

The Post-COVID Economy

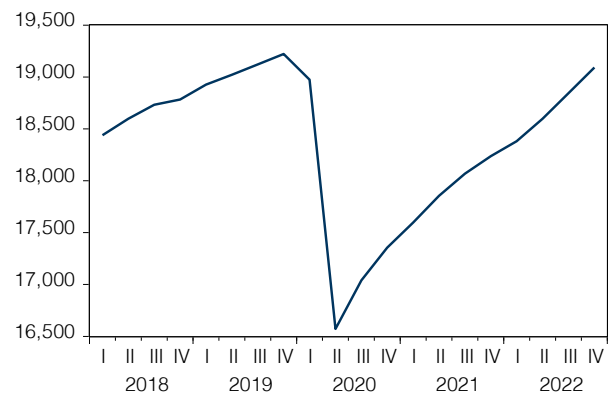
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*It will take time for all the king's horses
 and all the king's men to put the economy
 back to together again.¹*

Induced by the COVID-19 pandemic, the economy had a great fall during the March-May time period. Nonfarm employment declined by 22 million nonfarm jobs and the unemployment rate skyrocketed from 3.5% in February to 14.7% in April. Make no mistake, the public health crisis of the pandemic morphed into a depression-like crisis in the economy. To call this crisis a recession is a misnomer. We are forecasting a 42% annual rate of decline in real GDP for the current quarter followed by a “Nike swoosh” recovery that won’t return the level of output to prior fourth quarter of 2019 peak until early 2023. (See Figure 1) On a fourth-quarter-to-fourth-quarter basis, real GDP will decline by 8.6% and then increase by 5.3% and 4.9% in 2021 and 2022, respectively.

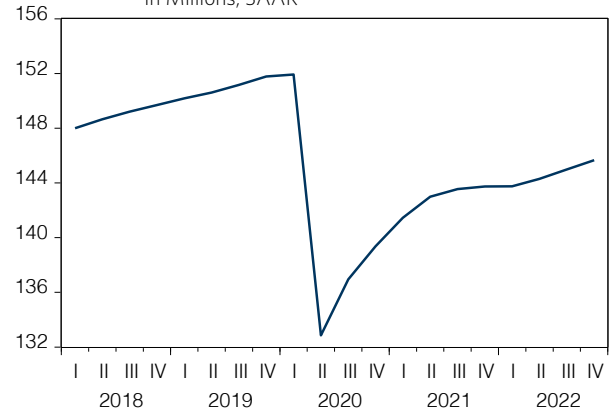
Similarly, employment won’t recover until well past 2022 and the unemployment rate will be around 10% in this year’s fourth quarter and will still be above 6% in the fourth quarter of 2022. (See Figure 2 and 3) Thus for too many workers the recession will linger on well past the official end date of the depression. We are assuming a start-stop return to normalcy with vaccines available in early 2021 and, most importantly, most of the nation’s public schools reopen in the fall.

Figure 1 Real GDP, 1Q2018 – 4Q2022, In \$ Billions, SAAR



Source: U.S. Department of Commerce and UCLA Anderson Forecast

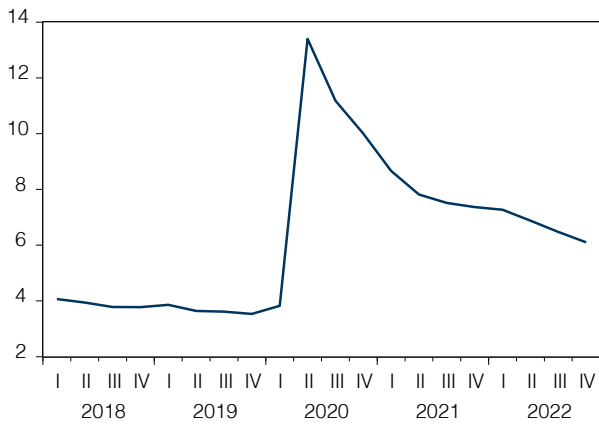
Figure 2 Nonfarm Employment, 1Q2018 – 4Q2022F, In Millions, SAAR



Source: Bureau of Labor Statistics and UCLA Anderson Forecast

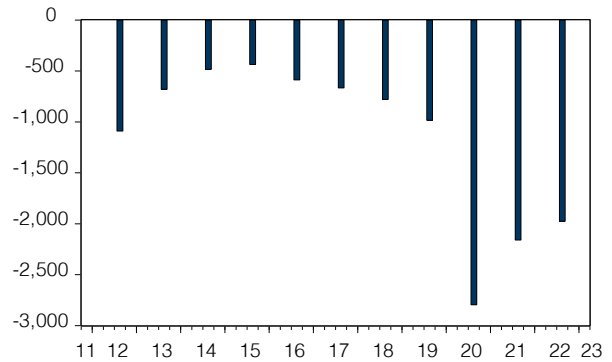
1. With apologies to Mother Goose.

Figure 3 Unemployment Rate, 1Q2018 - 4Q2022F, Percent, SA



Source: Bureau of Labor Statistics and UCLA Anderson Forecast

Figure 4 Federal Deficit, FY2012-FY2022F, In \$Billions, Annual Data



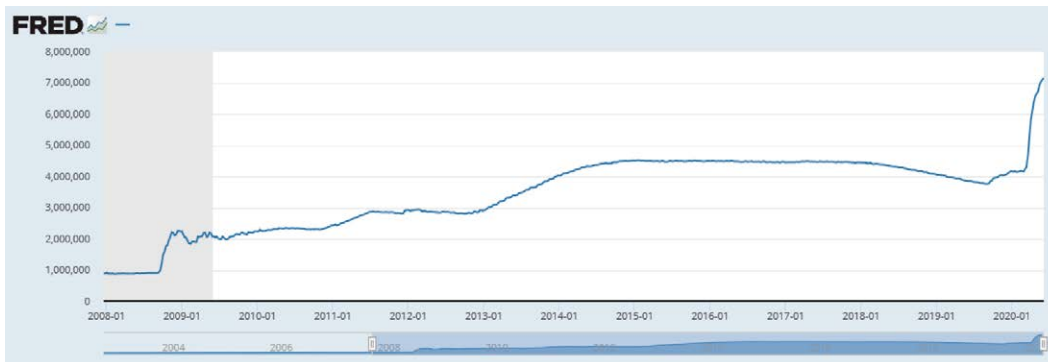
Source: Office of Management & Budget and UCLA Anderson Forecast

Fiscal and Monetary Policy Response

Both the Administration and the Federal Reserve Board responded with unusual alacrity to the crisis. The \$1.8 trillion CARES Act moved quickly through Congress (more will be needed, most likely in July) and the Fed immediately moved to a zero interest rate policy and committed itself to supporting the corporate bond market for the first time ever. (See Figure 4) As a result the Fed’s balance sheet ballooned by \$4.1 trillion from late-February to \$7.1 trillion in early June. (See Figure 5)

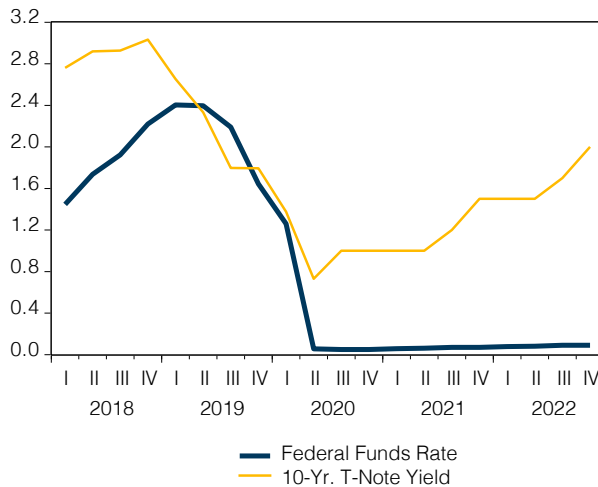
Further, it seems that the Fed is about to embark a yield curve maintenance program that will work to fix the long end of the Treasury curve. (See Figure 6) That policy is a throwback to the Fed’s support of the treasury market during World War II; an inflationary program (initially suppressed by price controls) that ended with the famous Treasury Accord of 1951. In essence, the Fed acted as an arm of the Treasury during World War II and didn’t regain its independence until after the Accord.

Figure 5 Federal Reserve Banks, Total Assets, Dec 2007 - June 2020, In \$ Millions, Weekly Data



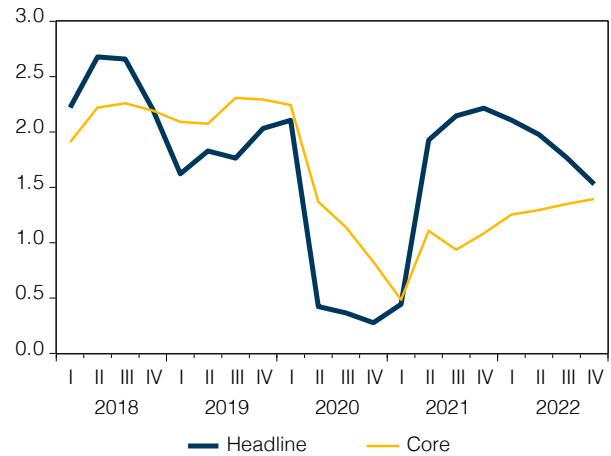
Source: Federal Reserve Board

Figure 6 Federal Funds vs. 10-Year U.S. Treasury Yield, 1Q2018 - 4Q2022F, Percent



Source: Federal Reserve Board and UCLA Anderson Forecast

Figure 7 Headline Consumer Price Index vs. Core CPI, Q12018-Q42022F, Percent Change Year Ago



Source: Bureau of Labor Statistics and UCLA Anderson Forecast

Although inflation will likely remain muted throughout the forecast period, it is our view that by the mid-2020s the Fed’s 2% inflation target will be handily exceeded. (Figure 7) Why? There are several theories as to what causes inflation: monetary, fiscal deficits and cost-push. We discussed the fiscal and monetary stimulus above and cost-push will come reorganizing the economy for resilience rather than efficiency, more on that below. However, many of those forces were at work after the Great Financial Crisis of 2007-2009 and inflation was quiescent.

What is different this time? First new banking rules made restoring liquidity rather than lending a priority and second fiscal policy in the U.S. and Europe turned from stimulus to austerity. The latter is not likely to happen this time. Thus the way is open for inflation to return later in the decade.

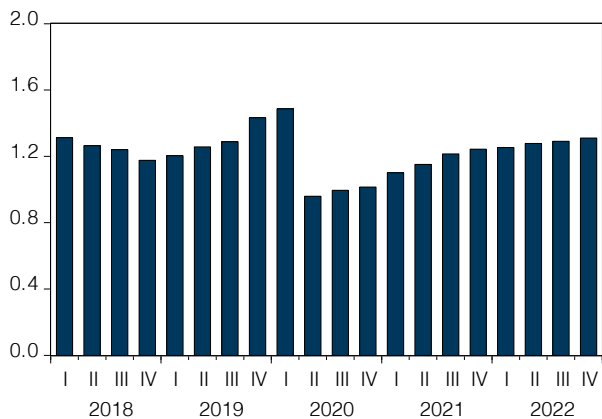
Why will the Recovery be so Moderate?

Despite all of the stimulus being poured into the economy, we anticipate a moderate recovery. Simply put, despite the Paycheck Protection Program too many small businesses will fail and millions of jobs in restaurants and personal service firms will disappear in the short-run. We believe that even with the availability of a vaccine it will take time for consumers to return to normal. (It took more than two years after 9/11 for air travel to return to its prior peak.) With businesses taking on a huge amount of debt, repayment of that debt will take a priority over new capital spending. **And do not forget that state and local budgets suffered a revenue collapse that even with federal assistance it will take years to recover from.**

Housing: A Bright Spot

Responding to a prolonged period of under-building earlier this year housing activity was on a tear. New starts exceeded an annual rate of 1.5 million units in January and February and prices were rising. With the shutting down of the economy, housing starts dropped to 890,000 in April. Nevertheless, despite the spike in unemployment underlying consumer demand appears to be strong and that the forces in play earlier this year will reassert themselves, especially with the availability of sub-3% mortgage rates. We expect the recent tightening of credit standards will loosen as employment growth begins to pick up. As a result, after starts declining to 1.11 million units this year as a whole, we forecast that activity will be running at a 1.3 million unit annual rate by the end of 2022. (Figure 8)

Figure 8 Housing Starts, 1Q2018 -Q42002F, In Millions of Units, Quarterly Data SAAR



Source: Bureau of the Census and UCLA Anderson Forecast

Speculations on the Post-COVID World

*“There are **decades** where nothing happens, and there are **weeks** where **decades** happen.”*

Attributed to Vladimir Lenin

First, to state the obvious, the trends that were in place prior to the outbreak of the pandemic accelerated. For example, the trend towards the increased digitization of the economy and cloud computing ramped up to a new higher level. **Online shopping, benefiting from social distancing and the closure of brick and mortar stores, accounted for a**

record 28% of retail sales less automobiles, gas and restaurants in April. A year ago it was 21%. The trend toward de-globalization was in train prior to the pandemic and that too will continue. I will now take in turn the changes I see in global geopolitics, domestic politics, the work environment, urban density, the housing market, the new rental dynamics of retail, and the popping of the higher education bubble. **I do this fully understanding the admonition of the Nobel Prize-winning physicist Nil Bohr who noted “It is very hard to predict, but especially the future.”**

*Geopolitics

A new cold war with China arising from trade tensions and Chinese expansion into the South China Sea was smoldering prior to the pandemic. It ignited with the Chinese being less than candid with their responses to the COVID-19 pandemic which originated in Wuhan, China. It was further exacerbated by China’s new legislation that limits freedom in Hong Kong, pending congressional legislation to have greater oversight on the listing of Chinese securities on the U.S. markets and China gradually devaluing its currency.

As the pandemic hit full force in the U.S., Americans realized that a host of critical medical supplies and bio-active ingredients were largely sole-sourced out of China and of a sudden became very hard to get. **Where for many decades the watchword for the economy was “efficiency;” the new watchword will be “resilience.”** What that means is American companies under the pressure of tariffs were already diversifying their supply sources out of China will accelerate that move and will also return production to the U.S. That production will likely locate in the lower-cost South and Midwest and much of it will be automated.

In contrast, the European Commission announced a \$1.35 trillion virus recovery plan that will have the effect of the rich north subsidizing the poorer south. With that policy reversal, largely by Germany’s Angela Merkel the risks of a Eurozone breakup have been reduced thereby working to prevent a potential banking crisis.

*Domestic Politics

As we noted above the U.S. government will be running mega-deficits for years to come. Ultimately that will mean higher taxes, especially on the wealthy. Whether the pandemic leads to an entire rethinking of the social safety net remains open to question, but the virus has laid bare the problems associated with employer-based health insurance. With unemployment lagging the recovery in the economy it

likely Congress will finally get around to funding a major infrastructure package that will be able to be financed at very low interest rates.

*The Work Environment

What we have learned from the pandemic is that the economy can work from home (WFH), at least for the 37% of jobs that are amenable to that environment.² Firms from Morgan Stanley to Facebook have noted the success of the WFH experiment has been so successful that they plan to radically reduce their office footprint. Indeed Facebook Founder and CEO Mark Zuckerberg noted, **“Over time location will hopefully be less a factor in how many people work ... And we’ll have technology to feel truly present no matter where we are.”**³ He further noted that perhaps half his current workforce of 45,000 could be working from home in five years. **And if you can work from home, it can be practically anywhere.**

Office purists argue the WFH environment works against corporate culture and the internal and external agglomeration economies associated with dense office environments. They further argue that the Yahoo WFH experiment failed in 2013. **There is merit to those arguments, but given recent advances in telecommunications (e.g. Zoom) it seems to me that agglomeration economies will become less a prisoner of geography than now believed.**

An offsetting factor for the demand for office space will be a partial undoing of the two-decade-long trend to densify office space. The WeWork model of having 75-100 square feet of office space per employee does not work in a virus conscious world of social distancing. Office workers will have more space and there will quite a bit of Plexiglas separating workstations.

For primary caregivers (almost all women) of children, WFH will open up a host of opportunities for a better work-life balance. It will be far easier to take care of a sick child and go to a school event.

*Urban Density

Since the late 1990s we have witnessed a renaissance of many of America’s great urban centers, especially on both coasts. Density linked with mass transportation has been the holy grail of real estate developers and owners. Now that

whole concept has been called into question as the pandemic thrived in dense urban environments. **Simply put dense pedestrian-oriented environments and mass transit (both horizontal and vertical as in elevators) do not work in a socially distancing environment.** The arrival of a vaccine will certainly ameliorate the situation, but the shock of the shutdown and the fear that the virus or another virus may return has been seared into the consciousness of the citizenry.

If office work becomes more dispersed, the urban amenities of restaurants, bars and entertainment will be under stress for the lack of customers. That is, of course, assuming that most of the restaurants reopen after the virus shutdown which seems unlikely. Why be in an expensive city that lacks amenities.

*The Housing Market

If WFH becomes prevalent post-crisis there will be less need for people to live in expensive urban environments and it will be hard to justify paying \$3,000-\$5000 a month for small apartments that were never designed to be a home-office environment causing rents to fall. It will take some time before pandemic-scarred commuters accept mass transit as a transportation solution. Hence the much-reviled automobile will once again become the commuter’s choice. This view is supported by a recent Citi survey of 5,000 urban households which indicated a strong desire to move to the suburbs, especially the higher-income ones.⁴

What all of this means is that, even as urban rents fall, suburban housing will once again become a choice solution for both millennials and empty nesters who so recently returned to an urban environment. It also means that many workers won’t have to live close to their workplace. The recent civil disturbances associated with the largely peaceful protests around the police murder of George Floyd and moves to “defund” the police will give added impetus to the move to the suburbs I envision. Instead of living in San Francisco, New York or Los Angeles workers can now chose to live in the relatively less expensive suburbs of Austin, Raleigh, Nashville and Denver. All that is needed are fast internet connections and a decent airport.

For those workers who chose this lifestyle commuting times will be radically reduced. Indeed with less commuting carbon emission will be reduced as well.

2. See Dingel, Jonathan I. and Brent Neiman, “How Many Jobs can be Done at Home?” NBER, April 16, 2020.

3. See Facebook post quoted in Politico New York Real Estate, May 26, 2020.

4. See Bilerman, Michael, “Into the Great Wide Open,” Citi Equity Research, June 15, 2020

The New Rental Dynamics of Retail

Under the onslaught of online competition it is no secret that brick and mortar retail has been in a world of hurt for the past several years. As we noted above the pandemic telescoped all of retail's worst fears in three months. Historically the rent-paying ability of retail tenants was based on sales per square foot. However, under the competitive hammer of online competition, retailer gross margins have been squeezed and rent is actually paid out of gross margin, not sales.

Let me present a stylized example. A store in typical Class A regional mall generates around \$700/square foot and the tenant pays a net rent of \$62/square foot with an additional \$25/square foot of common area charges.⁵ A few years ago a clothing retailer would generate a 40% gross margin in sales, or about \$280/square foot. However, **prior** to the pandemic that margin was squeezed to around 36%. Thus the new gross margin was running at around \$252/square foot, a \$28/square foot reduction and that is assuming sales remained at \$700/square foot, a heroic assumption. Thus, with the gross margin/square foot reduced by \$28/square foot, the \$62/square foot of rent is hardly sustainable and it is likely that when the economy returns to something approximating the pre-COVID normal mall rents will be under intense downward pressure. **I am not saying rents will decline by nearly 50% as indicated by my example, but a decline on the order of 15%-30% seems likely.** We would note that the analysis presented above ignores the raft of department store closings and retail bankruptcies that have occurred in the past three months.

The Popping of the Higher Education Bubble

Aside from a few dominant elite schools, higher education was already in trouble prior to the pandemic.⁶ Small private colleges were failing and now many more are on the brink of failure. The fundamental question is "who will pay big bucks for an online program." As schools reopen the rules of social distancing will drastically change campus life making college less attractive. Lower cost online education should surge especially from elite institutions.

On the financing side, with state budgets under intense pressure, higher education will be in the crosshairs of budget

cutters. Adding to the pressure will be the lack of student visas for foreign students, especially those from China. Remember it is those students who invariably pay full tuition. Although not normally discussed in an education context the major hospitals associated with state and private universities have taken a huge financial hit with the near shutdown of high-margin elective surgeries thereby putting additional pressure on university budgets.

As a result, colleges will close, more than a few academic departments will shrink or close and with that the demand for Ph.D.'s to receive degrees and to teach classes will collapse. The hitherto cloistered world of academia will face the restructuring pressures that have been felt elsewhere in the economy. Trust me, it will not be a pretty picture.

Conclusion

The public health crisis induced by the COVID-19 pandemic has morphed into an economic crisis bringing with it swift depression-like declines in output and employment. **Although the economy apparently has bottomed it will take time before output and employment levels are restored to the levels achieved in the fourth quarter of 2019.** Both fiscal and monetary policy reacted with great alacrity that thus far has prevented long term decline. However the huge debt buildup in both the public and private sectors will work to dampen output in the future. To be sure inflation will remain muted over the near term, but the combination of cost increases coming from prioritizing resilience over efficiency, record increases in the Fed's balance sheet and high fiscal deficit regime as far as the eye can see will leave the way open for inflation later in the decade.

The pandemic has telescoped trends that were already in place in the economy towards increased digitization of business functions and online commerce. It has increases already rising tensions with China and brought the E.U. closer together. A major response to the pandemic has been the success of work from home which looks like it will lead to long term changes in work and urban environments as workers avail themselves of more work/life options. **In a nutshell economic and housing activity will shift from large cities to mid-sized cities and away from the urban centers to the suburbs.**

5. The data are approximations taken from the 2019 Fourth Quarter Supplemental Report of Simon Property Group, the largest mall owner in the U.S.

6. Walsh, James D., "The Coming disruption," *New York Magazine*, May 2020 and Jakob, Spencer, "College Inc. Faces a Price Reckoning," *The Wall Street Journal*, June 6-7, 2020, p. B12

7. See Carey, Kevin, "Many Private Colleges Face Financial Troubles," *New York Times*, May 28, 2020, p.B5