



MORNING BRIEFING

April 28, 2020

P/Es in The Twilight Zone

Check out the accompanying [chart collection](#).

(1) Epidemiologists are like economists, but not in a good way. (2) Models versus common sense and empirical observation. (3) My pandemic prescriptions: required mask-wearing, temperature-taking, and COVID-specific field hospitals. (4) Public health: the seven steps forward followed by Taiwan. (5) Opening up is hard to do, but needs to be done without a second wave. (6) Back to The Twilight Zone: As earnings estimates dive, P/Es soar. (7) Misery Index Model isn't working, so far. (8) Buybacks falsely accused again.

Virology 101: Taiwan Shows the Way Forward. I am neither a virologist nor an epidemiologist. However, I have a lot in common with the latter group. As an economist, I was trained to use statistical models based on simplifying assumptions to predict the outlook for the economy. Epidemiologists also tend to rely heavily on statistical models based on simplifying assumptions, but use theirs to predict the likely path of viral pandemics. These models have come under increasing scrutiny and critical reviews because they are simply too simple, have little relevance to reality, and are just flat wrong in their predictions, just like economic models.

An April 16 [article](#) on this subject by two data science experts explains: "Epidemiological models are no different [than] any other models, and no matter how precisely the model can describe a situation, the accuracy of the predictions it makes depends critically on the quality of the data put into the model. The old computer science adage of 'garbage in, garbage out' applies. If the data's wrong, the results will be wrong." Economists have their hard-to-measure variables such as the natural rate of unemployment. Epidemiologists have R_0 , which is the expected or average number of individuals an infected person subsequently infects. Because R_0 is determined by averaging a large number of cases, its size can vary widely, as it depends not only on how contagious the pathogen is but also on how much contact with others the infected have.

I've always been a fan of common sense based on experience, historical data, and current empirical observations. So you might recall that in the March 25 [Morning Briefing](#), I advocated

for the government to require everyone to wear masks in public, noting that many Asian countries ' governments do so.

At the time, the healthcare experts here in the US, including the surgeon general, were flatly advising against wearing masks. A couple of weeks later, they changed their minds and encouraged mask-wearing, though President Donald Trump set a bad example by refusing to follow their advice himself. State governors are now mandating the wearing of masks as they open up their economies.

Now, here is my latest recommendation: Take everybody's temperature all the time. Don't let anyone walk into office buildings, shopping malls, stores, schools, trains, buses, subways, airports, or any other public area without having their temperature taken first, using forehead thermometers. The virus police should be authorized to collect the cell phone information of anyone who has a fever and report it to health authorities. On a strictly confidential basis, the authorities would send text messages explaining the required protocol for infected people to follow, with a significant monetary penalty if they do not comply.

That, along with widespread masking, is what Taiwan has done to contain the virus, with much success. I wrote about the role of masks in Taiwan's campaign against the virus in the March 31 [Morning Briefing](#): "Wearing masks to eliminate the virus pandemic seems to be working in Taiwan, which has a population of 23.8 million. Taiwan is right next to mainland China, and lots of businesspeople and tourists travel between the two countries. Indeed, hundreds of thousands of Taiwanese work and invest in China." Yet as of Sunday, Taiwan has just 429 cases and 6 deaths! And that's without any vaccines or cures.

A March 10 CNBC [article](#) titled " What Taiwan can teach the world on fighting the coronavirus," explained that Taiwan put lessons it had learned during the 2003 SARS outbreak to good use, and this time its government and people were prepared. Here are some key actions they took as soon as they recognized that the virus that originated in the Chinese city of Wuhan was a threat:

(1) *Closing borders*. On January 26, five days after it confirmed its first case of COVID-19, Taiwan became the first country to ban arrivals from Wuhan. Not long after, it did the same for flights from all but a handful of Chinese cities, allowing only Taiwanese people to fly in. After securing its borders, the government of Taiwan has used technology to fight the virus in multiple ways.

(2) *Taking temperatures at the airports.* Temperature monitors (which were already at airports since the 2003 SARS outbreak) detect any passenger with a fever. Passengers also can scan a QR code to report their travel history and health symptoms directly to Taiwan's CDC.

(3) *Tracking infected people.* Those coming from badly affected areas are put under mandatory 14-day home quarantine, even if they are not sick, and are tracked via their mobile phone's location-sharing function. Absconding can lead to heavy fines. The authorities quickly determine people with whom the infected had been in contact, test them, and put them in home quarantine.

(4) *Rationing masks.* To ensure a steady supply of masks, manufacturers are banned from exporting them, a mask-rationing system ensures that they're not wasted, and a set price of just 16 cents each keeps masks accessible to all. Soldiers are used to staff new production lines in factories, significantly increasing production.

(5) *Educating the public.* Television and radio stations broadcast hourly public-service announcements on how the virus is spread, the importance of washing hands properly, and when to wear a mask.

(6) *Taking temperatures everywhere.* Practically every office building, school, and community sports center checks temperatures and prevents entry by anyone with a fever. Apartment buildings place hand sanitizer inside or outside elevators.

(7) *Providing free care.* Taiwan's health insurance system covers all the costs of testing and hospitalization. People who are forced to be isolated get free food, lodging, and medical care.

By the way, while I am masquerading as Dr. Ed, MD, another recommendation—in addition to everyone wearing masks and taking everyone's temperatures—is that field hospitals should be set up in convention centers to treat all patients infected during a viral pandemic. Hospitals should go about their normal business of providing healthcare for everyone else. And, don't forget to wash your hands.

Now that state governors are starting to slowly open up their economies, the outlooks for the economy and financial markets will depend greatly on doing so without triggering a second wave of infection.

Strategy I: P/Es Decoupling from Reality? The Congressional Budget Office (CBO) is projecting that real GDP will fall 40% (saar) during Q2 and that the unemployment rate will average 14%. Over the five weeks ending with the April 18 week, initial unemployment claims totaled a whopping 26.5 million.

S&P 500/400/600 forward earnings are in freefalls along with their forward profit margins ([Fig. 1](#) and [Fig. 2](#)). Industry analysts have been chopping their 2020 quarterly earnings estimates in recent weeks resulting in the following y/y growth rates for the April 23 week: Q1 (-16.0%), Q2 (-32.8), Q3 (-17.7), and Q4 (-8.2) ([Fig. 3](#)).

For the S&P 500, forward earnings fell to \$146.40 per share during the April 23 week. For 2020 and 2021, industry analysts have cut their estimates to \$134.92 and \$170.04 ([Fig. 4](#)). (Joe and I are still forecasting \$120 and \$150.) The index's consensus expected 2020 profit margin has plunged from 11.9% at the start of this year to 10.1% during the April 16 week ([Fig. 5](#)).

Yet the forward P/Es of the S&P 500/400/600 have rebounded smartly from their recent March 23 lows just as their forward earnings have gone into death dives ([Fig. 6](#)). Here is their forward-P/E derby as of Friday, April 24 compared to Monday, March 23: S&P 500 (19.4, 12.9), S&P 400 (16.5, 10.3), and S&P 600 (17.8, 11.0) ([Fig. 7](#)).

Why are valuations rising when earnings are tanking? Consider the following:

(1) *Recalling 2007-09.* . During the Great Financial Crisis, these three forward P/Es bottomed at 8.9, 8.2, and 9.7 on November 20, 2008. However, by the end of 2009, they had rebounded to near their levels on October 9, 2007, which was the peak of the previous bull market. Here is their forward-P/E derby at the end of 2009 versus at the peak of the previous bull market: S&P 500 (14.4, 15.1), S&P 400 (16.2, 17.1), and S&P 600 (17.5, 17.7).

(2) *Shock-and-awe MMT response.* Is it possible that the stock market has just replayed the previous experience in a matter of weeks rather than months? Yes, it's possible. Anything is possible in The Twilight Zone, as we explained in yesterday's [Morning Briefing](#) titled "The Twilight Zone: Where Is Everybody?"

QE4ever, which was announced on March 23, was followed by the CARES Act on March 27. The result was a shock-and-awe combination of fiscal and monetary stimulus that proponents of Modern Monetary Theory (MMT) had only dreamt about until then. While the CBO is projecting a horrible economic outlook for Q2, the agency is also estimating that all the fiscal stimulus programs announced in recent weeks will result in a fiscal 2020 federal budget deficit of \$3.7 trillion, up from \$984 billion during fiscal 2019. That's a lot of stimulus.

About \$450 billion of the \$2.2 trillion CARES Act will be provided to the Fed to lend out on a 10-for-1 leveraged basis, i.e., \$4 trillion in loans to households and businesses. Meanwhile, the Fed hasn't wasted any time implementing QE4ever, as evidenced by the \$2.4 trillion increase in the Fed's balance sheet from the end of February through the April 22 week.

A trillion here, a trillion there adds up to unprecedented fiscal and monetary stimulus.

By the way, before COVID-19 hit the fan and spread around the world, the CBO estimated that the federal debt to nominal GDP ratio would gradually increase from 79% during fiscal 2019 to almost 100% by 2029 ([Fig. 8](#)). Now, the CBO is projecting that we'll get there by the end of the current fiscal year.

(3) *Bond yield near zero*. Stocks are certainly cheap compared to the 10-year US Treasury bond yield according to the Fed's Stock Valuation Model ([Fig. 9](#)). That's been true for a while, but never to the current extent—with the S&P 500 forward earnings yield at 5.16% during the April 24 week, while the bond yield is down to 0.61%. That implies that stocks are undervalued relative to bonds by a record 88% ([Fig. 10](#)).

Of course, an alternative interpretation of the model is that bonds are grossly overvalued relative to stocks. However, that's because bond yields are no longer managed by the Bond Vigilantes but rather by the major central banks. In any event, the P/E of the bond market is currently around 150 (in The Twilight Zone, for sure), well above and beyond the current multiples of the S&P 500/400/600 ([Fig. 11](#)).

(4) *Misery Index has lots of company*. It may be time to bury the Misery Index, which is the sum of the unemployment rate and the inflation rate, using the y/y percentage change in the CPI. This index has historically been inversely correlated with the S&P 500 forward P/E ([Fig. 12](#)). This history hasn't repeated itself so far during the viral pandemic, given the rebound in

the P/E since March 23 at a time when we all know that the unemployment rate is probably heading toward 20% in coming months.

Strategy II: Bye-Bye, Buybacks. The bears have had a great year so far if they shorted the S&P 500 on February 19 and covered their short on March 23. They would be up 33.9% on that trade. They would be up only 15.0% if they held on through yesterday's close. Of course, most bears have been bearish for a while. Those who shorted the market a year ago would be up just 2.1% if they hadn't been forced to cover by the meltup through February 19.

Those who remain bearish are taking comfort in the notion that the current and upcoming earnings seasons are going to be horrible, which will reverse the rebound in valuation multiples, causing the market to at least revisit the March 23 lows, in their opinion. Even more bearish would be a second wave of the pandemic. The bears also claim that two important sources of funds for the stock market are about to dry up, namely buybacks and dividends.

Sure enough, there is a very good correlation between the S&P 500 and the sum of S&P 500 buybacks and dividends ([Fig. 13](#)). However, correlation is not the same as causality, which can run both ways. Furthermore, correlation can simply be the result of both variables being highly correlated with the performance of the economy. When the economy is growing, stock prices tend to go up along with earnings, which provide cash flow for dividends and buybacks. During recessions, they all go down along with the economy.

In our May 2019 *Topical Study* titled "[Stock Buybacks: The True Story](#)," Joe and I empirically supported our main thesis: "The most common reason that S&P 500 companies buy back their shares is to offset the dilution in the number of shares outstanding that results when employee compensation takes the form of stock options and stock grants that vest over time, not just for top executives but for many employees. In effect, the ultimate source of funds for most stock buybacks is the employee compensation expense item on corporate income statements, not bond issuance as the bears contend."

During recessions and bear markets, companies reduce their compensation for bonuses including those in the form of stock options and stock grants.

CALENDARS

US: Tues: Consumer Confidence 87.2, Richmond Fed Manufacturing Index -38, Advance

Trade Balance -\$54.3b, S&P CoreLogic 20-City Composite Home Price Index 0.4%/m/m/3.2%/y/y. **Wed:** GDP -4.0%, GDP & Core PCE Price Deflators 1.2%/1.6%, Pending Home Sales -10.0%, EIA Crude Oil Inventories, FOMC Rate Decision 0.13% (0.00%-0.25%). (DailyFX estimates)

Global: **Tues:** Australia CPI 0.2%/m/m/2.0%/y/y, ECB Published Quarterly Bank Lending Survey. **Wed:** Eurozone Economic Sentiment 74.4, Germany CPI 0.0%/m/m/0.5%/y/y, Japan Retail Sales -4.7% y/y, Japan Industrial Production -5.2% y/y, China M-PMI 51.0. (DailyFX estimates)

STRATEGY INDICATORS

S&P 500/400/600 Forward Earnings ([link](#)): Forward earnings tumbled for all three indexes yet again last week, but the rates of decline decelerated slightly for LargeCap and SmallCap for a second week. LargeCap's forward earnings dropped 3.1% to its lowest level since December 2017; MidCap's fell 4.4% to its lowest level since April 2017; and SmallCap's tumbled 5.6% to the lowest point since July 2016. These indexes had begun a forward-earnings uptrend during March 2019 but stumbled from July to November before rising until mid-February. LargeCap's is now 18.2% below its record high at the end of January; that's the most since April 2010. MidCap's and SmallCap's are 24.6% and 34.7% below their October 2018 highs; that's the most since November 2009 and September 2009, respectively. The yearly change in forward earnings soared to cyclical highs during 2018 due to the boost from the Tax Cuts and Jobs Act (TCJA) but began to tumble in October 2018 as y/y comparisons became more difficult. In the latest week, the rate of change in LargeCap's forward earnings dropped to -15.8% y/y from -12.9% the week before. That's the lowest since October 2009 and down from 23.2% in September 2018, which was the highest since January 2011. MidCap's fell w/w to -23.6% y/y from -19.8%. That was the lowest since October 2009 and compares to a TCJA-boosted 24.1% in September 2018 (the highest since April 2011). SmallCap's dropped w/w to -29.9% y/y from -25.6%; that's also the lowest since October 2009 and compares to the TCJA-boosted eight-year high of 35.3% in October 2018. Analysts' y/y earnings growth forecasts for 2020 are down substantially in the past seven weeks, and further declines are still ahead. Here are the latest consensus earnings growth rates for 2020 and 2021: LargeCap (-17.2%, 26.0%), MidCap (-20.4, 27.7), and SmallCap (-31.0, 37.7).

S&P 500/400/600 Valuation ([link](#)): Valuations moved higher last week, but the gains were primarily due to lower forward earnings. LargeCap's forward P/E rose 0.4pts w/w to 19.4 from

19.0. That's the highest level since May 2002 and is up from 13.3 in mid-March, which was its lowest since March 2013. MidCap's 16.5 and SmallCap's 17.8 were up 0.6pts and 0.7pts w/w. That compares to MidCap's 10.7 and SmallCap's 11.1 in mid-March, which were their lowest readings since March 2009. LargeCap's forward P/E based on normalized earnings had been at 18.9 during mid-February, which was the highest level since June 2002. Of course, that high was still well below the tech-bubble record high of 25.7 in July 1999. Last week's level compares to the post-Lehman-meltdown P/E of 9.3 in October 2008. MidCap's P/E is down from a 22-month high of 17.4 in mid-December and the record high of 20.6 in January 2002. However, MidCap's P/E has been at or below LargeCap's P/E for most of the time since August 2017—the first time that alignment has prevailed since 2009. SmallCap's P/E is down from mid-December's 16-month high of 18.1 and a 15-year high of 20.5 in December 2016, when Energy's earnings were depressed. However, SmallCap's P/E is still below LargeCap's. It has been mostly below since last May—the first time that has happened since 2003. During mid-March, SmallCap's P/E was briefly below MidCap's for the first time since July 2008.

S&P 500 Sectors Quarterly Earnings Outlook ([link](#)): The March quarterly earnings books have been closed for four weeks now, but analysts continue to slash their estimates amid a “withdrawn guidance” environment in what's shaping up to be the worst season in many years. The Q1 EPS forecast dropped 49 cents w/w to \$32.89. That represents a decline of 16.0% y/y on a frozen actual basis and -14.8% y/y on a pro forma basis. That compares to a 3.1% gain in Q4-2019, a 0.3% decline in Q3-2019, and y/y gains of 3.2% in Q2-2019, 1.6% in Q1-2019, 16.9% in Q4-2018, and 28.4% in Q3-2018 (which marked the peak of the current earnings cycle). Besides the small y/y decline in Q3-2019, the last time earnings fell markedly y/y was during the four quarters through Q2-2016. Six of the 11 sectors are still expected to record positive y/y earnings growth in Q1, but none are forecasted to rise at a double-digit percentage rate. That compares to eight positive during Q4, when two rose at a double-digit percentage rate. Six sectors are expected to beat the S&P 500's pro-forma 13.5% decline in Q1. That compares to six in Q4 and seven in Q3, and is still up sharply from just three beating the S&P 500 during Q2-2019. Looking ahead to Q2, all sectors except Utilities are expected to post worse growth on a q/q basis during Q2. Here are the latest Q2-2020 earnings growth rates versus their blended Q1-2020 growth rates: Utilities (2.3% in Q2-2020 versus 1.3% in Q1-2020), Information Technology (-4.7, 2.4), Real Estate (-6.7, 0.5), Consumer Staples (-8.1, 4.0), Health Care (-11.6, 2.7), Materials (-24.8, -16.2), Financials (-40.1, -37.6), Industrials (-72.9, -33.6), Consumer Discretionary (-75.0, -41.5), and Energy (-148.7, -68.0).

S&P 500 Q1 Earnings Season Monitor ([link](#)): With nearly 25% of S&P 500 companies

finished reporting revenues and earnings for Q1-2020, revenues are beating the consensus forecast by 0.5%, but earnings have missed by an unusually high 3.4% primarily due to a boost in credit and loan loss reserves for the banks. At the same point during the Q4 season, the revenue surprise was 0.7% and the earnings beat was sharply higher at 4.1%. For the 123 companies that have reported through mid-day Monday, aggregate y/y revenue growth and the percentage of companies reporting a positive revenue surprise actually improved relative to the same point during Q4. However, all of the earnings measures were markedly weaker. The Q1 reporters so far have a y/y revenue gain of 3.0%, but earnings are down 19.0% in what's sure to be the worst quarter since Q1-2009 during the financial crisis. For the time being, fewer companies are reporting a positive revenue surprise (59%) than a positive earnings surprise (65%). However, more companies are reporting positive y/y revenue growth in Q1 (62%) than are reporting positive y/y earnings growth (49%). That's the lowest rate for earnings since Q3-2009. These figures will change markedly as more Q1-2020 results are reported in the coming weeks, but the earnings results are expected to remain dismal. Now more than ever, what companies say about the state of their business and their plans to ride out the COVID-19 crisis will be investors' main focus.

US ECONOMIC INDICATORS

Regional M-PMIs ([link](#)): Four Fed districts have now reported on manufacturing activity for April—New York, Philadelphia, Kansas City, and Dallas—and all four showed growth in a freefall. The composite index sank to a record low -59.6 from -30.3 in March and 14.0 in February—which was the best rate since November 2018. New York's measure tumbled 56.2 points this month—and 91.1 points the past two months—to a series low of -78.2! (By way of comparison, the lowest level this indicator had reached prior to this month was -34.3 during the Great Recession.) Manufacturing activity in the Kansas City (to -30.0 from -17.0) and Dallas (-73.7 from -70.0) regions also contracted at record rates, while growth in the Philadelphia (to -56.6 from -12.7) region fell at its fastest pace since the Great Recession. New orders also tanked this month, plunging to a record-low -67.1 from -26.0 in March and a 19-month high of 18.0 in February. Billings saw record declines in all four regions: New York (-66.3 from -9.3), Philadelphia (-70.9 from -15.5), Kansas City (-64.0 from -38.0), and Dallas (-67.0 from -41.3). The employment (-39.3 from -13.1) measure reveals factories are slashing jobs, with manufacturers in both the New York (-55.3 from -1.5) and Philadelphia (-46.7 from 4.1) areas cutting jobs at a record pace. Meanwhile, factories in the Kansas City (-34.0 from -32.0) region reduced payrolls at their fastest rate since March 2009, while factories in the Dallas (-21.2 from

-23.0) area cut jobs at roughly the same pace as in March—which was the sharpest since July 2009.

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