days was the growth in reported cases, followed by reported fatalities. **As reopenings begin, active cases/million and severity have separated even more than in March/early April – making them much more important to track. That’s true unless and until states/regions/cities demonstrate rapid and sustained growth from current levels.**

Summary

A subhead in the April 2 edition of the Covid-19 Update said: “Grappling toward a “model” of Covid-19’s Spread.” Six weeks later, the operative word is still “grappling.” Public health officials are still doing that; nursing home administrators know the answer for their patients but can’t grab the necessary resources; and Congress is grappling with another round of stimulus. Entering month four? Look for the same description.

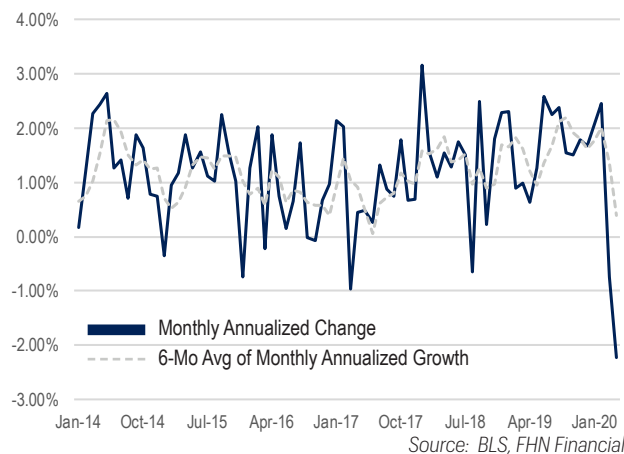
21st Century Response to a 15th Century Style Plague: Prices Adjust ASAP

With the exception of energy, consumer costs move with a lag. So not only did the headline surprise of .8% decline with its speed, the breadth of price reactions was breath taking in April.¹ Food expenses rose instantaneously as supply chain bottlenecks and “hoarding” demand translated into a 1.4% increase vs March. Transportation, excluding fuel costs, fell 2.2%.

As modern pricing mechanics (algorithms) attempt to optimize revenues and minimize risk, concepts such as “core” prices or trimmed mean inflation indexes can lose their relevance. Even the idea of a statistically “sticky” or flexible price measure begins to lose its meaning. **Consider one of Inflation Lab’s standby charts as a way to focus on pandemic era prices.** It eliminates housing – where monthly changes are usually imperceptible – and energy. Energy is largely irrelevant because so few consumers are spending money on it. You can’t save money with due to lower gasoline prices if you’re not driving.

The chart calculates the annualized one-month change in the CPI ex housing and energy. The 6-month annualized rate is included for perspective.

CPI Excluding Housing and Energy
2014 to April 2020
Monthly



As seen by the previous downward spikes once every two years, the April downturn captures the lockdown period, but does not necessarily argue inflation will fall that quickly the rest of the quarter. Rather than looking for large declines in any individual month, bond investors should track monthly declines among individual sectors. Compare the previous two months, where four falling sectors in March broadened to six of the 11 major categories in April.

¹ Perhaps breath taking only to economists and editors who compose Inflation Lab pieces, but still.

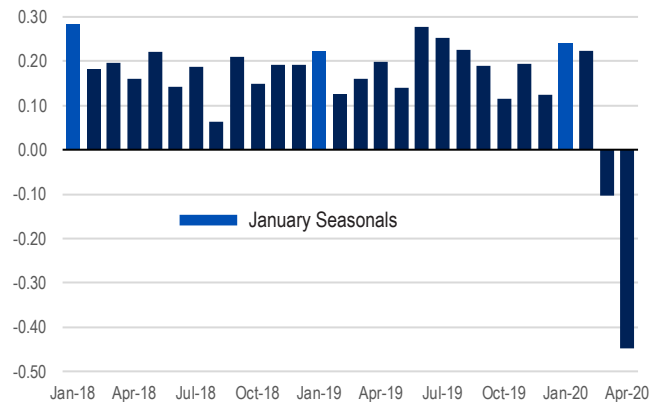
	Weight	Apr	Mar
OER	24.13	0.174	0.261
Housing less OER & Energy	14.88	-0.006	-0.054
Food & Beverages	13.86	1.487	0.341
Transportation less Motor Fuel	12.29	-2.197	-0.649
Medical	8.90	0.403	0.421
Energy	6.26	-10.139	-5.782
Education & Communication	6.76	0.140	0.108
Recreation	5.83	-0.217	0.124
	92.91		
Other	3.15	-0.077	0.252
Apparel	2.91	-4.692	-2.035
Alcohol	1.03	0.267	0.462
	7.09		

Source: FHN Financial, BLS

Even though core inflation may not be the best reflection of current price reality, the .44% decline in April was still historic as the largest single monthly decline in more than three decades. The chart of just the last two years puts the last two months into stark relief.

Monthly Change in Core CPI

January 2018 to April 2020

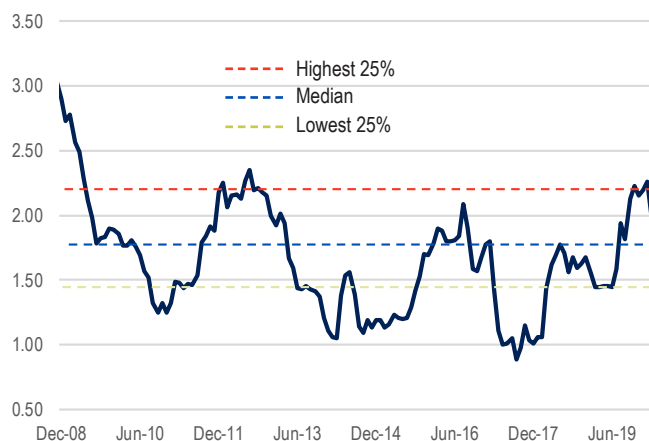


Source: Bureau of Labor Statistics

When looking at the sharp decline in year-over-year core inflation at the low rate of 1.4%, note the comparable period in 2019 reported only moderate inflation. The “easy” comparisons versus 2019 run from June through August. This chart is the “sticky” core that moves the slowest, ex housing, as constructed by the Federal Reserve Bank of Atlanta. Note the current reading moved to the lower 25th percentile. The “flexible” core that moves the fastest, by the way, fell almost 3% from April 2019.

Sticky Core Inflation, Ex-Housing

Year over Year
2009 to April 2020
Monthly



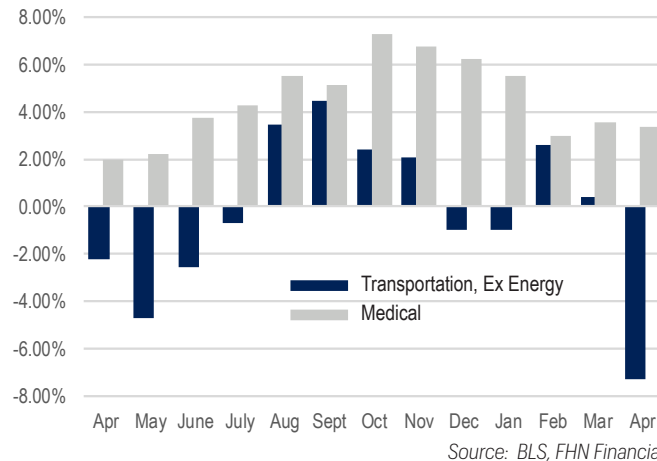
Source: Federal Reserve Bank of Atlanta, FHN Financial

Medical costs cannot react to involuntary reductions

At 9% of total CPI, medical costs are a principal component of core inflation, one that has been trending up since the end of 2018. Because elective medical visits and procedures were effectively shut down in April, there was no benefit to lower prices to attract revenues. But with discretionary income down from the last several years and facilities with large fixed costs to cover, will the medical profession experiment with lower costs to adapt to the new environment? That's merely one type of question that connects the pandemic and the direction of prices.

Transportation and Medical Costs

Annualized 4-Month Changes
April 2019 to April 2020



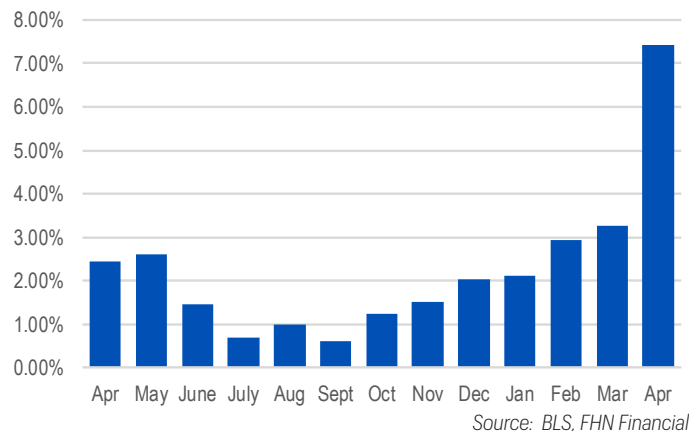
Food and energy prices go on in opposite directions

After keeping headline inflation low in the middle of last year, food prices started to rise in the three months preceding the pandemic. **With agricultural prices down as much as 10%-20% year to date, the increases reflect supply chain bottlenecks, processing costs and wider margins.**

The chart tracks total food prices, annualized over rolling 4-month intervals. In the last two months, price increases for food away from home have been slowing.

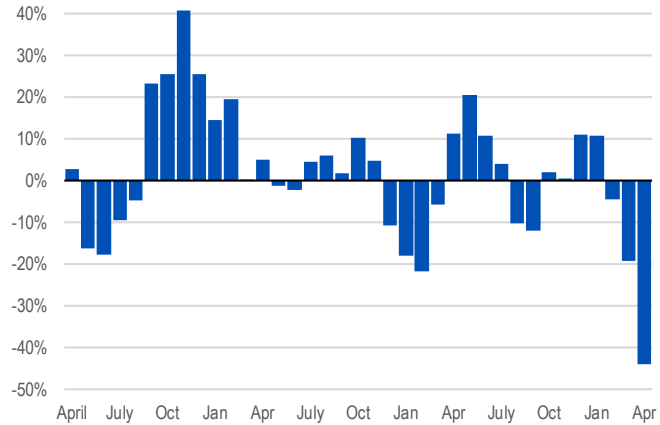
Food Cost Increases

Annualized 4-Month Changes
April 2019 to April 2020



Even though we are reducing emphasis on energy costs this spring as a key player in overall inflation, it is important to track its unusual plunge – unusual even given the circumstances – as a baseline for either stable prices this summer or to see if they maintain downward pressure on the headline.

CPI Energy
Annualized 4-Month Price Change
April 2016 to April 2020



Source: BLS, FHN Financial

Inflation surveys influenced by rising food prices

With millions sheltering at home, food shopping was a center piece of April life in America. Higher food prices certainly left an impression. Even for those that didn't go through the sky-high food cost era 40 years ago, empty shelves and lines at the checkout stirred unease. All three of the major household inflation surveys translated that experience into higher inflation expectations. The trend was most noticeable in one of the two surveys by the Federal Reserve Bank of New York.

**Inflation Rate Expectations,
3 Yrs Ahead**
Median of Consumer Expectations
June 2013 to April 2020
Monthly



Source: Federal Reserve Bank of New York

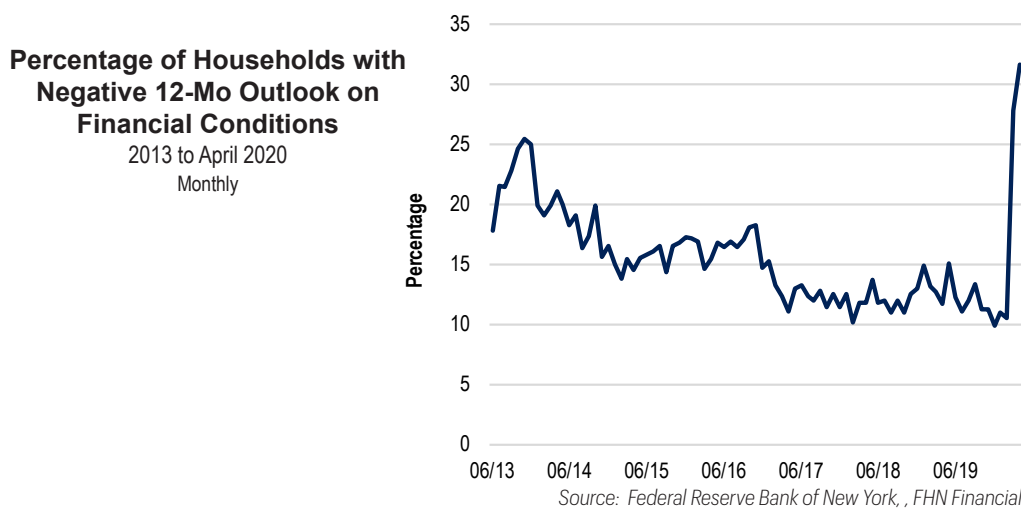
Positive Consumer Momentum until March Bust

Spending plans and household debt during the first quarter shows few consumers were looking ahead, no worries about a looming downturn. Savings were largely confined to older generations, not those still in full stride on a crest of rising job opportunities and earnings. In one sense, then, pandemic lockdowns were doubly painful due to a lack of preparation. At least there were warning signs well before the financial crisis.

In time, the shocking arrival of Covid-19 will matter far less than how many aspects of daily life can return in 2020. The possibility of over confidence before it arrived, though, may eventually require a new assessment of where the sustainable economy sat before Covid-19 invited itself into the picture. And, lenders will be looking back with some dismay at loans made in January and February, contributing to tighter standards in the early phase of the recovery.

In February, for example, the credit access survey hit the high for the series that goes back to 2014. The aptly named “financial fragility” study looks at household confidence in their ability to come up with \$2,000 within a month. In February, 71.6% responded yes, up more than two percentage points from the fall.

Two months later, survey findings for the stability of the household outlook are much lower. The chart tracks the monthly readings for expectations of future financial conditions for consumers in the next 12 months. It trends the combination of the percentage seeing a “much worse” or “somewhat worse” outlook.



Two bulleted items from the April survey concerning jobs, compiled by the New York Fed research staff:

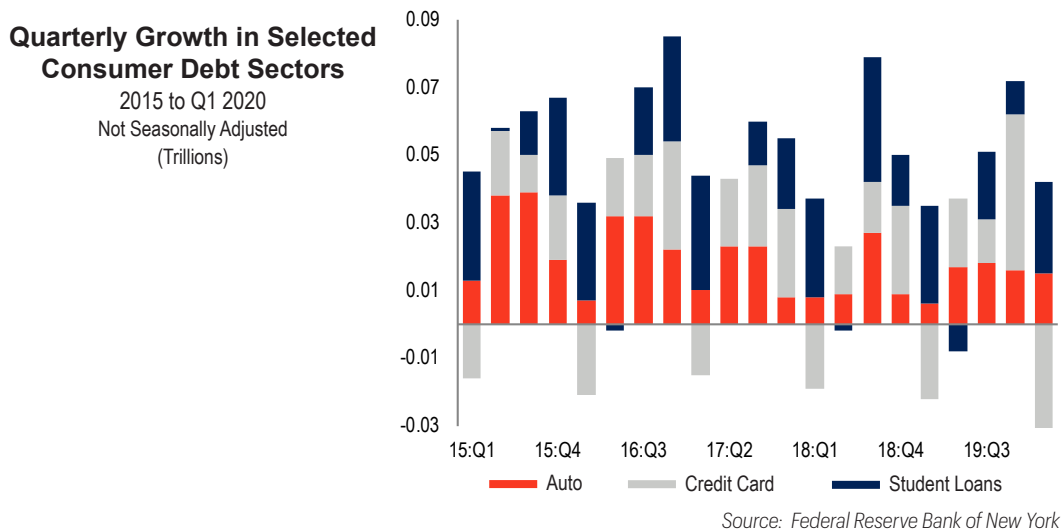
- The perceived probability of losing one's job in the next 12 months increased 2.4 percentage points to a mean of 20.9% in April, one of several highs in the outlook series. Probability of leaving one's job voluntarily in the next 12 months decreased 2.7 percentage points to a mean of 17.3%.
- The perception of the ability to find a job in the next three months (if one's current job was lost) plunged 6.1 percentage points to a mean of 47.0% in April, the largest month-to-month decline recorded.

With regard to access to credit, 48.0% of respondents reported access to credit being harder than a year ago, compared with 32.1% in March. Expectations for year-ahead credit availability also deteriorated in April, with 46.7% of respondents expecting that credit will become harder to access, as compared to 38.8% in March.

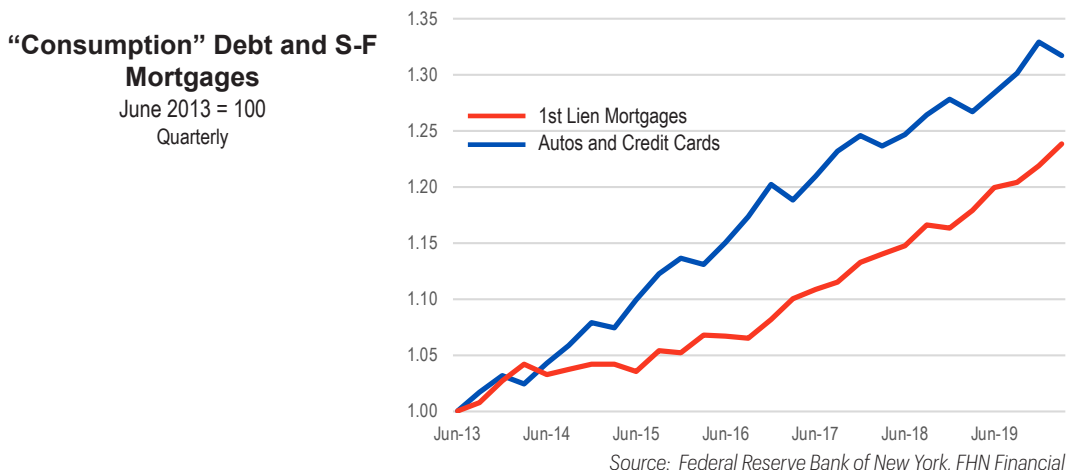
On May 14, the Federal Reserve Board included a Covid-19 survey addendum to its Survey of Household Economics and Decisionmaking for 2019. The survey was taken April 3-6, and is summarized [here](#).

Loans lenders now regret grew 4.6% vs 2019

The first quarter produced the usual decline in credit card debt from the fourth quarter, as holiday purchases are repaid. Still, overall debt rose 1.1% from Q4 2019, according to data extracted from credit bureaus by the Federal Reserve Bank of New York. The biggest increase was in first lien mortgages followed by student loans. The chart looks at “consumption” debt, excluding mortgages which we categorize as “investment” debt.



Continuing the theme that things were great until the door slammed shut, mortgage debt was accelerating for the first time in more than a decade in 2019. It wasn't going to catch up with the growth in consumption debt by next year, but the gap was closing.



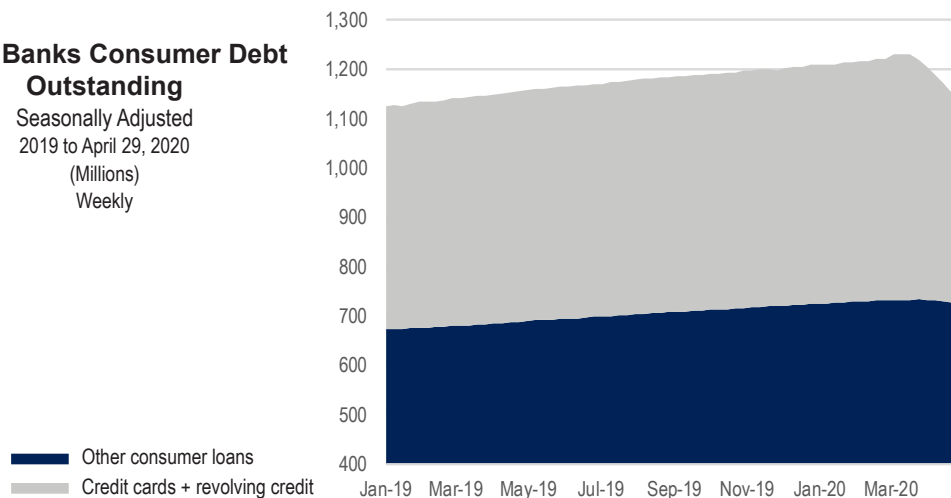
The April survey addresses home prices specifically. Fed researchers again: “For the first time since the inception of the survey, the median one-year ahead expected change in home prices dropped to 0% in April. In fact, 44.2% of respondents expect home prices to decline over the coming year. The decline was broad-based across demographic groups and regions.”

Some households paying down debt, improving liquidity

While banks are concerned about the quality of loans made in the last six months, some of their better customers are paying down their debt. In more than 15 years of this data series in FHN Financial’s records, that adjust for bank/thrift mergers, there has never been this type of abrupt decline in consumer debt. In the last two months, the paydowns in credit cards and revolving consumer debt totals \$75 billion on a seasonally adjusted analysis. The chart layers that category on top of the larger “other” consumer loans which are dominated by auto debt.

Large Banks Consumer Debt Outstanding

Seasonally Adjusted
2019 to April 29, 2020
(Millions)
Weekly

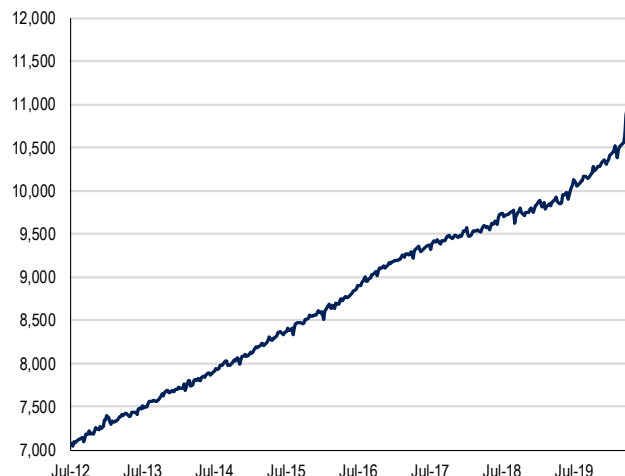


Source: Federal Reserve H.8 Reports

And even amid falling asset values this year on stocks and sagging incomes, cash is flowing into bank savings deposits at a record pace. Investors may be sticking with much of their equity portfolio, but from the look of this chart, they are barbellizing with cash.

Total Consumer Time and Savings Deposits

Weekly, Seasonally Adjusted
(Billions)



Source: Federal Reserve

Summary of Household Finance Survey special report

The Federal Reserve's annual survey of household finances is an authoritative and comprehensive analysis, with information gathered October each year. This year, it resurveyed a smaller subset in early April, after the CARES Act passed, in the middle of the lockdowns, but before any stimulus benefits were distributed.

- Among those experiencing these employment disruptions, over one-third expected to have difficulty with their bills in April. Yet, for those not experiencing an employment disruption, financial outcomes at the time of the supplemental survey were largely similar to those observed in the fourth quarter of 2019.
- Thirty-nine percent of people working in February with a household income below \$40,000 reported a job loss in March. Another 6 percent of all adults had their hours reduced or took unpaid leave. Taken together, 19 percent of all adults reported either losing a job or experiencing a reduction in work hours in March.
- Many people who lost a job remained connected to their employer and expected to return to the same job eventually. Nine in 10 people who lost a job said that their employer indicated that they would return to their job at some point. In general, however, people were not told specifically when to expect to return to work.
- Sixty-four percent of adults who reported a job loss or reduction in hours expected to be able to pay all their bills in full in April, compared to 85 percent of those without an employment disruption.

Bottom Line: Two observations: 1) Chair Powell correctly highlighted the plight of lower income households and those with less formal education falling at the forefront of losses early in the pandemic. 2) Optimism about being rehired (or unfurloughed) was very high among those not working. Watch carefully for how long that optimism continues as the calendar moves to the third quarter. As noted on page 2, 55% of US GDP is concentrated in 15 states still in very very early stages of reopening.

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