June 2020

From the front page of the online version of Wednesday's WSJ:

After Crisis Low, Stocks Rebound In Quarter

BY MICHAEL WURSTHORN

After a quarter in which the coronavirus shutdown sent markets plummeting, U.S. stocks recovered with their best quarter in percentage terms in more than 20 years.

The rebound came on the heels of massive federal stimulus and a tentative national recovery.

Just three months ago, investors were lamenting the end of the bull market—and the longest economic expansion on record—after major U.S. stock indexes lost about 35% of their value in less than six weeks. The subsequent rebound has been nearly as brisk.

Partly due to a stimulus package from the Federal Reserve and Congress and a surge in trading among individual investors, the rally has lifted everything from beaten-down energy stocks to apparel retailers to big technology firms.

“Massive stimulus by the Fed and on the fiscal side has propelled the stock market’s recovery at a speed unlike what we’ve ever seen,” said Liz Ann Sonders, a chief investment strategist at Charles Schwab & Co. “But there’s a perceived disconnect between what the market has done and the economic recovery. ...”

The S& P 500 finished the second quarter up 515.70 points, or 20%, to 3100.29, its biggest percentage gain since the last three months of 1998. The Dow Jones Industrial Average added 3,895.72 points, or 18%, to 25812.88, its best quarter since 1987. The rally has cut the indexes’ losses for the year to 4% and 9.6%, respectively.

The Nasdaq Composite, which is heavily weighted toward big tech stocks, including **Apple** and **Microsoft**, has fared even better, up 31% in the past three months and 12% for this year. ...

The market’s rally has slowed lately as a resurgence in coronavirus cases in some parts of the U.S. and civil unrest sparked by the killing of George Floyd, a Black man in police custody, have worsened the U.S. investment environment ....

After logging its biggest two-month percentage gain since 2009 in April and May, the S& P 500 rose 1.8% in June.

The economic picture also remains bleak. Nearly 20 million jobs have been shed since February, and retail sales are far below prepandemic levels. Manufacturing activity in the U.S. has also contracted, albeit at a more gradual rate. ...

A second wave of coronavirus cases was cited as the most prominent risk facing stocks for a fourth consecutive month, according to a survey of 190 fund managers by Bank of America in June. Permanently high unemployment and a Democratic sweep of the election followed. ...

The stock market's performance in the months ahead of the election could have a big impact on the outcome of the race. Data going back to 1928 show the incumbent party has won the contest 87% of the time if the S& P 500 is positive over the three months ahead of the election and lost it when it is negative, said Courtney Rosenberger, director of policy research at Strategas Securities. ...

More than 180 companies in the S& P 500 have withdrawn their forecasts for 2020, according to FactSet, making it difficult for investors to value stocks.

From BCA Research's Global Investment Strategy:

June 30, 2020

Third Quarter 2020 Strategy Outlook: Navigating The Second Wave

I. Macro And Markets

Financial markets' response to the pandemic has followed three distinct phases:

• ***Phase One: Hope and Denial.*** While equities did buckle on the news that a previously unknown coronavirus had emerged in China, they quickly recovered in the hope that the epidemic would be contained. Equities remained resilient even as the virus resurfaced in South Korea and Iran ....

• ***Phase Two: The Wile E. Coyote Moment.*** The second phase began with the outbreak in Italy. Scenes of overflowing emergency rooms prompted governments to order all non-essential workers to stay home. The resulting decline in commerce caused equities to plummet. Credit spreads widened, while funding markets began to seize up.

• ***Phase Three: Recovery.*** With memories of the 2008 global financial crisis still fresh in their minds, policymakers sprung into action. The combination of massive monetary and fiscal easing helped stabilize financial markets. Risk assets received a further boost as the number of new cases in Italy, Spain, New York City and other hotspots began to decline rapidly in April (**Chart 2**). The hope that lockdown measures would be relaxed continued to power stocks in May and early June.

Fast forward to the present and things do not seem as straightforward. Despite today's rally, global equities are still down 4.7% from their June 8th high. The key immediate question for investors is whether the recent bout of volatility marks the end of Phase Three or just a temporary pause in a new cyclical bull market for stocks.

On balance, we lean towards the latter scenario. As we discuss in greater detail below, while we do think that the next few months will be more treacherous for investors due to a resurgence in the number of Covid cases in some countries, as well as uncertainty over how the looming US fiscal cliff will be resolved, we expect global equities to be higher 12 months from now.

Stocks And The Economy

Pundits such as Paul Krugman often like to recite the mantra that "the stock market is not the economy." While there is some truth to that, equities still tend to track the ups and downs of the business cycle. This can be observed simply by looking at the strong correlation between the US ISM manufacturing index and the S&P 500.

As happened in 2009 and during prior downturns, stocks bottomed this year at roughly the same time as leading economic indicators such as initial unemployment insurance claims peaked.

Will the economic data continue to improve, allowing equities to move higher? In the past, recoveries following exogenous shocks have tended to be more rapid than those following recessions that arose from endogenous problems. The pandemic would seem to qualify as an exogenous shock.

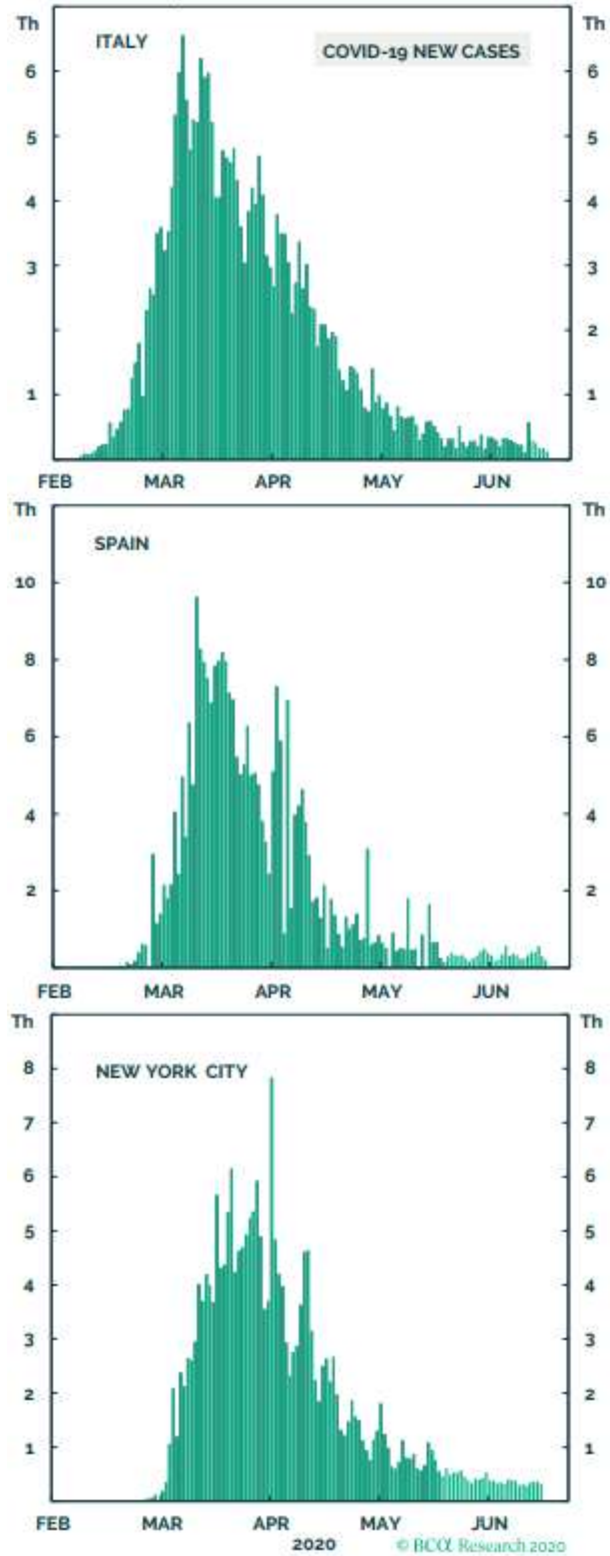
Temporarily furloughed workers have accounted for the vast majority of the increase in US unemployment this year. As lockdown measures are relaxed, the hope is that most of these workers will return to their jobs.

Bumps In The Road

Nevertheless, the recovery will be a bumpy one. In the near term, the main barrier will be the virus itself. Globally, the number of new cases has been trending higher since early May. The number of deaths has also reaccelerated (Chart 6).

In the US, the epicenter of the pandemic has shifted from the Northeastern tri-state corridor to the southern states. Florida, Texas, and Arizona have been particularly hard hit. Contrary to President Trump's claims, more testing does not explain the rise in case counts. As **Chart 7** shows, the fraction of tests coming back positive has actually been trending higher in all three states.

CHART 2
Sharp Decline Of New COVID-19 Cases In April Allowed Equities To Recover

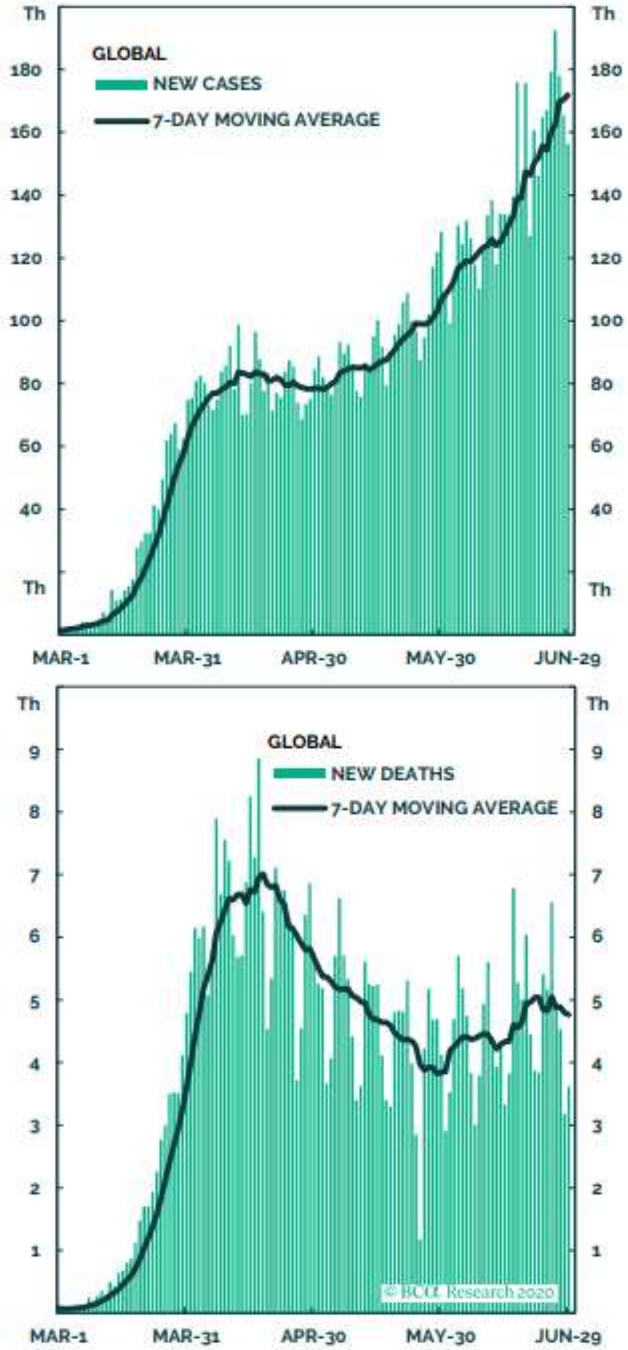


SOURCE: THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHNS HOPKINS UNIVERSITY.

It did not have to be this way. The evidence suggests that the widespread use of masks could have kept the virus at bay while still allowing most economic activities to resume. Unfortunately, the question of whether to wear a mask, like almost everything else in the US, has become another front in the culture war.

CHART 6

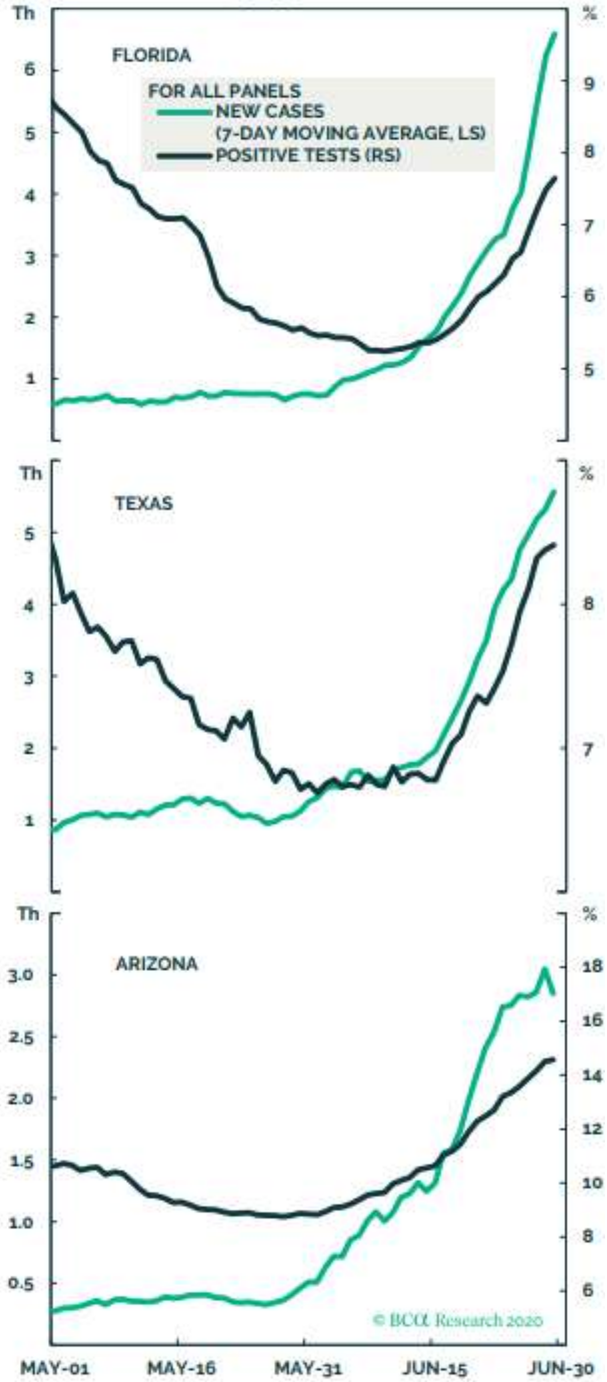
Globally, The Number Of New Cases Has Been Trending Higher Since Early May, While The Number Of Deaths Has Moved Off Its Recent Lows



SOURCE: THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHN HOPKINS UNIVERSITY.

CHART 7

Fraction Of Tests Coming Back Positive Has Been Moving Higher In Certain States



SOURCE: THE COVID TRACKING PROJECT AND THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHN HOPKINS UNIVERSITY.

Mask wearing is much more common in China and the rest of east Asia, which is one key reason why the region has suffered far fewer casualties than elsewhere. Hence, a second wave is likely to be much more muted there. Western Europe, Australia, and New Zealand should also remain largely unscathed going forward.

Luckily, treatment options have improved over the past few months, as medical professionals have learned more about the virus. Hospitals have also built up capacity to deal with an influx of patients. Another less well recognized development is that protocols have been put in place to protect residents in long-term care facilities. In Canada, more than 80% of COVID deaths have occurred in nursing homes.

All this suggests that while a second wave will weigh on global growth over the coming months, we are unlikely to see the sort of broad-based economic dislocations experienced in March.

A Structural Break

Even if a second wave does not turn out to be as disruptive as the first, it probably will be several years before spending in the sectors most affected by the virus returns to pre-pandemic levels.

Indeed, there is a chance that some sectors may not ever fully recover. The technology to work from home was in place before the pandemic began. Many workers chose not to do so because they did not want to be the odd ones out. The pandemic may have nudged society to a new equilibrium where catching a red-eye flight to attend a business meeting becomes more the exception than the rule, while working from home is seen as perfectly acceptable (and safer) than going to the office. If that happens, there will be, among other things, less business travel going forward, as well as less demand for office space.

Such a transformation could end up boosting productivity down the road by allowing companies to slash overhead costs and unnecessary expenses. However, it will impose considerable near-term dislocations, particularly for airlines, hotels, commercial real estate operators and developers, and associated lenders to these sectors.

The Role Of Policy

It would be unwise for policymakers to try to prevent the shift of capital and labor towards sectors of the economy where they can be more efficiently deployed. However, policy can and should smooth the transition.

Most of the suffering during recessions comes in the form of collateral damage. For example, more than 80% of the jobs lost during the Great Recession were outside the residential real estate sector. ...

This is where the role of monetary and fiscal policy takes center stage. Central banks moved quickly to ease monetary policy as soon as the pandemic began. Unfortunately, with rates already quite low in most countries, there was only so much that conventional monetary policy could achieve.

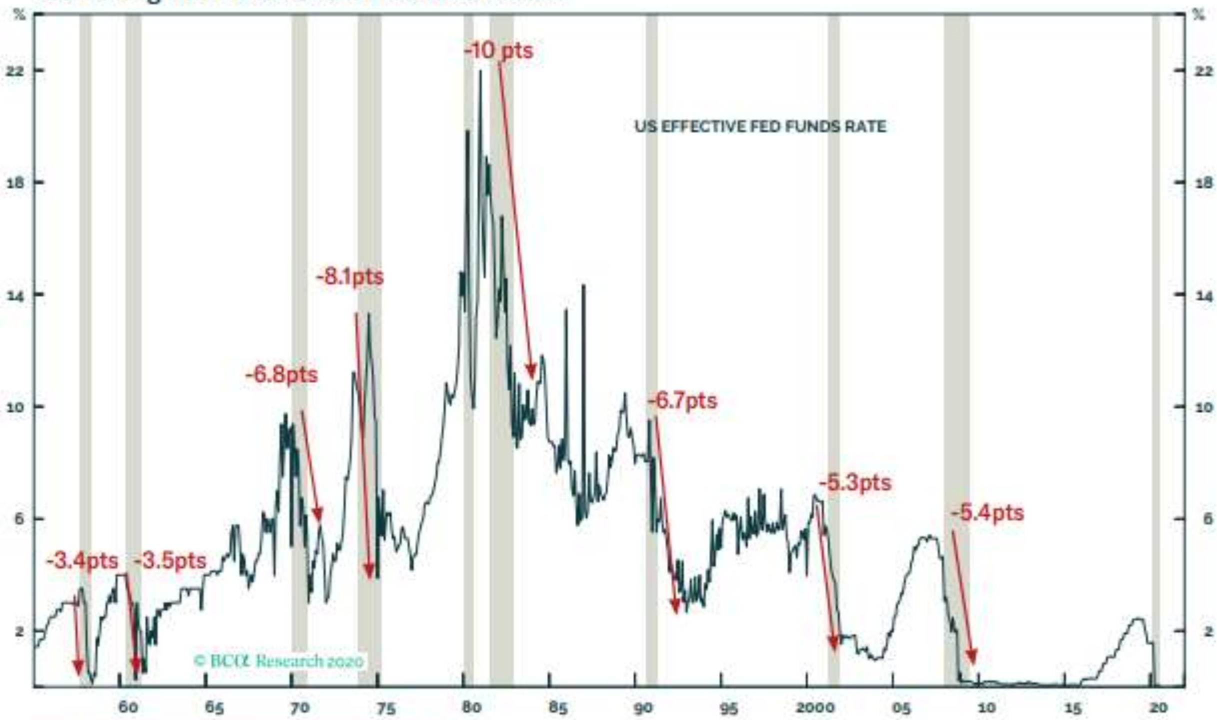
The Federal Reserve, which had more scope to cut rates than most, brought the fed funds rate down 150 bps to a range of 0%-to-0.25%. As helpful as this action was, it fell well short of the more than five percentage points in easing that the Fed has delivered, on average, during past recessions (Chart 10).

With conventional monetary policy constrained by the zero lower bound, central banks turned to unconventional tools, the most important of which were asset purchases, lending backstops, and forward guidance. These tools blurred the line between fiscal and monetary policy. To some extent, this was by design. By offering to buy government debt in unlimited quantities and at extremely low rates, central banks incentivized governments to run larger budget deficits.

Even if one excludes loan guarantees, governments have eased fiscal policy by an extraordinary degree this year (**Chart 11**). The G7 as a whole has delivered 11.7% of GDP in fiscal stimulus, compared to 4% of GDP in 2008-10. In China, we expect the credit impulse to reach the highest level since the Global Financial Crisis, and the budget deficit to hit the highest level on record.

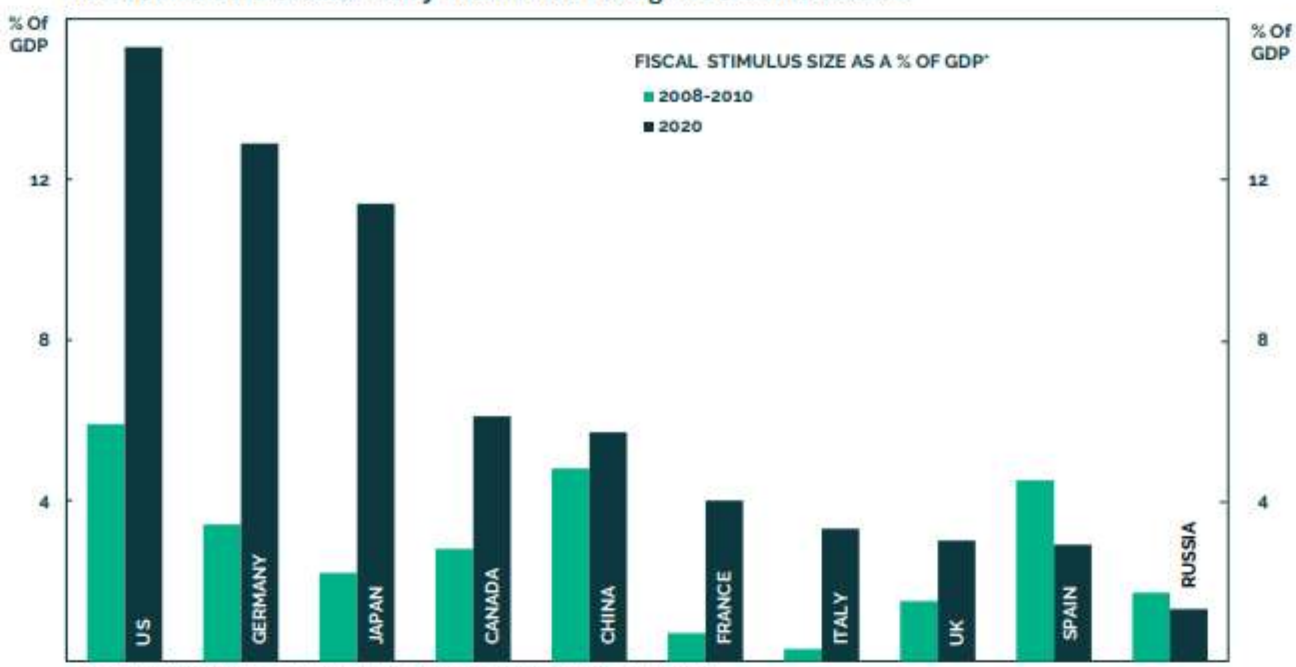
Fiscal Austerity? Don’t Bet On It

CHART 10
Fed Easing Has Fallen Short This Time Around



NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

CHART 11
Fiscal Stimulus Is Greater Today Than It Was During The Great Recession



NOTE: LOAN GUARANTEES ARE EXCLUDED IF THERE IS A SPECIFIC AMOUNT IN THE NEWS.
* SOURCE: VARIOUS NEWS AND GOVERNMENT AGENCIES, BROOKINGS, THE IMF, AND BCA CALCULATIONS.

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The recovery following the Great Recession was hampered by the decision of many governments, including the US, Germany, and Japan, to tighten fiscal policy prematurely, despite a lack of pressure from bond markets to do so. While a repeat of such an outcome cannot be excluded, we think it is quite unlikely.

Politically, stimulus remains very popular. Unlike during the housing bust, there has been little moral handwringing about bailing out households and firms that “don’t deserve it.” Thus, while the US faces a daunting fiscal cliff over the next two months – including 3% of GDP in expiring Paycheck Protection Program funding and over 1% of GDP in expanded unemployment benefits and direct payments to individuals – we expect Congress to ultimately take action to avert most of the cliff. (This has already happened with PPP.)

This will probably involve rolling over some existing programs and supplanting others with new measures such as increased aid to state and local governments. The same pattern is likely to be repeated globally.

II. Long-Term Focus: Inflation And The Fiscal Hangover

The combination of large budget deficits and falling output has caused the ratio of government debt-to-GDP to explode. The IMF now expects net government debt to reach 132% of GDP in advanced economies in 2021, up from an earlier estimate of 104% made last October. ...

The Inflation Solution

What if highly indebted governments refuse to tighten fiscal policy? At that point, they would either have to: 1) allow debt levels to spiral out of control; 2) default on the debt; or 3) lean on their central banks to keep rates low. The first two options are unlikely to be politically feasible, implying that the third one would be chosen.

By definition, the third option would entail keeping policy rates below their neutral level, or in other words, keeping monetary policy more stimulative than is necessary to maintain full employment and stable inflation. Eventually, this would result in rising inflation.

In theory, the increase in inflation can be temporary and limited. Rising consumer prices will lift nominal GDP, causing the ratio of debt-to-GDP to decline. Once the ratio shrinks by enough, central banks could raise interest rates to a suitably high level in order to bring inflation back down. Unfortunately, in practice, the whole process of driving inflation up in order to erode the real value of a government's bond obligations could be quite destabilizing. This would be especially the case if, as is likely, a period of high inflation leads to a significant repricing of inflation expectations.

Long-Term Inflation Risk Is Underpriced

Investors are not too worried that inflation will accelerate anytime soon. The CPI swap market expects inflation to remain subdued for decades to come.

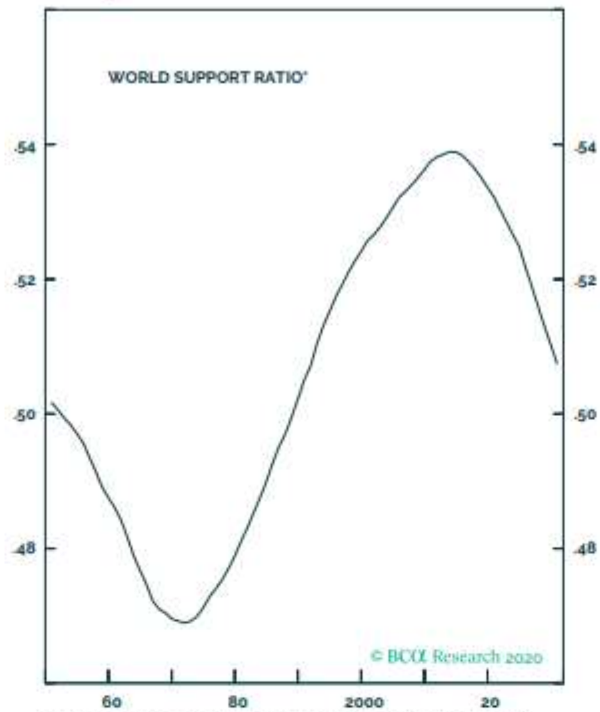
This could turn out to be an erroneous assumption. While central banks do not want inflation to get out of hand, they would be happy for it to increase from current levels. After all, they have been obsessing about the zero-lower bound constraint for the better part of two decades. If inflation is, say, 4% going into a downturn, central banks could cut nominal rates to zero, taking real rates to -4%. That would be quite stimulative. Such a deeply negative real rate would not be achievable if inflation were running at 1% going into a downturn.

As noted above, heavily indebted governments would also prefer higher inflation to higher interest rates. The former would erode the real value of debt, while the latter would require that tax dollars be diverted from social program to bondholders. ...

If, as seems likely, we are entering an era where political populism promotes big budget deficits, this makes it more likely that economies will, at some point, overheat. ...

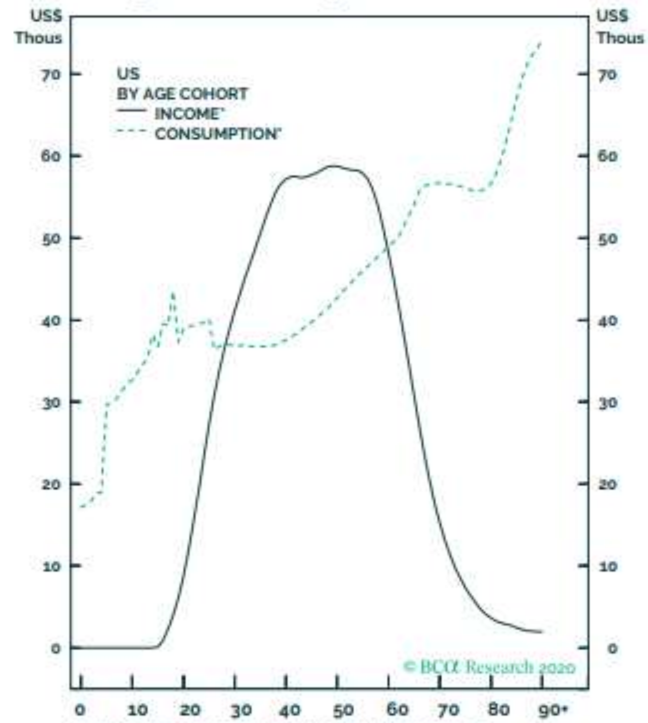
Starting in the mid-1970s, the ratio of workers-to-consumers – the so-called "support ratio" – began to steadily increase as more women entered the labor force and the number of dependent children per household declined

CHART 16
The Ratio Of Workers-To-Consumers Is Now Falling



* NUMBER OF WORKERS RELATIVE TO NUMBER OF CONSUMERS. NUMBER OF WORKERS INCORPORATES AGE-SPECIFIC VARIATION IN LABOR FORCE PARTICIPATION, UNEMPLOYMENT, HOURS WORKED, AND PRODUCTIVITY. NUMBER OF CONSUMERS INCORPORATES AGE-SPECIFIC VARIATION IN NEEDS OR WANTS BASED ON AGE-SPECIFIC CONSUMPTION DATA. THEY ARE ALSO REFERRED TO AS 'EFFECTIVE WORKERS' AND 'EFFECTIVE CONSUMERS'. SHOWN AS A GDP-WEIGHTED AGGREGATE OF 46 COUNTRIES.
SOURCE: NATIONAL TRANSFER ACCOUNTS.

CHART 17
As Populations Continue To Age, The Global Savings Glut Will Dissipate



* SOURCE: UNITED NATIONS, NATIONAL TRANSFER ACCOUNTS.

(**Chart 16**). An increase in the number of workers relative to consumers is equivalent to an increase in the amount of production relative to consumption. A rising support ratio is thus deflationary.

More recently, however, the global support ratio has begun to decline as baby boomers leave the labor force in droves. Consumption actually increases in old age once health care spending is included in the tally (**Chart 17**).

Meanwhile, globalization, a historically deflationary force, remains on the backfoot. The ratio of global trade-to-output has been flat for over a decade (**Chart 18**). Globalization took a beating from last year's trade war, and is taking another bruising from the pandemic, as more companies relocate production back home in order to gain greater control over their supply chains.

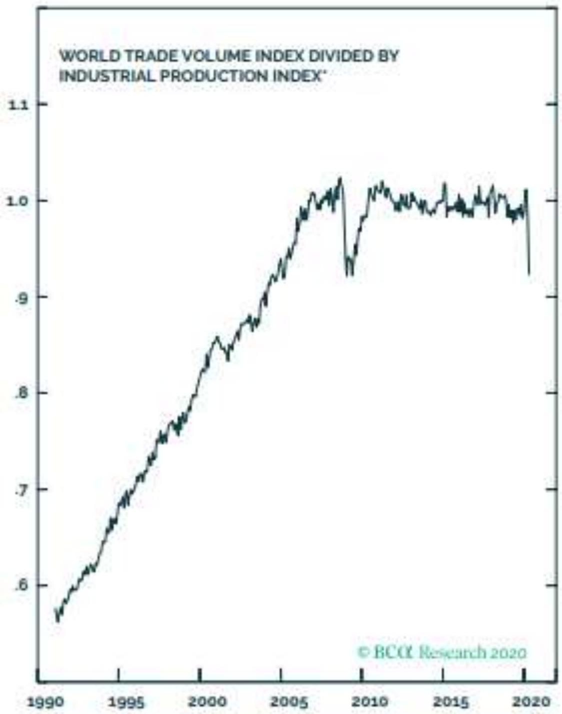
It is possible that newfangled technologies will allow companies to cut costs, thereby helping them to bring down prices. But, so far, this remains more a hope than reality. As **Chart 19** shows, productivity growth in the major economies remains abysmal. Weak supply growth would slow income gains, potentially leading to a depletion of excess savings. ...

III. Investment Implications

For Now, Buy The Dip

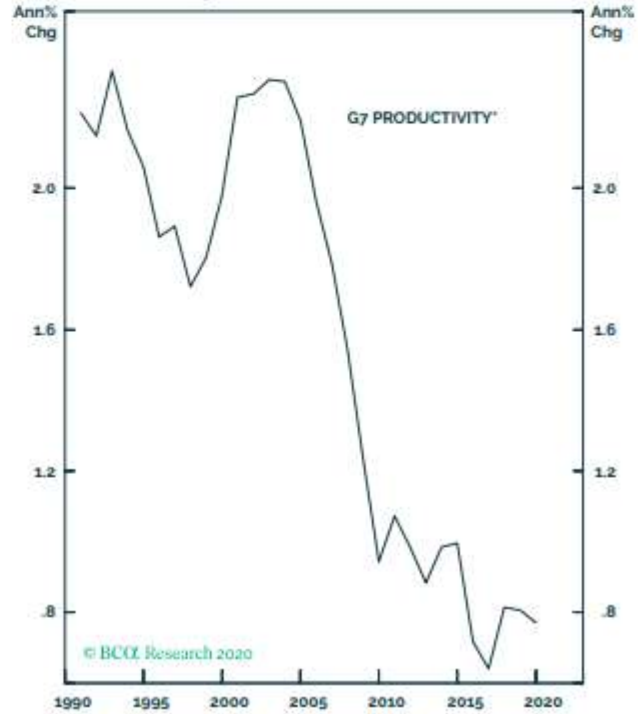
COVID-19 is a deadly disease, much deadlier than the common flu. But, at this point, it is a "known known." The next few weeks will bring news reports of overflowing emergency rooms in some US states, delayed

CHART 18
The Ratio Of Global Trade-To-Output Has Failed To Rise For Over A Decade



* SOURCE: CPB NETHERLANDS BUREAU FOR ECONOMIC POLICY ANALYSIS.

CHART 19
Productivity Growth In The Major Economies Remains Abysmal



* GDP-PER-HOUR WORKED. SHOWN AS A 5-YEAR MOVING AVERAGE.
SOURCE: OECD. INCLUDES FORECAST FOR 2019.

reopenings, and increased talk of renewed lockdowns. The knee-jerk reaction among investors will be to sell stocks. ...

As was the case during the first wave, the latest outbreak will be brought under control through a combination of increased voluntary social distancing and the cessation of activities that are known to significantly contribute to the spread of the disease (allowing bars and nightclubs to reopen was, as many predicted, a huge mistake).

Likewise, while the next few weeks could see plenty of posturing among politicians in Washington, the end result will be a deal to avert most of the fiscal cliff. Investors who run for the hills now will end up making the same mistake as those who jettisoned stocks every time the debt-ceiling issue came to the fore in the past.

Panicking about the outcome of November's US presidential election would also be unwise. Yes, if Joe Biden wins and the Democrats take control of the Senate, then Trump's corporate tax cuts would be in jeopardy. A full repeal would reduce S&P 500 EPS by about 12%. However, the betting markets are already expecting the Democrats to win the White House and Senate (**Chart 22**). Thus, some of this risk is presumably already priced in.

Moreover, it is possible that the Democrats only partially reverse the corporate tax cuts (Biden's position.), focusing more on closing some of the more egregious loopholes in the tax code. And even if corporate tax rates do rise, spending would likely rise even more, resulting in a net increase in fiscal stimulus. Lastly, a Biden presidency would result in less trade tension with China, which would be a welcome relief for equity investors.

Are Stocks Already Pricing In A Benign Scenario?

Bottom-up estimates foresee S&P 500 earnings returning to 2019 levels next year. Does this mean that Wall Street analysts are banking on a V-shaped recovery? Not quite. Outside of the health care and technology sectors, EPS is still expected to be down 9% next year relative to 2019.

Globally, earnings estimates are still fairly downbeat. This suggests that analysts are expecting more of a U-shaped recovery.

Of course, what matters to investors is not so much what analysts expect but what the market is pricing in. Given that the S&P 500 is down only 4% year-to-date, have investors gotten ahead of themselves? Again, it is not clear that they have.

The value of the stock market does not simply depend on expected earnings growth. It also depends on the discount rate one uses to calculate the present value of future earnings. In a world of exceptionally low interest rates, the contribution from earnings far out into the future to this present value calculation is almost as important as the path of earnings over the next year or two.

Provided that the pandemic does not permanently impair the supply-side of the economy, the impact on earnings should be transitory. In contrast, if long-term bond yields are any guide, the impact on the discount rate may be longer lasting. The 30-year US TIPS yield, a proxy for longterm real rate expectations, has fallen by 76 basis points since the start of the year, representing a significant decline in the risk-free component of the discount rate. If we put together analysts' expectations of a temporary decline in earnings with the observed decline in real bond yields, what we get is an increase in the fair value of the S&P 500 of about 15% since the start of the year.

CHART 22
Betting Markets Now Expect Joe Biden To Become President

Admittedly, the notion that there could be a temporary decline in corporate earnings but a permanent decline in bond yields sounds contradictory. However, it need not be. Imagine a situation where the pandemic does permanently reduce private demand, but that this is fully counteracted by looser monetary policy and increased fiscal stimulus. The result would be the same level of GDP but a lower interest rate. As odd as it sounds, this suggests that the pandemic might have increased the fair value of the stock market.

Lots Of Cash On The Sidelines

The combination of surging government transfers and subdued household spending has resulted in a jump in personal saving. Accumulated US personal savings totalled $1.25 trillion in the first five months of the year, up 123% from the same period last year.

Much of that money has made its way into savings deposits and money market funds (**Chart 26**). As a share of stock market capitalization, US cash holdings currently stand at 51%, up nearly 12 percentage points from the start of the year. Looking at it differently, if the ratio of cash holdings-to-stock market capitalization were to return to January 1st levels, stocks would have to rise by about 30%.

Retail Bros Versus The Suits

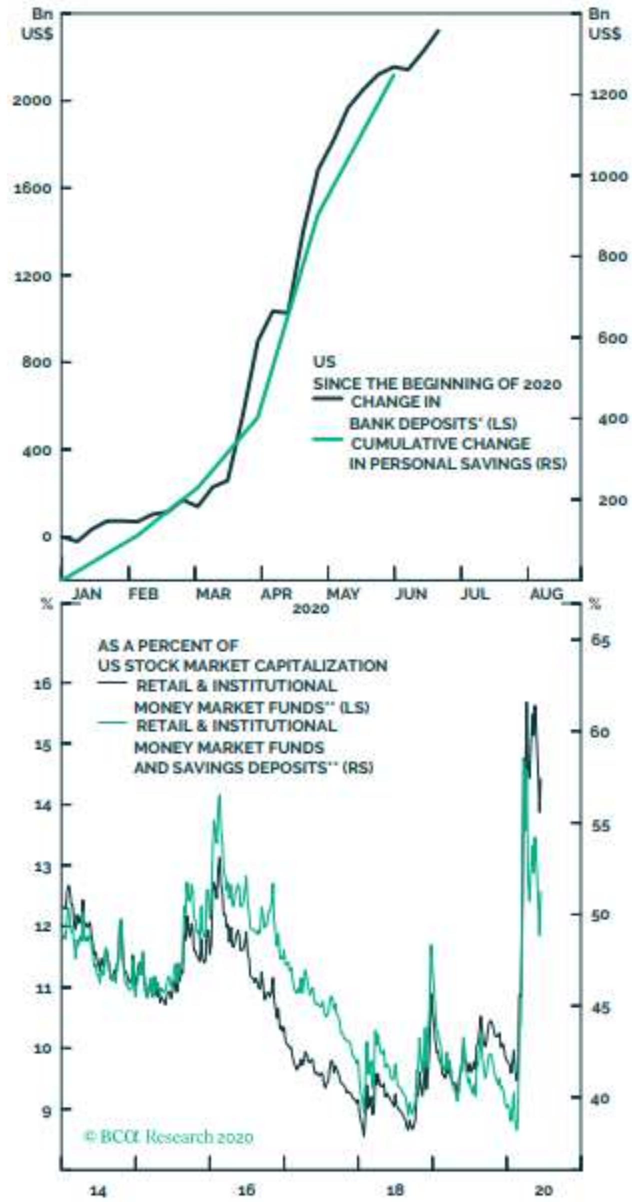
Thanks to a steady flow of income from Uncle Sam, plenty of spare time, zero brokerage commissions, and a lack of opportunities for sports betting, the popularity of day trading has surged. (see "No, It's Not a Good Idea" below.) It would be easy to dismiss the rise of the "retail bros" as another comical, and ultimately forgettable, chapter in financial history. That is what most have done. Not us.

The late 1990s stock market bubble was as much a consequence of the boom in day trading as the cause of it. That boom lasted for more than four years, taking the S&P 500 to one record high after another. The current boom has lasted less than four months. It may have much further to run.

Keep in mind that every time an institutional investor sells what they regard as overpriced shares to a retail trader, the institutional investor is left with excess cash that must be deployed elsewhere in the stock market. Buying begets buying.

Then there are the hedge funds. Brokerages like Robinhood make much of their money by selling order flow data to hedge funds, who then trade on this information. This activity probably lifts prices by enhancing liquidity and reinforcing the price momentum generated by retail trades.

CHART 26
Lots Of Savings Slushing Around



* COMMERCIAL BANKS. SOURCE: FEDERAL RESERVE.
** SOURCE: FEDERAL RESERVE.

One would also be remiss not to point out that the mockery levelled at retail traders has an aura of hypocrisy to it. The average mutual fund underperforms its benchmark, even before fees are included. As we discussed before, this is not because active managers cannot outperform the market. It is because most don't even bother to try.

In contrast to retail traders, a large fraction of institutional investors did not participate in the stock market recovery that began in late March. According to the latest BoA Merrill Lynch Survey, fund managers were still more than one sigma underweight stocks and nearly one sigma overweight cash in June. Along the same vein, speculators increased short positions in S&P 500 futures contracts soon after stocks rallied, paring them back only recently (**Chart 28**). As of last week, bears exceeded bulls by 25 percentage points in the AAII survey. When positioning is underweight equities and sentiment is bearish, as it is today, stocks are more likely to go up than down. ...

Start Of The Dollar Bear Market

CHART 28

Speculators Still Net Short S&P 500 Futures Contracts

* COMBINATION OF THE REGULAR AND E-MINI S&P 500 FUTURES CONTRACTS. SOURCE: CFTC.

A weaker dollar should also help global equities. After peaking in March, the broad trade-weighted US dollar has fallen by 4.4%.

Unlike last year, the dollar no longer benefits from higher US interest rates. Indeed, US real rates are below those of many partner countries due to the fact that US inflation expectations are generally higher than elsewhere.

The dollar is a countercyclical currency, meaning that it tends to move in the opposite direction of the global business cycle. If global growth recovers over the coming quarters, the dollar should weaken. The negative pressure on the dollar may be amplified by the fact that the second wave of the pandemic seems likely to affect the US more than most other large economies.

Commodities And Commodity Currencies To Benefit

Once fears of a second wave abate, the combination of stronger global growth, infrastructure-intense Chinese stimulus, and a weaker dollar will also boost commodity prices.

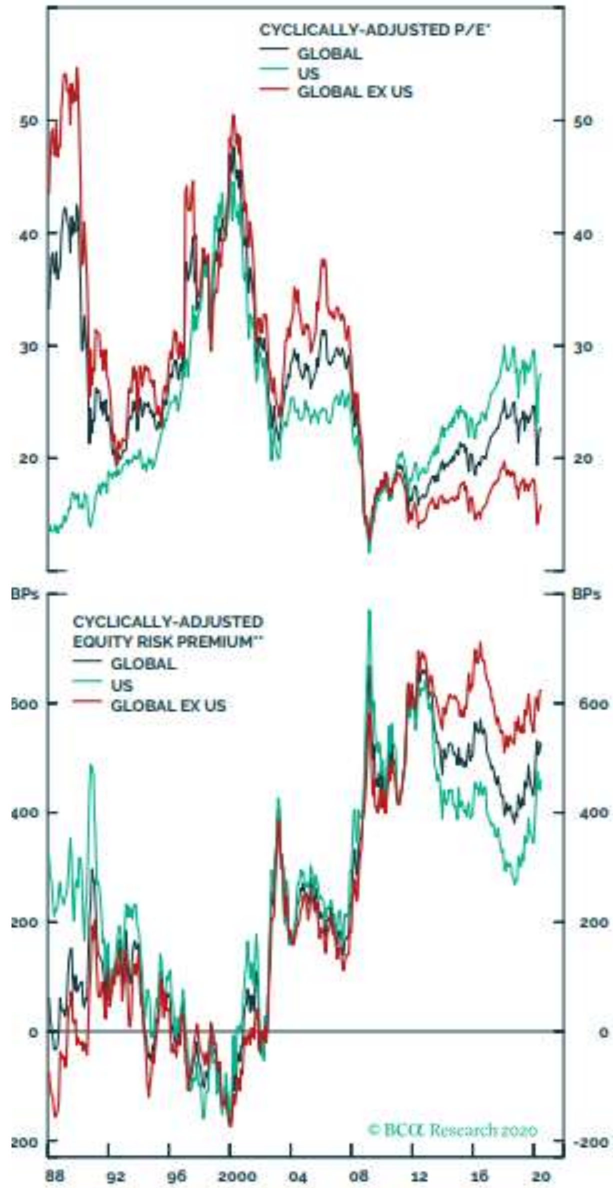
BCA's commodity strategists remain particularly fond of oil. They expect demand to pick up gradually this year, with supply continuing to be curtailed by shut-ins among US producers and production discipline from OPEC and Russia. Their latest projections foresee WTI and Brent prices rising more than 50% above current market expectations in 2021. ...

A Weaker Dollar Will Support Non-US Stocks

Stronger global growth, a weaker dollar, and higher commodity prices will disproportionately help the more cyclical sectors of the stock market. Since cyclical stocks tends to be overrepresented outside the US, non-US equities should outperform their US peers over the next 12 months. ...

More broadly, non-US stocks look quite attractive in both absolute terms and in relation to bonds compared to their US peers (**Chart 37**). They are also unloved. In the BofA Merrill Lynch survey mentioned above, equity managers are heavily overweight the US, despite the fact that consensus earnings estimates point to a slightly faster recovery in EPS outside the United States. Thus, earnings trends, valuations, and sentiment all currently favor non-US stocks.

CHART 37
Non-US Stocks Look Cheaper Than Their US Peers In Both Absolute Terms And In Relation To Bond Yields



* BASED ON A 10-YEAR MOVING AVERAGE OF REAL EARNINGS PER-SHARE.
** CYCLICALLY-ADJUSTED EARNINGS YIELD MINUS REAL 10-YEAR GOVERNMENT BOND YIELD. BOND YIELD DEFLATED USING HEADLINE CONSUMER PRICES AND 10-YEAR CPI SWAPS.
NOTE: GLOBAL IS THE MARKET CAPITALIZATION-WEIGHTED AVERAGE OF THE US, EURO AREA, JAPAN, UK, CANADA, AUSTRALIA, SWITZERLAND, SWEDEN, AND EMERGING MARKETS.

Bond Yields To Stay Subdued… For Now

It will probably take a couple of years for the unemployment rate in the G7 to fall to pre-pandemic levels. It will likely be another year or two before labor markets tighten to the point where inflation takes off. And, as discussed above, even if inflation does rise, central banks will be slow to raise rates both because they want higher inflation and because governments will pressure them to keep rates low in order to avoid having to redirect tax revenue from social programs to bondholders. All this suggests that short-term rates could remain depressed across much of the world until the middle of the decade.

Yield curves will steepen marginally over the next few years as global growth recovers and long-term bond yields rise in relation to short-term rates. In absolute terms, however, long-term yields will remain low.

An initial bout of higher inflation will not be enough to lift long-term yields to a significant degree given the ability of central banks to cap yields via the threat of unlimited bond purchases – something that Japan and Australia are already doing. Yields will only rise substantially when central banks start feeling uneasy about accelerating inflation. As noted above, that point is probably still 3-to-5 years away. But, when it does come, it will be very painful for bondholders and equity holders alike. ...

From Bespoke:

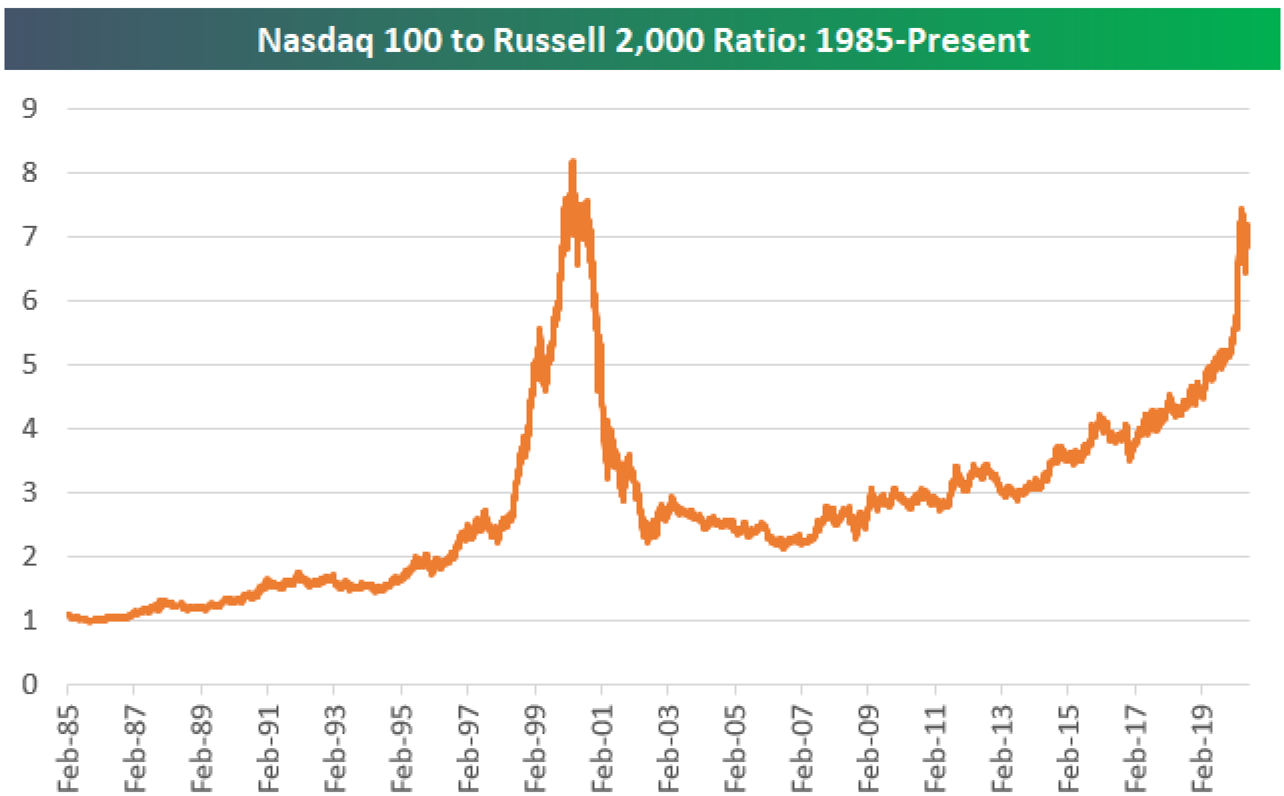
Nasdaq to Russell 2,000 Ratio

Tue, Jun 30, 2020

Last week we compared the recent performance of the Nasdaq to the small-cap Russell 2,000. Below is a look at the relative strength between the Nasdaq 100 and the Russell 2,000. The chart shows the ratio of the Nasdaq

100 to the Russell 2,000 since 1985. In the late 90s, the Nasdaq soared versus the Russell, with the ratio rising from 1:1 in the mid-80s up to 8+ at the peak of the Dot Com bubble. The ratio came crashing back down to the low 2s in the mid-2000s, but it has been on a steep upward trajectory for the last 12 years.

Over the first two months of 2020, with small-caps underperforming and the Nasdaq outperforming, the ratio spiked more than two points from ~5 up to 7.5 at its recent peak. We'd note, however, that since the Covid Crisis hit, we've seen the ratio trade sideways in what looks to be a peak for the time being. One day small-caps will have their day in the sun again, it's just a matter of how long it takes for that to happen.



From Verdad on June 15th:

No, It's Not a Good Idea

Robinhood traders buying bankrupt equities aren't onto something

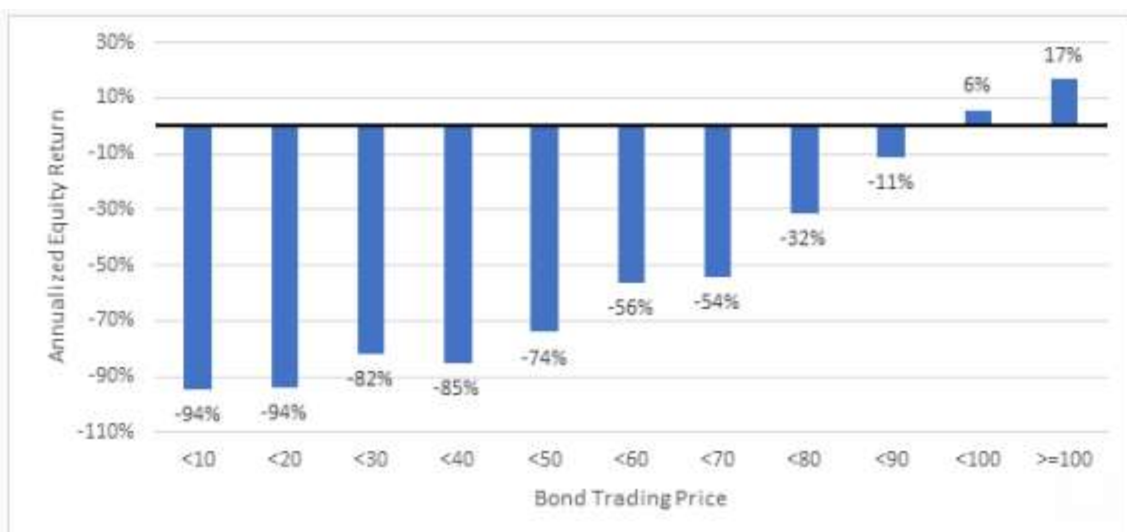
By Greg Obenshain

Stuck at home amidst the COVID quarantines, bored punters have taken to gambling on the equities of bankrupt or near-bankrupt companies, where small retail flows can dramatically move prices.

Chesapeake Energy is planning to file for bankruptcy. The first-lien debt trades at 55 cents on the dollar, with the second-lien and unsecured bonds trading at between 2 and 8 cents on the dollar. But on June 8th, retail traders drove the price of the stock from $15 to $73 before it crashed back down to $24 on news coverage of the potential bankruptcy. (CHK's filing for bankruptcy on Sunday made the front page of the WSJ on Monday.)

As specialists in leveraged equities, we are perhaps uniquely suited to comment on the merits of this strategy. We dug into our debt and equity databases and looked at the performance of stocks with bonds trading at distressed price levels. Below we show the cumulative annualized equity returns for strategies that simply pick equities based on the company’s bond trading price.

Figure 1: Equity Returns by Bond Trading Level

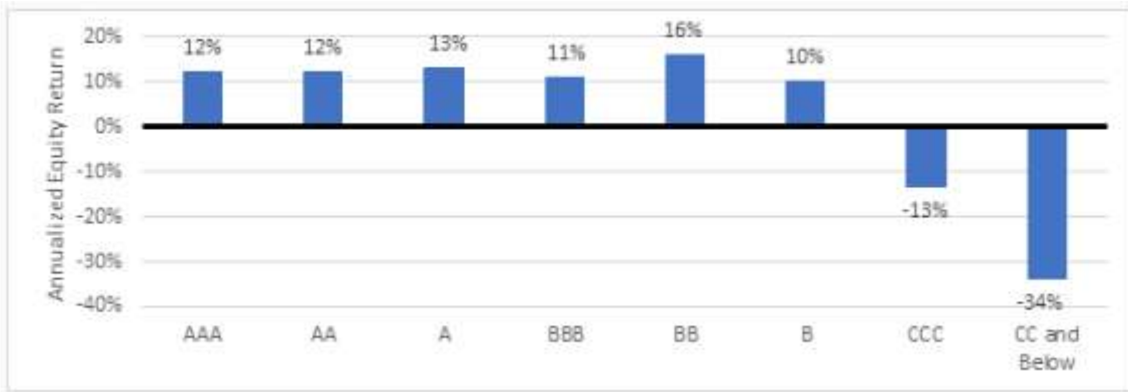


Source: Verdad bond database. Data for USD corporate high-yield and investment-grade bonds 12/31/96 – 5/30/20. Uses average bond price for unsecured bonds, secured bonds if no unsecured bonds, and subordinated bonds if no secured or unsecured bonds.

Verdict: it’s a very bad idea to buy the equity in companies where the bonds are distressed. Distress risk is not compensated. But what is particularly surprising to us is that it is also a bad idea to buy equity in companies with bonds trading below 90 cents on the dollar. Equity returns deteriorate very quickly with even a whiff of bankruptcy risk. ...

But while the above confirms our long-held view that investors should avoid investing in companies on the verge of bankruptcy, the analysis is flawed, as bond prices fluctuate with macro-economic conditions—they are not a consistent measure of credit quality. To provide a more consistent measure of credit quality across time, below we show equity returns by market-implied ratings, which are the ratings implied by a bond's trading level.

Figure 3: Equity Returns by Credit Quality



Source: Verdad bond database. Data for USD corporate high-yield and investment-grade bonds 12/31/96 – 5/30/20. Ratings are market-implied ratings estimated by Verdad but can be closely proxied using agency ratings.

Equity returns deteriorate when credit quality falls below the BB or high single-B quality level. As corporate credit returns peak in the BB quality category, so do equity returns. As is often pointed out, debt is a double-edged sword. It magnifies returns up to the point where it begins to magnify losses.

In an increasingly leveraged corporate sector, it is no longer possible to simply avoid companies with leverage. Equity investors need to understand when debt becomes dangerous. We believe simply checking the trading prices and credit ratings of a company can help equity investors avoid costly mistakes.

Follow-ups

In my Advanced Topic in Investments class at OU, I talk about ETNs as a product to avoid. They are almost never meant as a buy and hold product, and some of them explicitly state in their prospectus that their long-term expected value is 0. This combined with the fact that the institutions that sell them can "redeem" them at any time (usually at the worst possible time for the client) makes them financial WMDs. From the front page of June 2nd's WSJ:

Collapse of Risky Securities Burns Individual Investors

Seeking high returns, they poured savings into leveraged ETNs

By Akane Otani and Sebastian Pellejero

When William Mark decided to get back into investing after the 2008 financial crisis, he looked past stocks and bonds. Needing to play catch-up with his retirement portfolio, the piping engineer decided to bet on a complicated product he hoped would deliver double-digit annual returns.

It worked so well—earning him 18% a year in dividends, on average—that he eventually poured $800,000 into the investments, called leveraged exchange-traded notes, or ETNs. When the coronavirus pandemic hit, he lost almost every penny.

“I’m 67 years old and I’m basically bankrupt in just two weeks,” Mr. Mark said.

The pandemic-fueled economic downturn has sparked turmoil in nearly every financial market. It has taken a particularly brutal toll on investors like Mr. Mark, who wagered on the roughly $7 trillion market for structured products: complex instruments that include ETNs, options-based strategies and certificates of deposits whose returns are tied to stocks or currencies.

Banks and brokerages advertised them as offering payouts both steadier and more lucrative than plain-vanilla investments such as bonds or index-tracking funds. Most professional money managers avoided them. For many less sophisticated retail buyers, the market blowup taught the kind of painful lesson that comes with just about every economic crisis: There is no such thing as an investment that is both safe and highly profitable.

The market’s collapse punished some banks that sold the products, which are considered derivatives. Société Générale SA, BNP Paribas SA and Natixis SA each lost more than $200 million on their structured-products businesses this year.

To understand how Mr. Mark and other investors were drawn to complex derivatives, it helps to go back to what happened after investment bank Lehman Brothers failed in 2008. Central banks cut interest rates to historic lows, which helped stabilize the financial system. It also lowered the income generated by the safest and most-stable investments, pushing investors into a risky hunt for bondlike products that could offer higher returns.

Mr. Mark bought a leveraged ETN issued by UBS AG that bet on companies that invest in the mortgage market, known as mortgage real-estate investment trusts. For others, the search for income led to investments in companies that bundled small business loans or oil pipeline rights, their payouts inflated by borrowed money.

What all the products had in common was the potential to deliver robust returns at a time when economic growth was slow and a mountain of sovereign bonds around the world was offering investors no income at all.

Money manager ProShares made a name for itself focusing on riskier funds that would double or even triple the daily returns of conventional products, expanding its lineup from a handful of funds in 2006 to more than 130 ETFs today. Brokers working for Citigroup, Morgan Stanley, UBS and Wells Fargo sold billions of dollars of risky exchange-traded funds, or ETFs, in 2008 and 2009.

Some traders said large asset managers, turned off by the complexity, mixed record and relatively high fees, hardly ever bought the products.

“If institutions aren’t buying this, the retail investor shouldn’t be either. Otherwise they’re the sucker at the poker table that doesn’t know it,” said Larry Swedroe, chief research officer at wealth-management firm Buckingham Wealth Partners. “If a product is so complex that you can’t explain it to your partner, then you shouldn’t buy it.”

Regulatory action

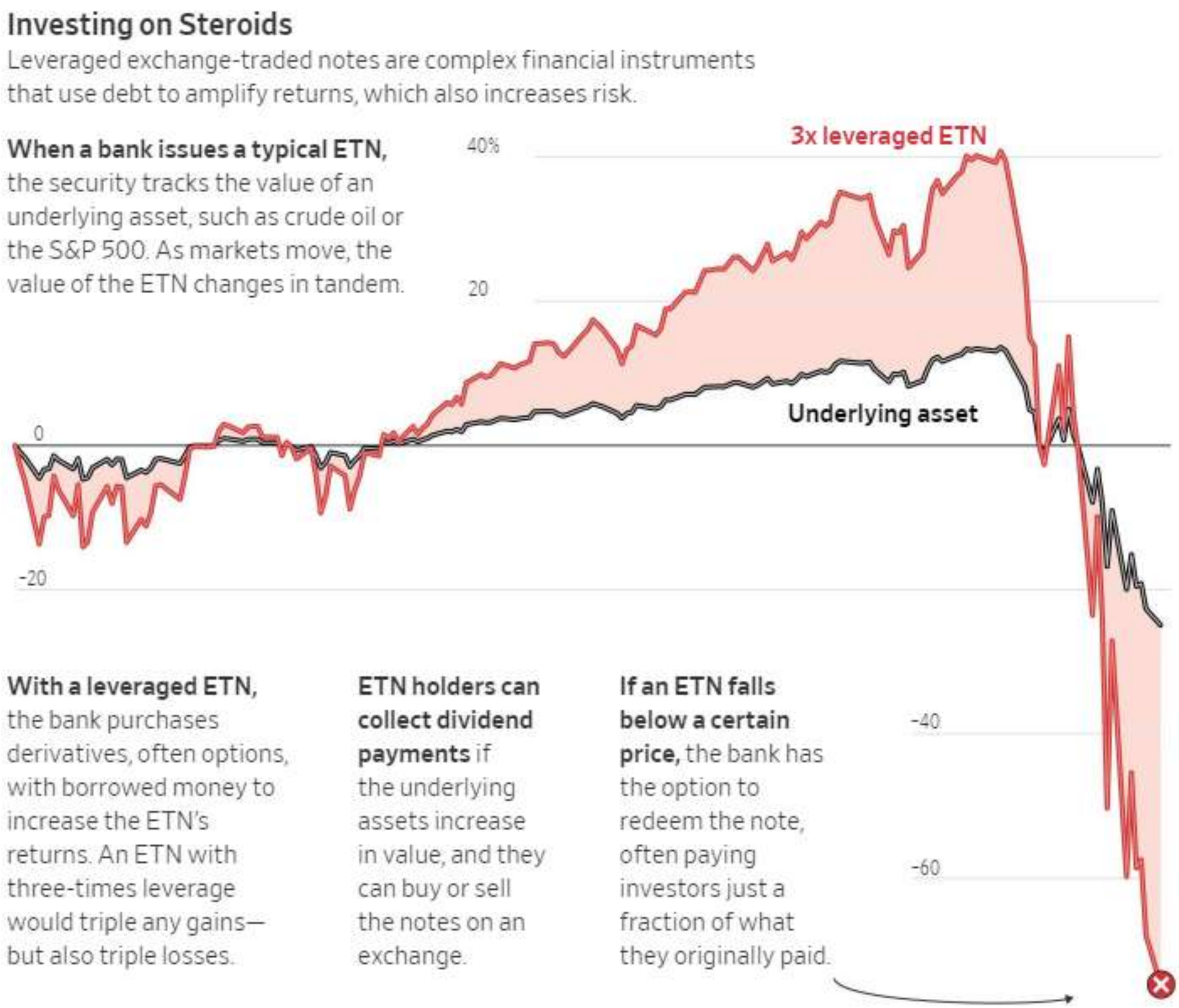
In 2012, regulators sanctioned banks for failing to educate investors about the risks of leveraged ETFs. This year, Wells Fargo agreed to pay $35 million to settle claims that its financial advisers recommended inverse ETFs—funds that move in the opposite direction of what they track—that were too risky for retail clients.

This year, at least 15 ETNs managed by UBS have been taken off the market after tumbling in value. ETNs run by Citigroup and other firms have suffered significant losses. When troubled funds are taken off the market, investors typically are paid just a fraction of what they initially put in.

"As with any complex financial product, investing in leveraged ETNs carries risk," UBS said in a written statement. "We provide considerable public disclosure outlining the risks and special features of our exchange-listed ETNs to enable investors to make informed investment decisions."

Wells Fargo declined to comment.

Over the past decade, Wall Street packaged and sold many niche products engineered to get investors higher income than more plain-vanilla offerings. Their popularity soared during the bull market. UBS, Citigroup, JPMorgan Chase & Co., French bank Société Générale and Germany's Landesbank Hessen-Thuringen Girozentrale all offered individual investors ways to tap into structured products.

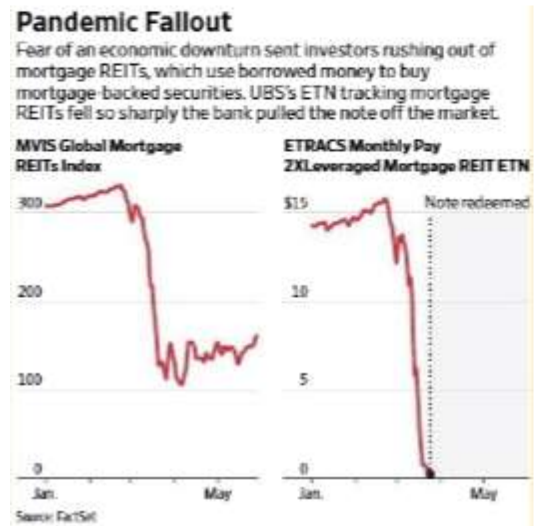


UBS created Mr. Mark's ETN in 2012, as mortgage-investment firms recovered from the financial crisis.

On the surface, ETNs don't look much different than ordinary mutual or exchange-traded funds that track a group of companies. Both products allow investors to bet on the performance of anything from the U.S. stock market to the Swiss franc to wheat. But unlike ETFs, ETNs don't own the assets they track. They are debt instruments. And the banks that issue them often have the option to take them off the market if their value falls below a certain level.

One reason ETNs have been hit hard in recent months as that many are leveraged, meaning they use borrowed money to amplify both gains, which also magnifies losses. Instead of rising 3% on a day that crude oil rises 3%, an oil ETN with three-times leverage aims to rise 9%. And instead of falling 3% on a down day, it would fall 9%.

It is "investing on steroids," said Todd Rosenbluth, director of ETF and mutual-fund research at CFRA, an investment-research firm.



Some products layered complex strategies on top of each other. James Zhu, a 78-year-old retired college professor and engineer, invested his and his wife's life savings into ETNs based on payment streams from mortgage bonds, bundled together by investment firms and amped up with leverage.

So-called mortgage real-estate investment trusts, or mortgage REITs, return a significant portion of their profits to investors through dividends. When interest rates are low, mortgage REITs can look attractive to investors because they offer relatively high income.

By buying a leveraged ETN, Mr. Zhu was amplifying his bet on the mortgage market. Last year, shares of mortgage investment firms rallied. But this March, Mr. Zhu's bet blew up.

The coronavirus pandemic sent corporations scrambling for cash, increasing volatility in overnight borrowing markets on which mortgage REITs rely. That put pressure on their shares. ETNs making leveraged bets on mortgage investment firms nosedived.

The ETN Mr. Zhu bought from UBS slumped to less than 25 cents a share, from around $14 at the start of the year. On March 17, UBS redeemed it, notifying investors they would be paid out $0.201 per security held. That resulted in a loss of $700,000 for Mr. Zhu, who had purchased the ETN at $13.35.

"We're too old to play those games," Mr. Zhu said. "It's too difficult for us. We were just looking for basic income."

He is now suing his online brokerage, TD Ameritrade, alleging the company made the ETN available to individual investors without providing sufficient disclosures. A representative for TD Ameritrade declined to comment. ...

Another concept that backfired: ETNs focused on the $122 billion market for loans to small and midsize firms through so-called business development companies, or BDCs. Like mortgage investment firms, BDCs tend to offer investors hefty dividends to qualify for tax benefits.

So far this year, shares of two of the largest such companies, FS KKR Capital Corp. and Ares Capital, are down about 39% and 19%, respectively. BDCs managed by BlackRock, Carlyle Group, and Investcorp have fallen 42%, 32%, and 38% over the same period. The S&P 500 is down 5.4% by comparison.

Now, many worry that loan losses will mount as small and midsize businesses struggle during the downturn. A drop in the value of BDC holdings can increase its leverage level, possibly exceeding thresholds set with investors. ...

The VelocityShares 3x Long Crude Oil ETN was issued by Citigroup. Its prospectus says ETNs "may not be suitable for investors who plan to hold them for a period other than one day," and noted it is "possible that you will suffer significant losses in the ETNs even if the long-term performance of the applicable Index is positive."

Investors who sold the VelocityShares crude oil ETN at the end of last year could have come out positive, because nearly all markets, including commodities, rose on prospects at the time for global growth. The pandemic sent crude prices down sharply to $14 a barrel, from $61 a barrel at the end of 2019. The losses were amplified for holders of the VelocityShares ETN. It last traded at around 16 cents a share, down from about $15 at the start of the year. In April, Citigroup pulled the ETN off of the market altogether, adding in a statement that it would no longer issue notes of that variety. ...

Some investment professionals, including Messrs. Swedroe and Rosenbluth, contend that leveraged ETNs shouldn't be as accessible as they are to individual investors.

Some firms, including Vanguard Group, have stopped handling client purchases of leveraged or inverse notes altogether. Other online platforms catering to amateur investors continue to allow them to dabble in complex products.

From Morningstar:

A 13% Yield: What Could Go Wrong?

There's not much to like when it comes to structured notes.

Amy C. Arnott, CFA
Jun 2, 2020

One of the fundamental truths about investing is that there is no such thing as a free lunch. An investment that promises higher returns is going to come with higher risks of losing money. And often, those bigger return promises not only come with greater risks, but with a lot more complexity and potentially, higher fees.

That is certainly the case with securities known as structured notes, investments that some financial advisors have been pitching to clients with growing frequency.

In a recent in-depth report on structured notes, called "Structured Notes: Buyer Beware," my colleague Maciej Kowara and I found a lot we didn't like when it comes to these complicated investments. (Morningstar Office and Direct clients can find the report here.)

In this article, we will aim to help answer the question, “Should I invest in structured notes?” with a primer on their inner workings. We’ll do so with a look at a recently issued note that offered up the tantalizing yield of 13%.

What is a Structured Note?

Structured notes are basically a stock/bond hybrid with a limited life span or maturity. When an advisor touts them, they may sound appealing because they often combine high coupon rates with some level of principal protection that would enable their buyer to get their original investment back. In the current environment, with interest rates at rock-bottom, their yields may seem especially attractive.

Like bonds, these securities typically make regular coupon payments and are set up to repay principal upon maturity. Legally, they are unsecured debt obligations of the issuing bank--typically large investment banks like HSBC, JPMorgan Chase, Barclays, and Goldman Sachs--and their creditworthiness is ultimately tied to the issuer. (Structured notes took a serious reputational hit in the wake of the global financial crisis in 2008-09, when investors holding structured notes issued by Lehman Brothers lost nearly all their original investment.)

Structured notes can be set up in a myriad of ways. Issuers basically mix and match the key product attributes to meet demand, leading to literally hundreds of potential different structures. The complex design of structured notes often makes it tough for investors to understand exactly what they’re getting.

Importantly, unlike most bonds, their coupon payments are often contingent on the performance of an underlying asset such as a stock or index, which means coupons may not always be paid.

In contrast to stocks, though, whose gains are potentially unlimited, structured notes often have no potential to appreciate in price or have an explicit cap on maximum gains.

A 13% Yield: What Could Go Wrong?

Here’s an example of how an enticing yield belies the inner workings of a structured note linked to the stock price of oil and gas company Diamondback Energy (FANG) .

Officially called a contingent coupon note, this security was issued in January 2020 by Barclays Bank PLC. The note has a two-year maturity and offered a tempting an annualized yield of 13% through a quarterly coupon payment of $32.50 per $1,000 in principal value. The prospectus filing notes that all payments are based on FANG’s stock price.

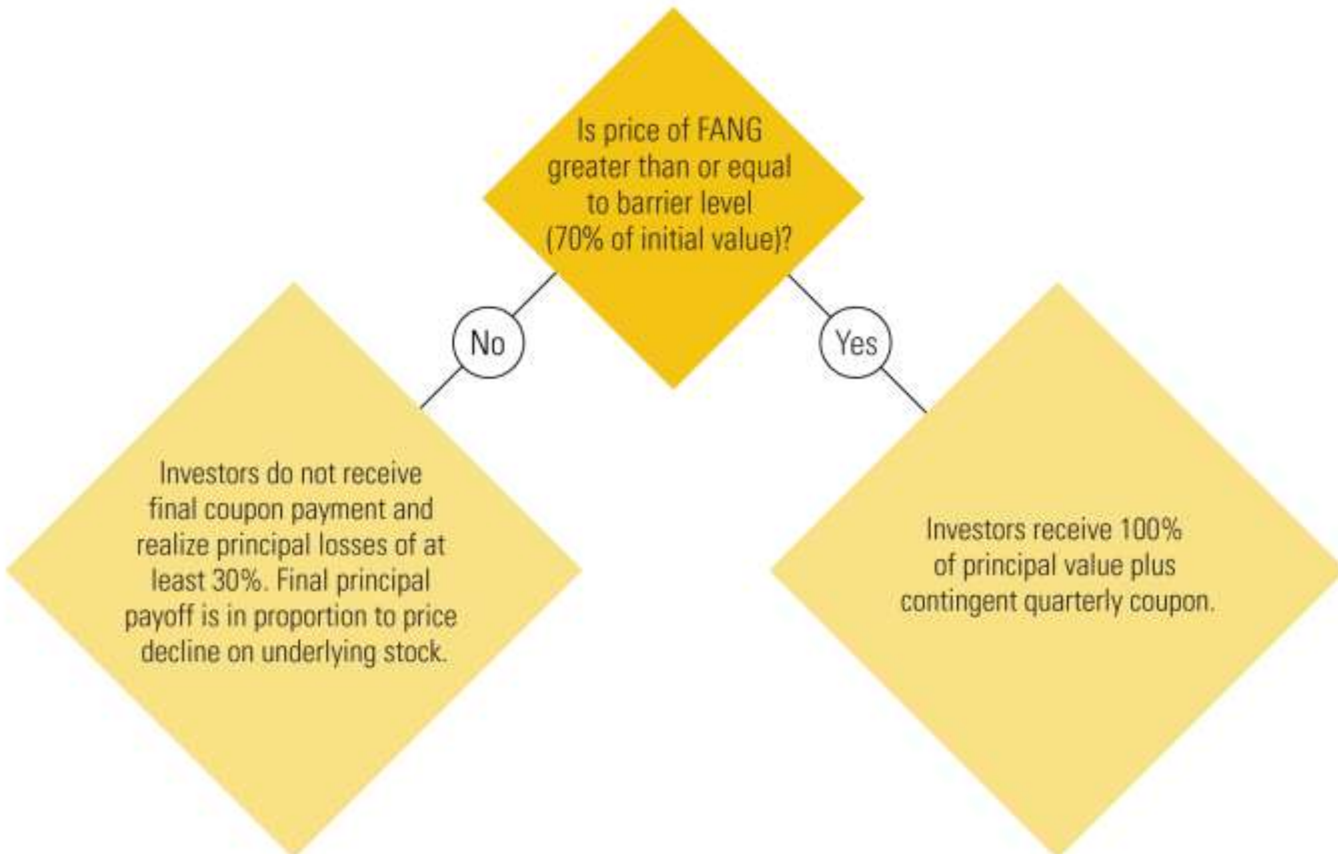
The key for buyers of the note is that it will only pay that quarterly coupon if FANG shares are trading at or above a predefined level--defined as 70% of the initial share price--on what is known as a quarterly observation date. If the stock drops below that level, investors don't receive a coupon for the quarter.

Based on past performance, this probably seemed like a fairly safe bet in January.

As of the prospectus date of Jan. 10, 2020, FANG had been above the coupon barrier of $64.58 for most of the previous five years. And while the stock was volatile, as are many energy company shares which swing up and down with changes in the price of oil, even a repeat of FANG’s biggest calendar-year loss of 26.3% in 2018 would still have left noteholders above the 30% decline that would have halted coupon payments.

Then came the historic drop in oil prices following the onset of the coronavirus, and FANG shares plunged more than 70% in the first quarter. While the stock regained some ground by the first quarterly coupon observation date on April 10, 2020, it was still well below the $64.58 per share coupon barrier.

Process for Determining Principal Payoff at Maturity



Source: SEC filings and author's calculations. Data as of 1/10/2020.

That meant investors didn't receive a coupon for the quarter. The note still has about 18 months left until maturity, but if it remains below the coupon barrier on future quarterly observation dates, investors will miss out on additional coupon payments.

Investors disappointed by the missed interest payment don't have much recourse. Because structured notes issued in the United States aren't traded on an exchange, it is generally very hard to find a buyer for notes after they have been issued. They could also hope that the issuing bank will agree to buy back the note (which would typically mean going back to the broker that sold the notes to you). In either case, they'd probably have to sell at a price much lower than the purchase price.

Investors who continue holding the notes face some additional uncertainty. For one, issuing banks can force the notes to be redeemed, or called, prior to maturity at any point after an initial six-month period.

If the notes are called prior to maturity, investors receive their principal back plus a contingent coupon (if the stock is above the coupon barrier). In the case of the FANG notes, Barclays has sole discretion--in other words, without the consent of noteholders--to decide whether to call the notes on specific call valuation dates starting in July 2020. Investors therefore have no way of knowing the notes' actual life span.

No Money-Back Guarantee
Traditional bonds promise to pay back buyers 100% of their initial investment. That will also be the case for a structured note, but only if the stock or other underlying benchmark doesn't close below its barrier value at the time the note matures.

In fact, if FANG remains below the $64.58 barrier value at its maturity date in January 2022, noteholders would take a loss in proportion to FANG's stock-price performance over the life of the note.

Granted, the FANG note could be viewed as an extreme example of what can go wrong with structured notes. But other structured notes linked to highly volatile underlying stocks or asset classes have suffered from similar woes. Investors in Asia--where structured notes are widely used by individual investors--have reportedly suffered billions of dollars in losses from structured notes tied to oil- and gas-linked indexes.

And if this isn't complicated enough, a popular variation is notes where returns are tied to more than one index or underlying security. In almost every case, the final payoff investors receive is based on performance of the underlying asset with the lowest returns.

Quite simply, it's hard to think of another example where investors would voluntarily purchase something that promises to give them the worst of multiple outcomes.

Hidden Costs
Not only are the inner workings of these notes complex, but they come with high fees that are invisible to

Process for Determining Quarterly Coupon Payments

Source: SEC filings and author's calculations. Data as of 1/10/2020.

investors unless they read the prospectus.

Structured notes are typically sold by brokers, who receive commissions averaging about 2% from the issuing bank. While investors don't pay these fees directly, they're built into the principal value as a markup or embedded fee.

In 2013, the SEC began requiring issuers to disclose estimated fair values for structured notes. We reviewed a sample group of about 50 notes issued in the United States at the beginning of 2020. On average, the issuer-reported fair values were about 97.1% of the value investors paid to purchase the note. That translates into an average markup or embedded fee of 2.9%.

The Barclays contingent coupon notes have a particularly steep fee structure. The notes were sold in increments of $1,000, but Barclays estimates the underlying value of each note was just $954.10 as of the issuance date. That means the notes were sold at a markup of 4.59%--higher than more than 80% of the notes in our sample group. Because the notes have a maturity of about two years, that's effectively an expense ratio of 2.3% per year. If the notes were called early, investors would end up paying even more in percentage terms.

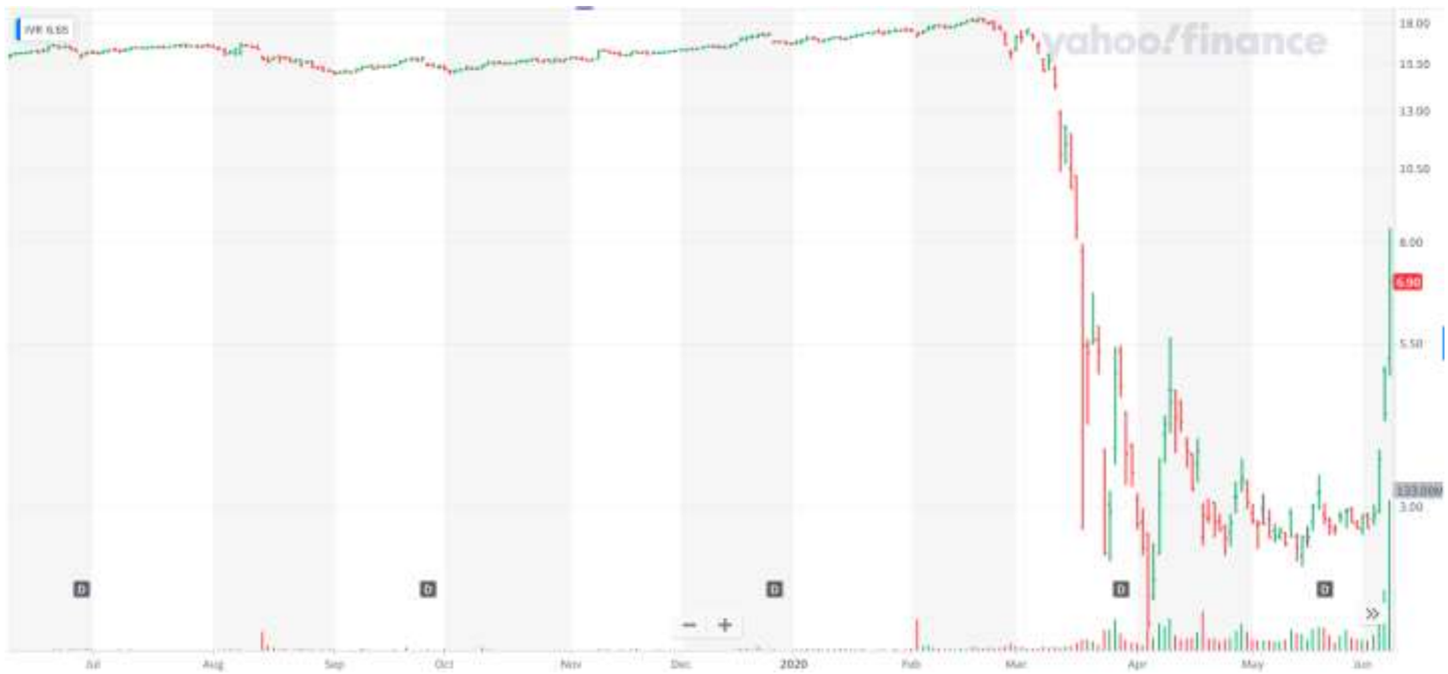
Conclusion

Structured notes may offer big payouts, but those advertised yields aren't always worth the risks In fact, when we recently dug into some of the academic research on how structured notes have performed, we found that two of the three studies we reviewed found that on average, structured notes have failed to perform better than a balanced portfolio of stocks and bonds, and at times have failed to keep up with risk-free Treasury bills.

Structured notes still account for a tiny fraction of investable assets in the U.S., but they've been gaining in popularity amid recent market volatility and record-low interest rates. They're often described as a way for risk-averse investors to capture additional income while limiting downside volatility. But their embedded costs, complexity, lack of liquidity and transparency, and often unfavorable payoff profiles make them difficult to use in a portfolio. Investors tempted by double-digit yields should therefore tread carefully--or take a pass.

Positions

IVR - We sold all positions (5 clients) in this mREIT on 6/8 @ 6.5238:



From High Dividend Opportunities on 6/8:

Sell Alert for IVR

Invesco Mortgage Capital Inc. (IVR) is seeing a large spike up on large volume. Optimism in the mortgage markets, and possibly a short-squeeze has sent the price up over 70% just today. IVR's book value was $2.25-$3.25 as of May 7th. While it is likely up since then, the current price is certainly materially higher than book value. Investors are also already entitled to receive the $0.50 dividend and we expect the next payment to be slashed materially.

Therefore, we are recommending that investors take advantage of this pop and sell IVR now. We realize that for some, this will be realizing a loss, for others, it might actually be a large gain. The bottom fell out of the mortgage market in March, with unprecedented volatility causing margin calls across the sector. IVR's decision to dump their entire agency portfolio at a loss was a poor one in our opinion, and materially impaired their long-term value. It is wise to take advantage of this exit opportunity.

Today is a huge up day, so the best option is to hold the cash and wait for new opportunities.

Investors who want to reinvest immediately and maintain exposure to the mortgage space, we recommend swapping into an agency mREIT like **Annaly** (NLY) (which is held by 3 clients), **AGNC** (AGNC), or **Dynex Capital** (DX), all are still trading at a discount to book value and is a much more conservative holdings with yields over 11%, higher than we anticipate IVR's will be after they cut.

Action To Take

- Sell IVR common

- Hold cash or reinvest in an agency mREIT (NLY, AGNC or DX) all of which have a very juicy yield and upside potential. Also the fact that they are agency REITs makes them investments with a higher level of safety for both income and principle preservation.

PEI - From June 12th's Global Investment Strategy's Weekly Report: "The rally in stocks linked to the reopening of the economy occurred alongside a retail investor speculative frenzy. In one of the more bizarre episodes in financial history, stocks of bankrupt or soon-to-be-bankrupt companies surged on Monday as novice day traders snapped up shares of companies that most institutional equity investors had left for dead." We sold all positions (3 clients) in this Mall REIT on 6/8 @ 2.495.