ECONOMIC SHUTDOWN — PERSPECTIVE

Before I share any investment-related perspectives with you, I would first like to acknowledge that writing about capital market volatility, asset valuations and the like amid a pandemic could epitomize tone deafness, if not outright callousness. In truth, I'm deeply empathetic to the many forms of distress that are in full bloom.

During the conversations I've had with some of you over the past few weeks, I have repeatedly found myself torn between a desire to share with you why I believe it still makes sense to continue to adhere to the asset allocation targets that are already in place for each of your portfolios, and the ethical responsibility I have to refrain from making any forward-looking statements that may falsely suggest I could somehow *know* how the pandemic may ultimately impact a particular person's portfolio, financial position or life. The Internet is full of charlatans who trade in the false comfort of impossible prescience and ill-premised predictions, but I have never engaged in any of that behavior so as you read what follows it is important to understand that the metaphorical error bars that underpin my views are, for now, extraordinarily wide.

INVESTMENT MATH BREAKS DOWN

Sophisticated investors ordinarily rely upon various types of models to help them gauge a given investment's value. In most cases, valuation models tend to be most useful when the model's inputs are varied incrementally. For example, a stock valuation model might suggest a plausible value for a given share of stock if the company that issued that share of stock is able to increase its earnings by, say, an average of 7% per year for the next 10 years and then 4% per year thereafter.

In contrast, that model is much less likely to generate plausible values in cases where the revenues and earnings of companies plunge each time humanity is forced to re-quarantine itself to thwart an ongoing pandemic's contagion flareups. And, even in cases where models could generate plausible valuations in response to gross input changes, the modeled output would still be useful only to the extent model inputs accurately capture future reality.

POLAR OUTCOMES

Financial modelers are struggling with the same type of modeling problems the scientific and medical communities are facing. Of course, we know that a relatively good resolution to this pandemic would consist of a virus that does not morph into other fatal or difficult-to-treat strains, the rapid development and the widespread availability of quick-result diagnostic tests, an effective antiviral drug and, ultimately, a vaccine. In short, a best-case outcome would be any set of circumstances that could quickly result in humans developing herd immunity. **Conversely, any outcome where re-infection becomes an issue, or where the best-case circumstances do not materialize may result in the repeated need for long-term sheltering protocols that would cause repeated economic disruption.** The financial outcomes associated with wildly varying circumstances may be modeled and estimated, but until we develop some sense of the likelihood of a given set of circumstances, the modeled output is unlikely to parallel whatever reality is headed our way.

ENTER THE FEDERAL RESERVE

In addition to the relief Congress authorized through the CARES Act, our central bank is doing its part to stabilize the U.S. economy in the face of pandemic-related disruptions.

While financial relief made available through the federal, state and local governments is, of course, welcome, it fosters debt, the repayment of which may be messy. For example, consider how distasteful it might be for the federal government, after having provided relief payments to people who are financially insecure, to then try to recoup those funds by taxing that same segment of the population more harshly, later. This situation may eventually need to be addressed by Congress, **but for now the Federal Reserve has already undertaken some heavy economic lifting that I believe could buy quite a bit of time** while we battle the pandemic on medical, social and other fronts.

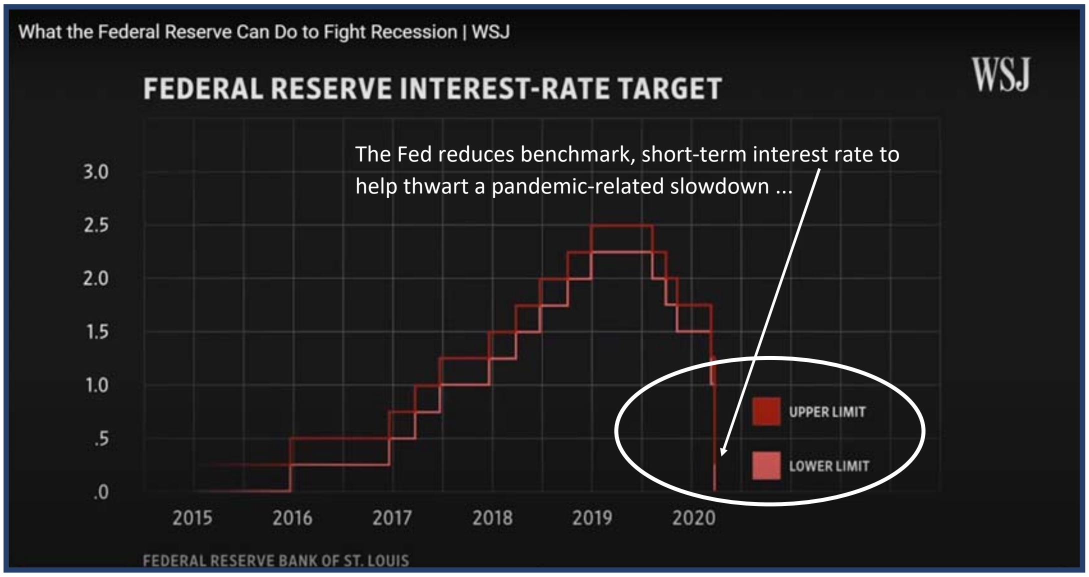
FED TO USE FULL RANGE OF TOOLS DURING THE PANDEMIC

In March, the Fed signaled that it would do everything within its power to help the U.S. economy remain functional. Whether the Fed is able to prevent the U.S. from experiencing the two successive quarters of economic contraction that is definitionally necessary for the U.S. to be in recession is not really a legitimate point of concern. More important is to recognize that the Fed can and will undertake a number of measures that will allow the U.S. economy to continue to function, even if at some reduced level.

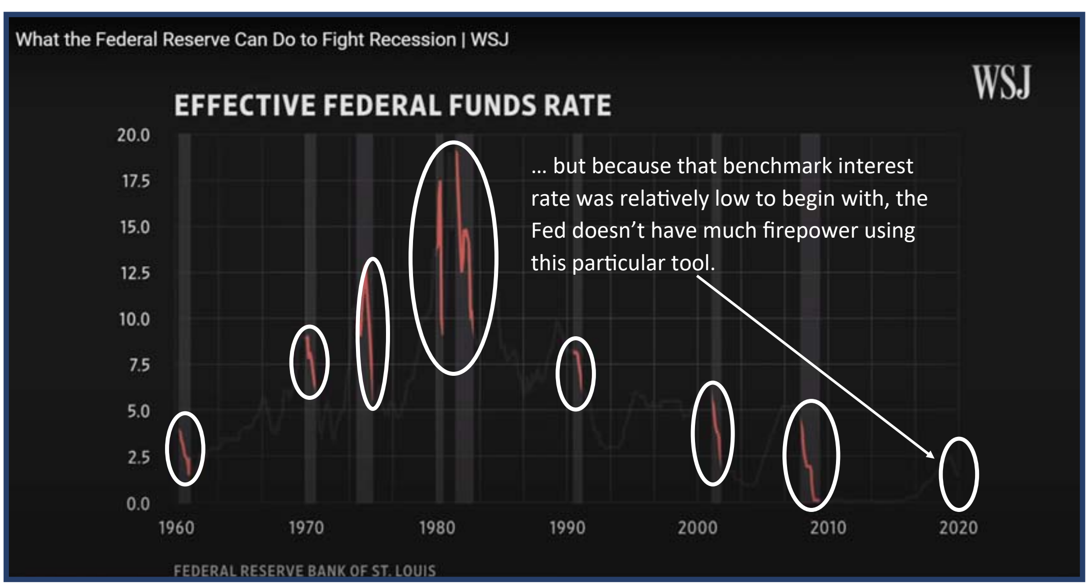
Note: One of my clients holds a PhD in finance and used to work for the Fed. If he weighs in or offers to improve my understanding in any way, I will share his feedback with you.

Tool #1 — Reduce Short-Term Interest Rates

On March 15th, the Fed reduced its target for the Overnight Federal Funds Rate by 1% to a rate that's close to 0% and it intends to hold that rate there until it's confident the U.S. economy has weathered the pandemic-related disruptions it is currently experiencing (image follows on next page).



In previous notes, I've outlined how lower interest rates are a byproduct of increased liquidity, so I won't rehash any of that here, but as you can see from the image below, the Fed has had to reduce its benchmark federal funds rate by relatively large amounts (an average of 5%, as shown in the elliptical areas) to help the U.S. economy recover from previous recessions (the shaded strips). Since the benchmark federal funds rate was already so low to start with in the current environment, however, the Fed does not currently have as much federal-funds-rate-ammunition as it might prefer.



Tool #2 — Reduce Longer-Term Interest Rates

Fortunately, the Fed has a quiver of other tools it can use to stimulate growth. The press often covers the Fed's benchmark federal funds rate as if it may be the Fed's only recession-fighting tool, but that's not the case. While there are actually a number of federal funds rates, the one the Fed typically aims to influence is the "overnight" rate (pictured twice on the previous page) which is the rate banks charge one another to lend funds among themselves for a day at a time (overnight). Of course, activity within the U.S. economy is also heavily influenced by longer-term rates. Fortunately, the Fed can heavily influence those rates, too.

On Monday, March 23rd, the Fed announced it would spend the week purchasing $700 billion worth of Treasury and mortgage-backed securities that mature well into the future. As the Fed purchased those securities, three important things happened:

⇒ After having been beaten down by investors having already sold in a panic, the **market value of these securities rebounded which helped restore investor confidence.**

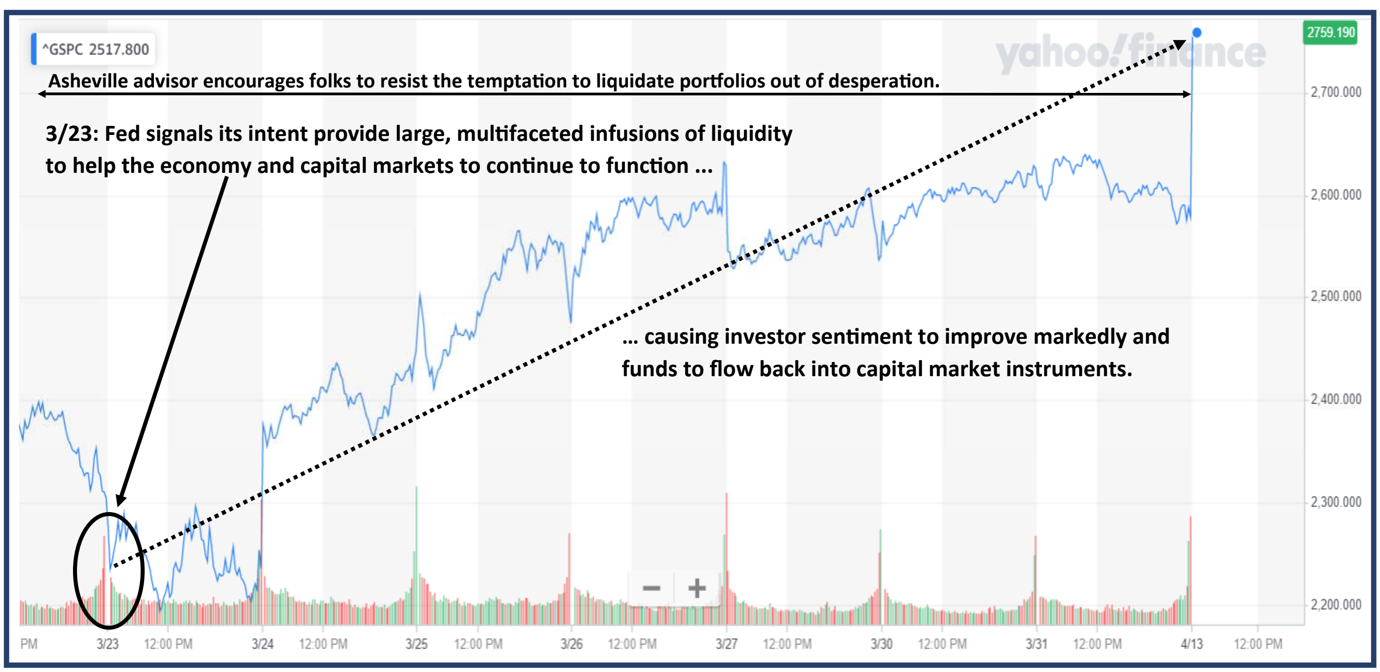
⇒ **The yields (interest paid as a percentage of their market value) on these securities declined.** Since the borrowing rates imposed on other borrowers within the U.S. are heavily influenced by the yields available on these securities, other, longer-term borrowing rates also declined. **As with the decline in the benchmark federal funds rate, this too induces increased economic activity by increasing the economy's marginal propensity to borrow and spend for productive or consumptive purposes.**

⇒ The money spent by the Fed introduced additional money into the U.S. economy.

> Those **additional funds supplied much needed liquidity to the capital markets to help them function, supported capital market asset values, and positioned banks to lend a portion of that newly-created money at lower rates of interest** than they otherwise would or could have.

Like a physician who attacks a malady from several angles, the Fed's multi-pronged approach will provide much needed relief to our disrupted economy. Because the capital markets are forward-looking entities, the evidence of that relief became apparent almost immediately as can be shown by the following chart of the S&P 500. As you can see, the market's rebound coincides with the Fed's announcement on March 23rd. Unlike diabetics who actually need to *receive* insulin to achieve an appropriate blood sugar level, the **Fed need only *allude* to forthcoming stimulus efforts for the capital markets to respond positively.** Disclaimer: Capital market relapses are possible, if not probable.

Those of you who called recently may recall me repeatedly referring to the fact that I believed asset values would rebound as liquidity was fed into the capital markets.



Unfortunately, longer-term interest rates were also pretty low prior to the onset of pandemic-related disruptions, so the Fed's power to stimulate the U.S. economy is somewhat limited in this respect, too. The Fed has a host of other tools, but before I go further, this is a good time to mention that the Fed has three societal mandates, each of which is intended to create a stable economic backdrop for our collective benefit:

1. Achieve maximum employment,
2. Maintain stable prices, and
3. Maintain moderate long-term interest rates.

Like a hotrodder who can never have a ride that's simultaneously fast, reliable and inexpensive, the Fed must prioritize, at most, two of its three mandates at any given time. It is obvious from the Fed's actions that it is prioritizing mandates 1 and 2 at the expense of mandate 3 (… plus I read it in the Fed's March 23rd press release).

Tool #3 — Function as a Lender of Last Resort

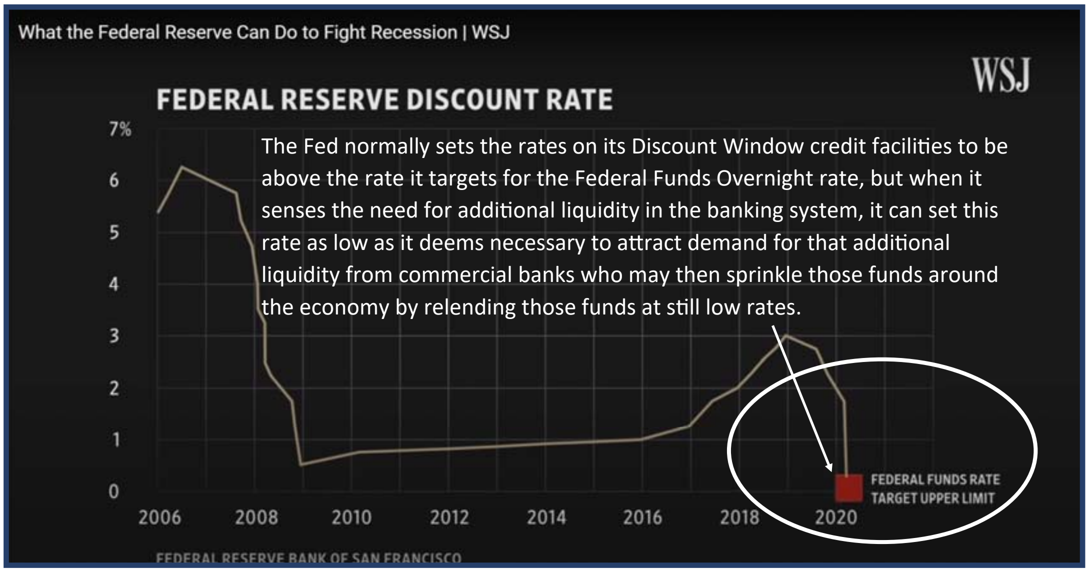
Since the Fed controls the supply of money within our country, it is uniquely empowered to function as a lender of last resort not only to banks, but to any entity it deems worthy. In mid-March, the Fed made $1.5 trillion ($1,500 billion!) available to our financial system in an effort to mitigate disruptions in the repurchase market. Everyone has heard of a money market account, but people do not typically know what money market instruments are. In short, they are short-term IOUs that are supposed to be highly liquid (i.e., easily bought and sold and easily converted to cash). In times of stress, however, that liquidity may vanish. So, the Fed may intervene when necessary. In March, the Fed lent that $1.5 trillion to various institutions that operate within the money market by accepting less liquid bonds in exchange (as collateral). The financial institutions that borrowed those funds from the Fed may then continue to conduct operations as they normally would, which once again allows the bond market to function normally, **which helps investors feel like the financial world is no longer coming apart at the seams**, which then reduces other forms of panic, which then allows our entire economic system to continue functioning **which then … knee bone to hip bone … helps capital asset values rebound causing investors' monthly statements to look less ugly.**

Tool #4 — Discount Window Lending

As a lender of last resort, commercial banks can borrow directly from the Fed through something it refers to as its Discount Window. (That odd nomenclature is unimportant to this letter.) Commercial banks normally use the funds depositors entrust to them to make loans to the public … and to each other through the federal funds market. But, during periods of heightened uncertainty, banks may be less inclined to lend, even amongst themselves.

Although commercial banks know they can borrow from the Fed (through its Discount Window) as a lender of last resort at any time, the Fed typically set its discount lending rate somewhat above prevailing market rates to make such loans attractive only to banks that are experiencing a liquidity pinch or that are having trouble remaining solvent. Accordingly, there's typically a stigma associated with borrowing through the Fed's Discount Window.

However, when the banking system as a whole is facing a liquidity shortfall, the Fed may be inclined to sweeten the lending terms associated with its Discount Window credit facilities. In mid-March, the Fed did exactly that. It reduced its discount-lending rate from about 1.75% all the way down to .25% (which is near the upper range of its already-reduced overnight federal funds target) to more or less signal to any commercial lender that might need additional liquidity that that liquidity is readily available directly from the Fed and at very little cost.



Tool #5 — Commercial Paper Funding Facility

During normal times, non-banking/non-financial businesses and municipalities typically borrow from a multitude of sources *other than* the Fed. For instance, when a corporation needs short-term funding, it may issue a money-market IOU known as commercial paper, in exchange for cash. When that IOU matures, the borrowing corporation must then repay the borrowed funds. As with other money market instruments, the market for commercial paper is typically available only to especially credit-worthy borrowers.

However, when financial stress or panic becomes prevalent, lenders that would otherwise advance cash in exchange for commercial paper may be less inclined to do so. Consequently, the Fed may step in and lend directly to private enterprise to allow it to continue operating. On March 23rd, the Fed announced it would do exactly that.

Tool #6 — Liquidity Swap Lines

A significant portion of the developed world conducts business in U.S. Dollars. Even though a given foreign entity may not transact directly with the U.S., other, secondary entities, may. Therefore, it's in the interest of the U.S., and, therefore, the Fed, to ensure that U.S. Dollars are available to support any foreign-sourced demand that may exist.

To this end, the Fed has already established $60 billion worth of temporary swap lines with the central banks of nine other regions. (As a point of comparison, the Fed established temporary swap lines with 14 other central banks during the financial crisis of 2008/9). In essence, the central banks of various regions agree to hold one another's respective currencies to help ensure trade isn't inadvertently hampered by a lack of availability of the whichever currencies may be needed to settle such transactions.

GOLDMAN SACHS THINKS THE WORST IS BEHIND US

On February 19th, the S&P 500 stood at 3,386. As it became apparent the pandemic would have far-reaching economic consequences, the index plunged some 34% to close at 2,237 on March 23rd. As of April 8th, this index stood at 2,750 (about 19% off its February 19th close). Goldman Sachs thinks the combination of unprecedented policy support and a flattening of the viral curve have dramatically reduced downside risks to the U.S. economy. Goldman Sachs has made a gutsy call. I hope it's correct.

ODDS & ENDS

Transferring Funds to an FDIC-Insured Bank Account

Chances are overwhelming that any cash you have at Shareholders Service Group is *already* in an FDIC-insured account. Both the Dreyfus Insured Deposit Program and the Interlink Insured Bank Deposit Program sprinkle cash balances among participating institutions to allow for higher FDIC coverage limits than would be available by using only one FDIC-insured institution (such as one's local bank). Of course, we will always honor redemption requests, but to the extent raising cash necessitates liquidating portfolio assets at prices that may be lower than they would be in the future, you run the risk of us realizing losses within your portfolio that might otherwise have been avoided.

The Litmus Test of an Investment

Events occasionally panic investors who may then be tempted to liquidate their investment positions indiscriminately. Therefore, the diversification that would normally be apparent in more normal times may temporarily disappear as the market values of many types of assets fall, more or less, in unison. Panicked investors may then conclude that portions of their investment portfolios no longer hold investment merit or are no longer suitable, inducing them to liquidate certain positions. However, a marked decline in value during a time of panic or market distress is not necessarily a valid litmus test of an investment's merit. Instead, suddenly lower asset values may be more of an indication that liquidity has temporarily flowed away from certain corners of the capital markets than it is that certain holdings within a portfolio lack investment merit or have become permanently impaired.

Dry Powder

Unless you're convinced that current trauma really will result in a collapse of asset values from which you may not have time to recover, it is important to realize that every portfolio I oversee that's of any material size includes what I view as dry powder. Dry powder consist of any cash within the portfolio, cash equivalents such as the insured deposit accounts I already addressed and relatively short-term, high-quality bonds.

I would expect all cash and money fund balances to maintain stable values during even the worst of times. Unless you have a particularly large portfolio, the bond exposure you have is likely to be in the form of funds.

Except for short-term bond funds, I prefer *not* to hold corporate bonds within traditional mutual funds (any fund that sports a 5-character ticker symbol ending with "X") due to the fact **such funds, unlike the bonds they hold, never mature**. In a declining-rate environment, holding bonds within traditional mutual funds may work out very well, but we do not appear to be in an environment where interest rates are likely to decline persistently. **To the extent rates rise again, owning longer-term bonds within traditional mutual funds may be a little like trying to get off a train that doesn't stop in your town.**

Consequently, I often use a series of funds that not only hold bonds that mature during a specified year, **the funds, themselves, liquidate at the end of that specified year** … **after the bonds within their portfolios have matured**. To continue the train analogy, owning this type of fund not only greatly improves diversification, it is like riding a train that stops gently in front of your home. However, these funds are subject to the same market forces individual bonds are, so **to the extent we are directed to sell these funds during periods of distress or anytime prior to a given fund's liquidation date, the resulting investment experience could be very much like the unnecessary trauma associated with jumping off a train that would eventually have stopped at your door.**

And, finally, I continue to receive calls suggesting that we stop investing until conditions improve. I think they already have. Moreover, the best time to buy assets is when they're on sale. I hope you found this letter helpful. — Glenn Wessel