

© ECONOMIC CURRENTS

APRIL 01, 2020

Navigating COVID-Tainted Waters: In Search of an Endgame

Diane C. Swonk, Chief Economist

COVID-19 is first and foremost a health crisis. It is a pandemic that is spreading rapidly. The only way to stem the loss in life and avert a larger loss to the economy is to literally shut down economies around the world, including the U.S. Dr. Anthony Fauci of the National Institutes of Health (NIH) estimates that we could suffer between 100,000 and 240,000 fatalities under "best case" scenarios over the next several months. That is several times the souls we lost to the Vietnam War and the wars in Iraq and Afghanistan, which spanned decades.

The cost-benefit analysis is unambiguous. Recent M.I.T. and Federal Reserve research on the 1918 Flu Pandemic shows that non-pharmaceutical interventions (NPI) - social distancing - reduced the number of deaths for cities that acted aggressively and strengthened their recoveries relative to cities that did not engage in shutting down public gatherings.

Moreover, we are learning from China on a real-time basis how complex the logistics of ramping up can be without a vaccine. Workers need to be quarantined and protocols for cleaning and protective gear need to be followed. This is at the same time that consumers and workers remain reluctant to use public transportation or enter public spaces for fear of another wave of infections. Shutdowns elsewhere are adding insult to injury to manufacturers watching demand for their products evaporate.

A Virus-Induced Deep Recession

Real GDP growth is now expected to drop at a 5.5% annualized rate in the first quarter because economic activity came to a standstill in March. The only major offset is a precipitous drop in imports, notably from China where its economy was brought to a standstill earlier with the first outbreak.

The collapse in GDP growth in the second quarter is expected to come in close to 30%, with risks to the downside. The only offsets are trade - both imports and exports are expected to fall - and government spending, which will surge as aid from recently passed bills and emergency funding comes through.

We are expecting to see a transition period over the summer and into the fourth quarter. Strong gains will do little to recoup what is being lost; some spending is gone for good. GDP is not expected to return to pre-COVID-19 highs until the end of 2021.

The Fed Goes Above and Beyond. The Federal Reserve has already crossed a line it wouldn't during the 2008-09 financial crisis. It has made QE (quantitative easing, or asset purchases) unlimited and stands as lender of last resort to businesses and municipalities. It will likely expand lending further to individuals and small and midsize businesses; the Fed could also monetize debt issues to offset deflationary pressures.

This edition of *Economic Currents* takes a closer look at the phases of the COVID-19 crisis. Chart 1 lays out the blow to GDP and the timeline for phases we are expecting to endure. The crisis is laid out in five phases; the first two were rapid and have already occurred. The remaining three will be longer and more difficult. The drop in GDP growth in 2020 represents the largest annual contraction in growth since millions of soldiers returned to the U.S. without jobs following the end of WW-II in 1946. The worst of the losses are front-loaded into the first two quarters of the year and measured in months not years, which will seem like an eternity. The world that emerges will look different from the one we left behind. Pandemics are now a reality, not just the plot to a horror movie.

COVID-19 is the iceberg, but our economies don't have to be the Titanic; we still have time to get more lifeboats into the water to spare more souls from the chill of COVID-tainted waters. Our political leaders and central banks are acting at an unprecedented pace but they are chasing a moving target. The \$2.3 trillion in aid the president just signed into law in the U.S. is encouraging but not enough. The goal is to stop a health crisis from metastasizing into a depression. We expect several more aid packages before the crisis is over. Eventually, we expect Congress to provide stimulus for the economy as it recovers. None of that is included in our forecast.

The seizure in credit markets has already been more rapid than it was during the global financial crisis of 2008-09, with one exception: big banks. Hence, the Federal Reserve's unprecedented moves to backstop the financial system and cross over into the realm of fiscal policy by leveraging collateral by the Treasury to make direct loans to businesses.

A price war over oil between Russia and Saudi Arabia is adding insult to injury as it deals a blow to commodity producing economies. The U.S. shale industry is an implicit target as both producers would like to see a drop in U.S. production. Lower prices at the gas pump mean little to consumers at a time when they are sheltering in place and unable to derive the saving by commuting to and from work.

The silver lining is technology, which is moving at a breakneck pace to deliver the testing, antiviral drugs and antibodies needed to manage the disease. South Korea, which has been the most aggressive on testing and tracking the disease, provides a useful model; it has enabled them to be more strategic and focused with shutdowns. The use of antibodies is a promising treatment that could deliver results faster than a vaccine, and potentially immunize health workers on the front lines.

Chart 1

Economic Phases of a Crisis (GDP Percent Change, Annualized Rate)



Pandemics are now a reality with risks that will have to be actively managed. Ideally, this would reverse the rise in isolationist policies that occurred in the wake of the 2008-09 crisis; that looks unlikely. Deglobalization is expected to accelerate with more friction instead of cooperation at borders. China and Russia have been filling the void with aid and support to other countries abandoned by the U.S.

Five Phases of a Crisis

Phase 1: Containment

The first phase, also called "Denial," started on December 31 and ended February 10. That spans initial reports that health authorities in Wuhan, China were seeing an unusual surge in pneumonia cases to the identification of the disease, the lockdown of the city and other major metropolitan areas. Those draconian efforts helped to slow the spread of the disease but by January 20, cases were confirmed in neighboring Japan, South Korea and Thailand. The next day, the first case was reported in the U.S. in Washington state.

The World Health Organization (WHO) declared a global health emergency on January 30. Travel by foreign nationals who had been to China in the last 14 days was restricted. Travel continued to flow to and from the rest of the world.

Many first used the 2003 SARS epidemic as a benchmark for how the virus might impact China and the global economy. Those comparisons were misleading. China was a small, emerging economy in 2003; now it is the second largest economy in the world with tentacles into every other economy. The blow to demand and supply, via supply-chain disruptions, is significant.

Phase 2: Contagion

The second phase of the crisis spans February 11 to February 29. On February 11, the novel coronavirus got a new name, COVID-19. Within days, the virus was showing up in Europe, Asia, the U.S. and Iran.

Nearly \$2.5 Trillion in Aid

The government passed a series of measures to battle COVID-19 and provide a backstop for the economic losses associated with stemming the spread of the disease. The following has occurred since March 3:

- \$8.3 billion for research into tests and a vaccine, public health funding and protective medical gear.
- The declaration of a national emergency, which enabled the Department of Health and Human Services to waive regulations and free up nearly \$50 billion in funds to combat the virus and provide support for FEMA. Medicare and Medicaid.
- \$100 billion in tax subsidies for paid sick leave and funds to cover testing and the costs of being sick with the disease.
- \$2.3 trillion in expanded and enhanced unemployment insurance, checks to individuals, funding for hospitals, loans leveraged by the Fed, tax credits for losses, payroll tax deferrals, small business loans and transfers to the states.

Funding to fight the virus, including a large infusion for hospitals, expansions and enhancements to unemployment insurance and checks paid directly to individuals is a welcome shift. There are also much-needed loan programs, with provisions for loan forgiveness, and an expansion of those loans by the Federal Reserve - \$454 billion in collateral that will support upwards of \$4 trillion by the Fed.

The plan includes \$200 billion in corporate tax breaks but does not increase money for SNAP (aka food stamps, mostly for children). There are \$367 billion in loans to small businesses to cover payroll and expenses that will be forgiven, provided those businesses are willing to call back workers already laid off. The bureaucracy of those loans is also significant and overwhelming the Small Business Administration. Funding for states falls woefully short and will prompt cuts to essential services at the very moment we need them most, when we are ramping up.

We will need fixes and more aid as the crisis compounds in the weeks to come. We will eventually need stimulus. Infrastructure spending is high on my list. Congress has gotten the message and is already working on more packages but still chasing a moving target. An economic pandemic took hold before an actual health pandemic was declared. Efforts to contain the spread of the virus disrupted economic activity from Asia to Europe and North America. Seven of the ten largest economies in the world - China, Japan, Germany, France, Italy, the U.K. and Canada - were suddenly flat to negative on growth in the first quarter and risks of a global recession were accelerating.

Large international conferences were canceled. Tech firms took the lead and started to cancel large internal and external meetings. There is some evidence that this actually helped to curb the spread of the virus in California relative to New York, although it remains too early to tell. Tech firms were requiring workers to shift to work from home during the first week of March, well before shelter-in-place warnings were issued.

The number of infections in Europe spiked, notably in the Lombardy region in Italy. After the Centers for Disease Control and Prevention (CDC) warned of an imminent outbreak in the U.S., the president asked Congress for \$1.25 billion in funding to prepare for the outbreak.

On February 28, the first death from COVID-19 was reported in the U.S. A day later, the president broadened travel bans to the U.S. to include Italy, South Korea and Iran. Air travel became much more restricted as fear took root and cancellations surged, first abroad and later within the U.S.

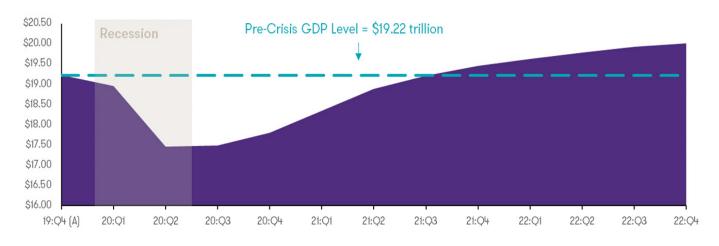
Phase 3: Quarantine

Phase three spans March through June; it represents the most painful phase in terms of fatalities and economic losses. Chart 1 shows the blow to GDP growth in the second quarter, which is at best a moving target. The drop in the first and second quarters due to COVID-19 is expected to represent the worst period for the U.S. and global economy since before the Great Depression.

March and April are expected to be the most difficult and heartbreaking months. Limits on gatherings, which tightened from 50 people to 10 in a 24-hour time frame were initially ignored. Revelers celebrated St. Patrick's day in bars and restaurants, despite canceled parades. Partygoers flooded the streets of New Orleans to celebrate Mardi Gras while Spring Breakers filled the beaches in Florida. That upped the pace of infection, and triggered much more restrictive shelter-in-place and stayat-home orders.

Chart 2

Nearly Two Years to Recoup Output Lost (GDP Levels, Trillion \$ 2012)



Source: Grant Thornton LLP

California was the first to move to statewide shutdowns on March 19. A week later more than half of the population was covered by such restrictions. Nearly 70% of the population will be included by April 1.

The result has been nothing less than devastating. Initial unemployment claims surged the week ending March 14 at the fastest pace outside of a natural disaster. The following week broke all records, with 3.3 million new people applying for unemployment insurance. That marked a fivefold increase from the previous 695,000 high hit in October 1982, when manufacturing workers were being shed by the thousands.

Worse yet, those numbers understate the actual loss in employment. Many laid-off workers could not access overwhelmed state websites to apply for unemployment insurance; others did not qualify. The \$2.3 trillion aid bill passed on March 27 expands and enhances unemployment insurance to furloughed, contract and gig workers. Job losses in the week ended March 28 could easily approach 10 million, given the data reported by the states. That was before more workers became eligible for unemployment insurance.

This is the first time in my career that I knew the exact week the economy collapsed - the first week of March - on a real-time basis. It also represents the most abrupt closing of the global economy, with the exception of health care and essentials, that anyone has ever seen.

The resulting recession will be deep and extremely painful. Efforts by the governments and central banks to backstop those losses can't prevent the recession from occurring but could blunt the pain for individuals, businesses and states. More will need to be done, notably in the U.S.

The Federal Reserve is working with Congress and Treasury to stop credit markets from seizing; it will go further to speed the cash to individuals and firms and will likely print money to absorb a good portion of the debt we take on to offset deflationary pressures. The Fed is learning from instead of emulating Japan, which resisted calls by former Fed Chairman Ben Bernanke to absorb its debt with a higher level of money printing or "monetizing" its debt. The Fed is even gambling its future independence because governments don't give up access to free cash easily, even when inflation returns. Why would the Fed risk so much? Because the alternative - the risk the economy slips into a deep depression - is greater.

Dr. Fauci is now calling the shots for the administration from his perch at the NIH. He argues that we can't safely begin to reopen until the number of cases has peaked **and** we have rapid testing and protective medical gear where needed.

A consensus on a road map to reopen the economy in phases is emerging. The most detailed is laid out in a new report by the American Enterprise Institute (AEI), which includes former administration officials. One of its lead authors is Dr. Scott Gottlieb, a former administration official and advisor to the White House. The report lays out a clear set of benchmarks that the worst affected areas must clear before they start to reopen. Benchmarks are critical to not only inform the public but to contain panic. Knowledge and transparency are our friends, not foes, in a crisis.

The AEI advises a more centralized response from the administration, working with states on the front lines of the crisis. The largest challenge is getting enough hospital beds up and running with ventilators and protective gear to care for those hardest hit by the disease without overwhelming the system. New York is hit the hardest at the moment but could also provide a model for other states as it hits key milestones for reopening.

The first milestone is a downtrend in the rate of infections for at least 14 days; that spans the period of incubation for the virus. That is why the administration has extended its window of guidance until the end of April. After that, some parts of the country may be able to start to reopen schools and businesses. The operative word is "may," as many schools have already extended closings to the entire school year. This will create hurdles for those who need daycare to return to work.

Testing and tracking the disease, including testing for the antibodies in people who have had the disease and are now immune will play a critical role in getting workers especially in health care back to work. One goal is to test 750,000 people a week to track the epidemic. Extensive testing has worked well in South Korea and Singapore but presents different challenges in the U.S. Acute budget cuts and underfunding have left our public health departments in tatters. We will need to rebuild and shore up our infrastructure of state and local public health workers with funding and volunteers.

Phase 4: Slow Ramp-Up

Phase four spans July to December. Drug trials have begun on antivirals and antibodies in New York, as the pharmaceutical manufacturers are pushed to produce the most effective and safest treatments. It still takes time but they are compressing the timeline and using small trials.

Businesses and institutions will need protocols in place to clean and regularly sterilize public spaces. This needs to be done before we get into phase four so that we can ramp up more rapidly and safely once restrictions are lifted. Expect significant hesitation by consumers, workers returning to work and firms willing to invest in new projects until the fog of uncertainty surrounding the pace of infections has lifted.

Hopes are high for a vaccine but that is still considered at least a year away, given the need for tests and safety protocols. Dr. Fauci has gone to great lengths to explain the downside to rushing a vaccine. The worst case scenario is that we could have a vaccine that propagates the infection instead of strengthening immunity to the disease.

Gains in GDP could be large during phase four but the level of economic activity we see will still pale when compared to that prior to the crisis. We have assumed another wave of infections in the fourth quarter, which will keep the need for testing, tracking, antiviral drugs, cleaning protocols, expanded health care systems and with an appropriate number of beds and ventilators elevated.

Phase 5: New New Normal, Post-COVID-19

Phase five starts in 2021, but will last for years. Chart 2 shows that our forecast suggests that it will take years, not months, to get back to the level of economic activity we saw prior to the crisis. Initial gains will be much stronger and faster than what occurred emerging from the 2008-09 recession but the threshold is low. It took three and half years for the economy to hit its pre-crisis peak following the recession of 2008-09. Our forecast suggests it will take at least two years to regain what's being lost, and that is assuming much more aid to backstop current losses and stimulus once the economy can fully reopen.

The world we come back to will be similar but not the same as the one we left. This crisis is accelerating the move from bricks to clicks and restructuring in the retail sector. Home deliveries for food and meals will increase. We will figure out what kind of meetings and education work via remote and what doesn't.

The move to online learning may face the largest speed bumps as the reality of the role that in-person instruction plays in our ability to learn is laid bare. Teachers will hopefully get a whole new level of appreciation for what they accomplish in their classrooms. Don't look for Al and technology to suddenly replace what makes us most human, our in-person interactions.

We are still a social species and need to congregate, just with more precautions than in the past. The role health care workers play in caring and consoling those with the most severe symptoms can't be done by a machine.

Bottom Line

As hard as this crisis is, we have an extraordinary advantage over our forefathers who suffered through the 1918 Flu Pandemic. That crisis hit one-third of the world's population and cost more in lives than World Wars I and II combined. The U.S. lost more than 675,000 people to that pandemic with a much smaller population than we have today.

Our savior is advances in medical care and technology: Innovations on tests, treatments and potential vaccines are moving at a breakneck pace. We are also working together with other nations to share data and find best practices to bend the curve on infections and later ramp up the economy without triggering more infections. The whole is truly greater than the sum of its parts, a message I worry could get lost in translation when it comes to how we interact with other countries after this crisis has passed.

Economic forecast — April 2020

National Outlook Chain-Weight GDP	7.0 7.2 12.0 37.0 119 -867 77 29.3 1.4 0.3 2.1 5.0 1.9 1.3	5.2 6.5 8.8 32.3 159 -1008 4.8 21.2 0.9 0.2 1.3 4.5
Personal Consumption	7.2 12.0 37.0 119 -867 77 29.3 1.4 0.3 2.1 5.0 1.9 1.3	6.5 8.8 32.3 159 -1008 4.8 21.2 0.9 0.2 1.3 4.5
Business Fixed Investment	12.0 37.0 119 -867 77 29.3 1.4 0.3 2.1 5.0 1.0 1.9 1.3	8.8 32.3 159 -1008 4.8 21.2 0.9 0.2 1.3 4.5 1.0 1.8 1.5
Residentical Investment 1.15	37.0 119 -867 7.7 29.3 1.4 0.3 2.1 5.0 1.9 1.3	32.3 159 -1008 4.8 21.2 0.9 0.2 1.3 4.5
Inventory Investment (5i S 12) 67 196 39 13 144 77 -317 -346 139 16 Net Exports (5i S 12) 9-564 5-571 7-76 9-901 8-839 -610 3-833 -450 -533 -698 Exports 0.0 14-7 7.5 2.1 53 -192 0.2 5.9 18.6 11.0 Imports 1.0 14-14 12.9 8-14 -10.7 -36.5 -270 15.4 290 33.9 Government Expenditures 2.3 1.8 1.6 2.5 1.6 0.3 2.4 1.4 1.9 1.5 Federal 3.5 3.4 1.0 3.3 1.4 6.9 2.0 0.4 0.5 0.5 State and Local 1.6 0.8 1.9 2.0 1.7 3.5 2.6 2.0 2.7 2.1 Final Sales 2.2 14-9 14.7 3.1 14-5 -27.6 5.4 7.8 8.5 9.1 Inflation	119 -867 7.7 29.3 1.4 0.3 2.1 5.0 1.9 1.3	159 -1008 4.8 21.2 0.9 0.2 1.3 4.5
Net Exports (bil S 12)	-867 77 29.3 1.4 0.3 2.1 5.0 1.0 1.9 1.3	-1008 4.8 21.2 0.9 0.2 1.3 4.5 1.0 1.8 1.5
Exports 0.0 -4,7 7,5 2.1 -6.3 -1.92 0.2 5.9 18.6 11.0 Imports 1.0 -14,4 12.9 -8.4 -10.7 -36.5 -27.0 15.4 29.0 33.9 Government Expenditures 2.3 1.8 1.6 2.5 1.6 0.3 2.4 1.4 1.9 1.5 Federal 3.5 3.4 1.0 3.3 1.4 6.9 2.0 0.4 0.5 0.5 State and Local 1.6 0.8 1.9 2.0 1.7 -3.5 2.6 2.0 2.7 2.1 Final Sales 2.2 -4,9 4.7 3.1 -4,5 -27.6 5.4 7.8 8.5 9.1 Inflation GDP Deflator 1.8 1.4 1.1 1.4 1.4 1.0 1.3 1.0 1.3 1.0 1.3 1.0 CPI 1.8 0.6 1.8 2.4 1.7 -6.6 3.5 2.8 2.2 2.0 Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 1.3 1.2 1.3 Special Indicators Corporate Profits² 2.2 -14,0 36.8 2.2 -10.1 -31.5 -23.3 -14,0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14,338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.4 0.8 1.2 1.2 0.5 0.5 0.5 0.9 1.2 1.3 1.1	7.7 29.3 1.4 0.3 2.1 5.0 1.0 1.9 1.3	4.8 21.2 0.9 0.2 1.3 4.5 1.0 1.8 1.5
Imports	29.3 1.4 0.3 2.1 5.0 1.0 1.9 1.3	21.2 0.9 0.2 1.3 4.5 1.0 1.8 1.5
Government Expenditures 2.3 1.8 1.6 2.5 1.6 0.3 2.4 1.4 1.9 1.5	1.4 0.3 2.1 5.0 1.0 1.9 1.3	0.9 0.2 1.3 4.5 1.0 1.8 1.5
Federal 3.5 3.4 1.0 3.3 1.4 6.9 2.0 0.4 0.5 0.5	0.3 2.1 5.0 1.0 1.9 1.3	0.2 1.3 4.5 1.0 1.8 1.5
State and Local 1.6 0.8 1.9 2.0 1.7 -3.5 2.6 2.0 2.7 2.1	2.1 5.0 1.0 1.9 1.3	1.3 4.5 1.0 1.8 1.5
Final Sales 2.2 -4.9 4.7 3.1 -4.5 -27.6 5.4 7.8 8.5 9.1 Inflation GDP Deflator 1.8 1.4 1.1 1.4 1.4 1.0 1.3 1.0 1.3 1.0 CPI 1.8 0.6 1.8 2.4 1.7 -6.6 3.5 2.8 2.2 2.0 Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 1.3 1.2 1.3 Special Indicators Corporate Profits² 2.2 -14.0 36.8 2.2 -10.1 -31.5 -23.3 -14.0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts [mil.] 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.5 0.9 1.2 1.3 1.1	1.0 1.9 1.3	1.0 1.8 1.5
Inflation GDP Deflator 1.8 1.4 1.1 1.4 1.4 1.0 1.3 1.0 1.3 1.0 1.3 1.0 CPI 1.8 0.6 1.8 2.4 1.7 -6.6 3.5 2.8 2.2 2.0 Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 0.9 1.3 1.2 1.3 Special Indicators Special Indicato	1.0 1.9 1.3	1.0 1.8 1.5
GDP Deflator 1.8 1.4 1.1 1.4 1.4 1.0 1.3 1.0 1.3 1.0 CPI 1.8 0.6 1.8 2.4 1.7 -6.6 3.5 2.8 2.2 2.0 Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 1.3 1.2 1.3 Special Indicators Corporate Profits ² 2.2 -14.0 36.8 2.2 -10.1 -31.5 -23.3 -14.0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.) ³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.5 0.9 1.2 1.3 1.1	1.9 1.3 56.5	1.8 1.5 36.8
CPI 1.8 0.6 1.8 2.4 1.7 -6.6 3.5 2.8 2.2 2.0 Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 1.3 1.2 1.3 Special Indicators Corporate Profits² 2.2 -14.0 36.8 2.2 -10.1 -31.5 -23.3 -14.0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales	1.9 1.3 56.5	1.8 1.5 36.8
Core CPI 2.2 1.9 1.2 2.0 2.6 0.9 0.9 1.3 1.2 1.3 Special Indicators Corporate Profits ² 2.2 -14.0 36.8 2.2 -10.1 -31.5 -23.3 -14.0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.) ³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 <td>1.3</td> <td>1.5</td>	1.3	1.5
Special Indicators	56.5	36.8
Corporate Profits² 2.2 -14.0 36.8 2.2 -10.1 -31.5 -23.3 -14.0 20.0 69.6 Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4		
Disposable Personal Income 2.9 2.4 1.3 1.6 1.5 8.8 1.6 -6.5 3.1 4.2 Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1		
Housing Starts (mil.) 1.30 1.04 1.34 1.44 1.43 0.86 0.89 0.97 1.13 1.25 Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.) ³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	47	
Civilian Unemployment Rate 3.7 9.1 8.7 3.5 3.7 10.6 11.0 11.2 10.6 9.3 Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	1.7	1.6
Total Nonfarm Payrolls (thous.)³ 1383 -14338 8242 216 379 -11572 -2427 -718 988 2197 Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	1.40	1.57
Vehicle Sales Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	8.0	6.8
Automobile Sales (mil.) 4.9 2.3 4.1 4.5 2.5 1.3 2.4 3.0 4.3 4.0 Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	2550	2507
Domestic 3.5 1.5 2.9 3.3 2.0 0.8 1.5 1.8 3.0 2.9 Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1		
Imports 1.4 0.8 1.2 1.2 0.5 0.5 0.9 1.2 1.3 1.1	4.0	3.9
- i	2.9	2.8
I+ Triple (mil) 121 7h 125 123 80 55 70 00 110 120	1.1	1.1
Lt. Trucks (mil.) 12.1 7.4 12.5 12.3 8.0 5.5 7.0 9.0 11.0 13.0	13.0	12.9
Domestic 9.7 6.6 9.8 9.7 8.0 4.9 6.0 7.5 8.5 10.3	10.2	10.0
Imports 2.4 1.0 2.7 2.6 `1.4 0.6 1.0 1.5 2.5 2.7	2.8	2.9
Combined Auto/Lt.Truck 17.0 9.7 16.5 16.8 10.5 6.8 9.4 12.0 15.3 17.0	17.0	16.8
Heavy Truck Sales 0.5 0.3 0.4 0.6 0.4 0.2 0.2 0.3 0.4 0.4	0.4	0.5
Total Vehicles (mil.) 17.5 10.0 17.0 17.4 10.9 7.0 9.6 12.3 15.7 17.4	17.4	17.3
Interest Rate/Yields		
Federal Funds 2.2 0.4 0.1 1.6 1.2 0.1 0.1 0.1 0.1 0.1	0.1	0.1
10-Year Treasury Note 2.1 0.7 0.8 1.8 1.6 0.7 0.0 0.6 0.7 0.8	0.8	0.8
Corporate Bond BAA 4.4 4.5 3.9 3.9 4.0 5.8 3.8 4.3 4.3 4.0	3.8	3.5
Exchange Rates		
Dollar/Euro 1.12 1.10 1.09 1.11 1.11 1.10 1.09 1.08 1.08 1.08	1.09	1.10
Yen/Dollar 109.0 106.9 106.0 108.7 108.8 106.8 106.3 106.0 106.0 106.0	106.0	106.0

 $^{^{\}rm L}\,$ 1 in 2019, GDP was \$19.1 trillion in chain-weighted 2012 dollars.

Copyright © 2020 Diane Swonk - All rights reserved. The information provided herein is believed to be obtained from sources deemed to be accurate, timely and reliable. However, no assurance is given in that respect. The reader should not rely on this information in making economic, financial, investment or any other decisions. This communication does not constitute an offer or solicitation, or solicitation of any offer to buy or sell any security, investment or other product. Likewise, this communication serves to provide certain opinions on current market conditions, economic policy or trends and is not a recommendation to engage in, or refrain from engaging, in a particular course of action.

"Grant Thornton" refers to Grant Thornton LLP, the U.S. member firm of Grant Thornton International Ltd (GTIL), and/or refers to the brand under which the GTIL member firms provide audit, tax and advisory services to their clients, as the context requires. GTIL and each of its member firms are separate legal entities and are not a worldwide partnership. GTIL does not provide services to clients. Services are delivered by the member firms in their respective countries. GTIL and its member firms are not agents of, and do not obligate, one another and are not liable for one another's acts or omissions. In the United States, visit grantthornton.com for details.

© 2020 Grant Thornton LLP \mid All rights reserved \mid U.S. member firm of Grant Thornton International Ltd

² Corporate profits before tax with inventory valuation and capital consumption adjustments, quarterly data represents four-quarter percent change.

^{3.} Total nonfarm payrolls, quarterly data represents the difference in the average from the previous period. Annual data represents 4Q to 4Q change.

Quarterly data are seasonally adjusted at an annual rate. Unless otherwise specified, \$ figures reflect adjustment for inflation. Total may not add up due to rounding.