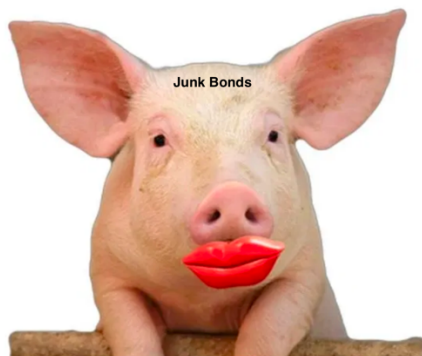


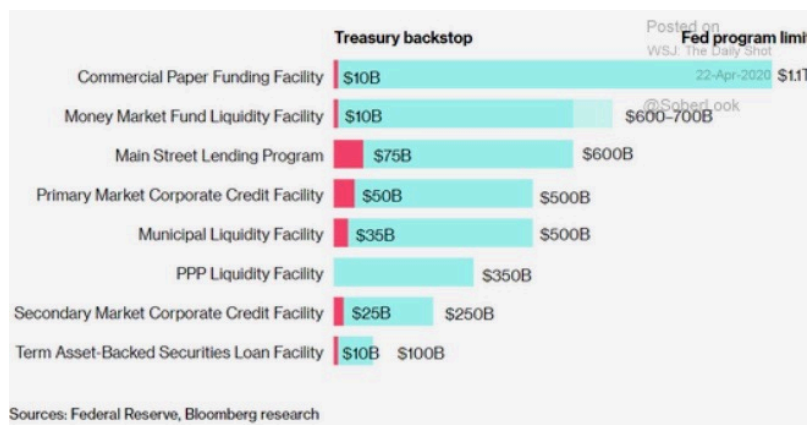
The Fed's support of Junk Bonds is like "putting lipstick on a pig"



Source: Allenrsmith.com

“Putting lipstick on a pig” is an old saying popularized during an Obama campaign event in which he said “You can put lipstick on a pig but it’s still a pig.” And that was the first thing that came to mind when the Federal Reserve (Fed) announced its umpteenth Bazooka on 4/9/2020. The Fed is so worried about the self-induced coma of our economy and its largest employers that it is doing ANYTHING to keep them afloat. Speaking of swine, the Fed’s actions harkens back to the European Central Bank’s (ECB’s) pivotal moment in which Super Mario (Draghi) said the ECB would do “whatever it takes” to save its own PIGS. He was of course referring to Portugal, Italy, etc. that got themselves into trouble after biting more debt than they could chew. I’ll revisit this later.

Many of the U.S.’s largest employers are investment grade names that count on thousands of people to keep them going and vice versa. The Ford’s and GE’s of this country are considered “too big to fail” and would cause further systemic risk if capital markets were shut to them. Consequently, the Fed [announced](#) on 3/23/2020 that it would establish special purpose entities supporting two facilities: the Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity to outstanding corporate bonds. Other parts of the Fed’s “No Asset Left Behind” actions are below:



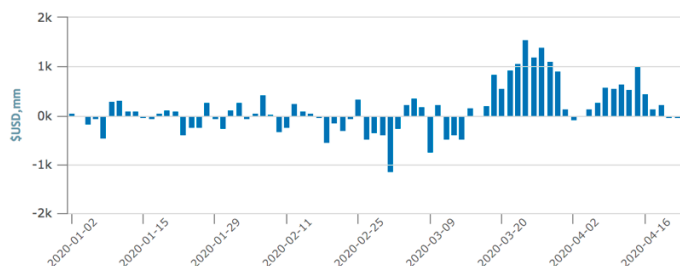
The [Term Sheets](#) provided with the 3/23/2020 announcement stipulated eligible assets, issuers and limits per issuer. In other words, the Fed announced it would only buy or lend to issuers that were investment grade (BBB or higher) with maturities of four years or less. The limitations essentially define the amount the Fed can lend to an individual issuer so that it reduces concentration risk. The SMCCF term sheet gives similar stipulations as above except that they would apply to the secondary market. In addition, the Fed said it may purchase exchange traded funds (ETFs) that provide broad investment grade exposure. LQD (iShares iBoxx Investment Grade Corporate Bond) comes to mind as it’s the largest.

The lockdown of our economy and rapid stock market selloff beginning in mid-February was a call to action for the Fed to expand the above programs with [another set](#) on 4/9/2020. Consequently, chairman Powell introduced a kitchen sink of actions geared towards mom & pop and small businesses. That press release also announced it would expand the PMCCF and SMCCF showing the Fed appreciated that corporate bond prices were rapidly declining. Its attached [term sheet](#) said the Fed would expand its support of those investment grade issuers that were downgraded to junk (“fallen angels”) so long as they had been rated BBB as of 3/22/2020. I caution investors as limitations on the leverage of the special purpose vehicle supporting the PMCCF and SMCCF essentially incentivize the Fed to flow monies to investment grade names rather than high yield (HY). What got investors rushing to buy high yield bonds (see charts below) were details saying the Fed would support those fallen angels by outright purchases of high-yield corporate bonds via

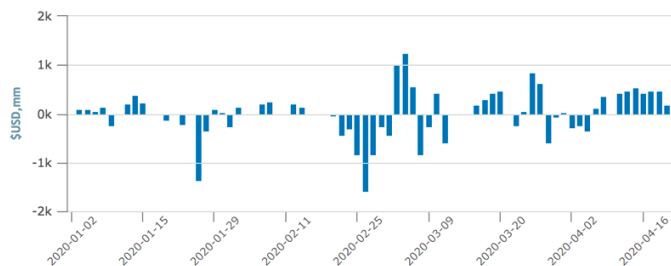
ETFs such as JNK and HYG (the largest high yield ETF) since some of those original investment grade bonds could no longer be held in the LQD exchange trade fund.



LQD Daily Fund Flows



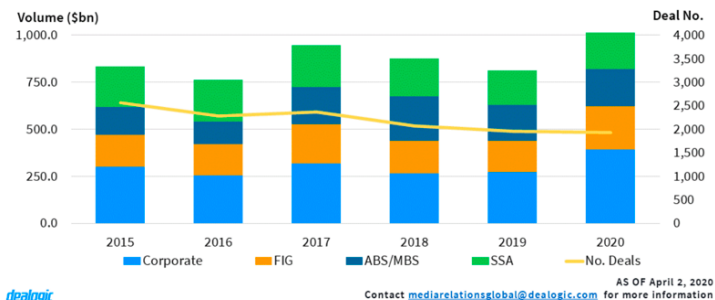
HYG Daily Fund Flows



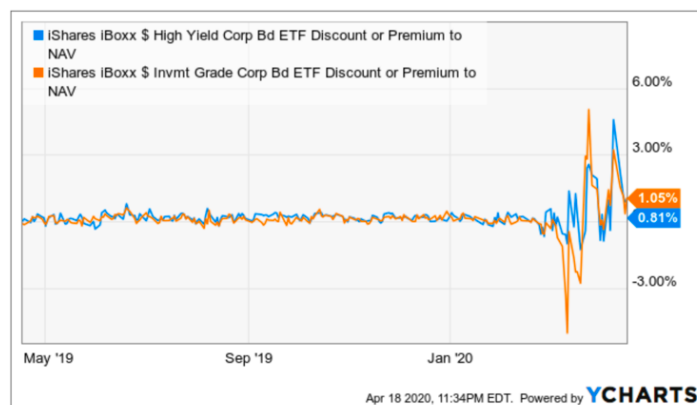
While working for commercial banks as a credit analyst, I never understood the point of lending to companies where banks were playing a game of “heads I win, tails you lose” most of the time. There’s the issue of asymmetric information where the issuer knows more about their risks than the banks or investors. If you’re a bondholder, you are probably receiving a low coupon payment and yet if the issuer does well, those bonds may be called back. If the issuer deteriorates, then the investor must deal with credit and liquidity risk. So you have a limited upside but a greater downside (yet another meaning of the word asymmetric).

The Fed’s 4/9/20 press release coincided with some of the [largest price gains](#) on record in both LQD and HYG. The Fed’s acting as “lender of last resort” allowed corporations to issue new bonds at the highest rate on record. This was especially clear in investment grade issuers that were refinancing commercial paper (roll-over risk) into long-term fixed-rate bonds. The light blue bar-chart below shows bond issuance in debt-capital-markets through 4/2/20.

US-MARKETED DCM ISSUANCE, Q1



As of this writing, both LQD and HYG are within 5% of their 52 week highs. Those highs can be associated with par since the default rate was low most of last year. It’s illogical then that corporate bonds should be trading near par when companies are going bankrupt on a weekly basis. Further, those ETFs are trading at a premium to net asset value (NAV) which doesn’t make sense – these are not closed end funds!



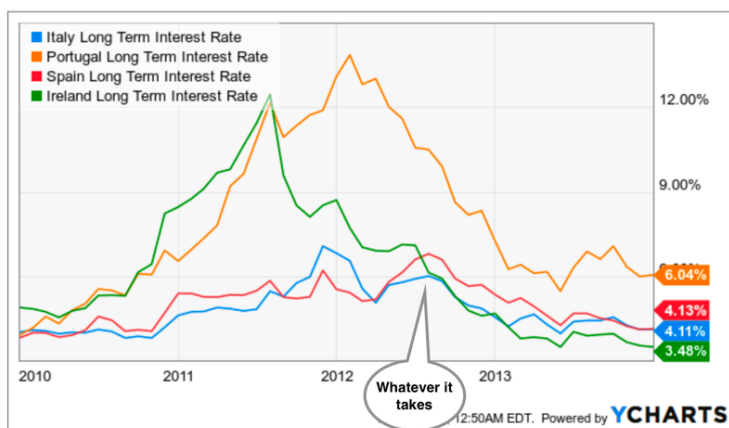
The **ONLY** factor suspending the corporate bond market is the Fed's announced actions. My mentor Marty Zweig, who was a panelist on the original Wall Street Week, always said "Don't fight the Fed." So I don't take it with a grain of salt that what the Fed's doing is powerful.

After ruminating the Fed's press releases a few times, it seems clear that their objective is to support investment grade names, even if that means following them into the junk bond underworld. While the Fed can and has shown itself to be markedly creative and nimble, I think it will tread carefully in fully supporting **all** high yield bonds. It's worth noting that most large (fallen angel) corporations do not cease during bankruptcy proceedings but simply restructure into more viable entities. It is more difficult to argue that high yield companies are systemically vital. There is also the issue of whether the Fed's actions are legal under [Section 13](#) of the Federal Reserve Act.

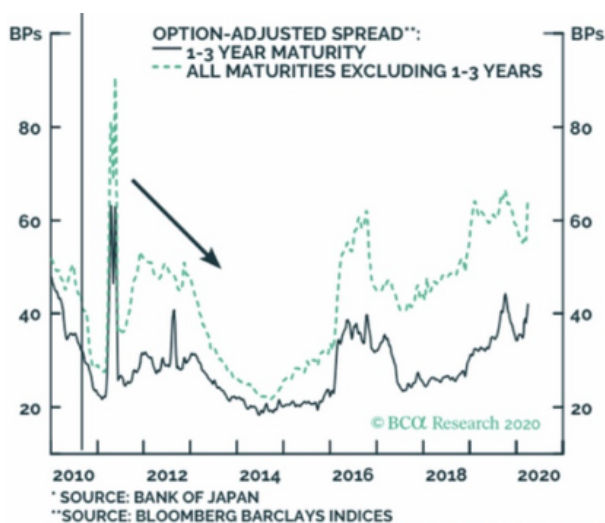
It does seem ethically right that the Fed is trying to help citizens and prevent a short-term liquidity crises from becoming a crises of solvency. However, it seems immoral to encourage companies to take on even **MORE** financial risk and compensate speculators that bought those bonds. Some companies took on more debt just so they could buy back stock and raise dividends instead of saving for a rainy day. That's called Moral Hazard and nothing good ever came out of it.

Two examples of authorities purchasing bonds

Authorities have unlimited power to affect markets and this is a risk to my bear thesis on corporate bonds. I found two examples of governmental authorities supporting bonds over the last decade. The first was the ECB's support of the PIGS' sovereign bonds including risky debt of Greece, Spain and Italy. Following his bold promise (7/26/12) that the "ECB is ready to do whatever it takes to preserve the euro..." the ECB initiated its Outright Monetary Transactions in which it pledged to purchase sovereign bonds. This "Draghi Put" had a powerful effect and resulted in sharply lower bond yields of Eurozone countries. So this is a case where government buying successfully supported bond prices.



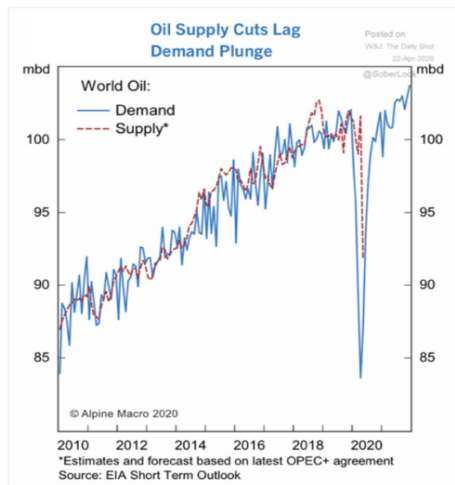
The other example is Japan. After the election of Shinzo Abe in 2012, Japan embarked on an extensive policy reform which included what he calls "three arrows" (i.e., monetary, fiscal and structural reforms). The monetary reform included purchases of stocks as well as corporate bonds and ETFs. The results have been mixed at best as corporate bond yield spreads did **not** decline despite the Bank of Japan increasing its ownership to nearly 80% of corporate bonds by 2019. There have also been some successes in the foreign exchange market. For example, the U.S. was able to jawbone the US dollar higher in the late '90s by vocally supporting a strong dollar policy.



Forward Indicators of Corporate Bond Performance

The following points support my conclusion for lower bond prices. Some indicators (e.g., VIX, EDF, Equity prices) are correlated and may be considered together.

1. **Extremely low oil prices:** Declining oil prices and issues with OPEC were already a problem prior to coronavirus. The virus only exacerbated the issue. The health of the oil economy is vital to the high yield market since it comprises 14% of the \$1.2 trillion universe according to Fitch Ratings. Energy is the tail that wags the high yield dog. After an unsuccessful OPEC meeting (with <10mbd cuts vs > 20mbd needed), WTI crude oil is trading below \$20/bbl. That is a level below the breakeven costs for most oil producers, especially U.S. frackers. Fitch expects the energy default rate to end 2020 at 17% (up substantially from its earlier 7% projection). It is also important to note that the fracking industry became popular after 2007 so Energy is expected to exert a far worse contribution to high yield defaults in 2020-21 compared to 2008-2009.



Source: [Alpine Macro](#)

What WTI oil price does your firm need to profitably drill a new well?

Survey of 157 oil and gas firms conducted March 11-19, 2020.



2. **High Financial Leverage:** Financial leverage is amongst the highest in history whether it's measured against gross domestic product on a "top down" basis or "bottoms up". Net Debt to EBITDA has soared during recent years and is far higher compared to the Great Financial Crises. Depressed EBITDA from the coronavirus is reducing EBITDA coverage and many issuers have debt maturity walls in 2021.

Debt/earnings ratio*

■ Russell 2000 ■ S&P 500*

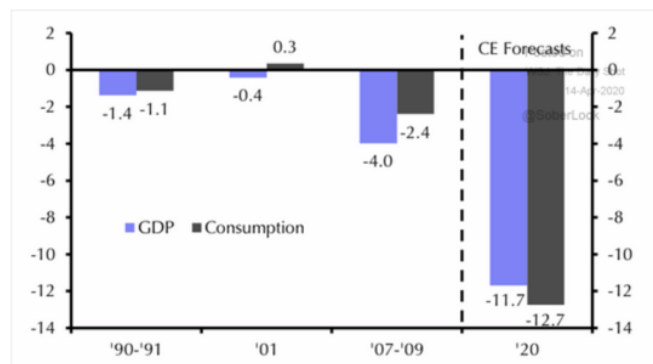
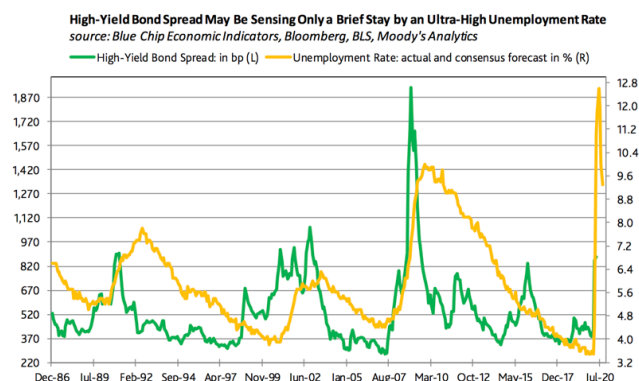


*Net debt divided by earnings before interest, taxes, depreciation and amortization

Note: Data excludes financial sector companies.

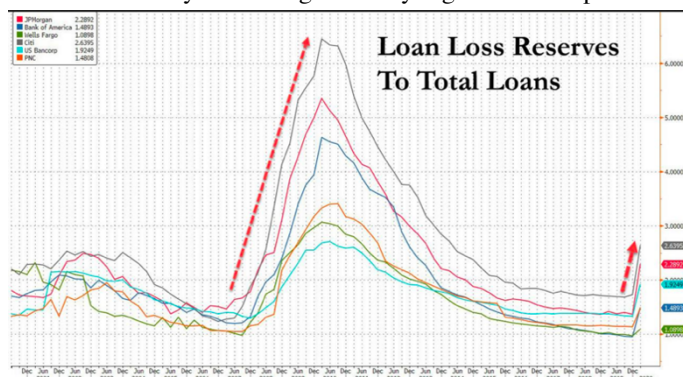
Sources: FactSet; BofA U.S. Equity & U.S. Quant

3. **Sudden and broad decline in economic growth:** Given that most of us are feeling this at home, I won't spend too much time explaining the obvious. What still seems hard to fathom is that economists are expecting the worst unemployment rates and GDP growth since World War II. The chart below shows the historical unemployment rate versus high yield bond spreads.



Source: Capital Economics

4. **Sharply rising Loan Loss Provisions:** Beginning in 1Q'20, banks began boosting their loan loss provisions. This was led by JP Morgan (JPM) which increased provisions \$6.8Bn from last year's level to \$8.3Bn (the highest level since 2009). Some analysts argue that the large number was due to a change in accounting ([called CECL](#)) which may have boosted reserves by 25%. However, JPM said the reserves would have been the same (as per the conference call). On a percent to total loans basis, JPM's provisions are 2.3%. What's important here is not the dollar level or even percentage, but the trend. If past trends hold, there is likely to be a significantly higher level of provisions, meaning that high yield bonds would be expected to decline.



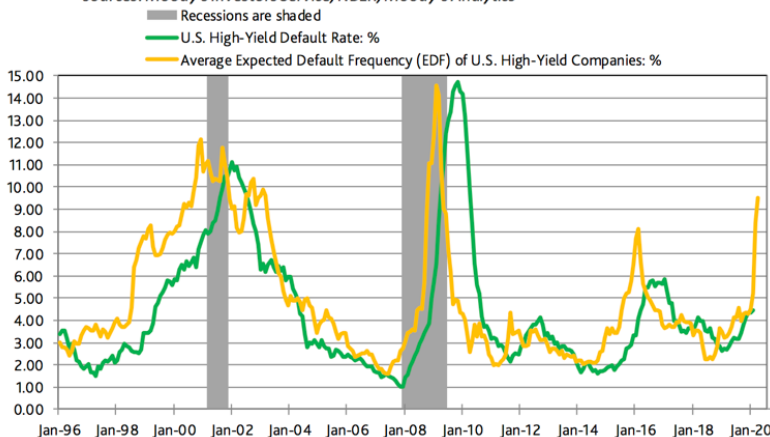
Source: ZeroHedge



5. **Rising Expected Default Frequency (EDF):** EDF is a credit measure that was developed by Moody's Analytics as part of the KMV model. EDF holds that a company defaults when the market value of its assets declines below its liabilities payable. EDF is calculated separately from Moody's ratings and is somewhat correlated with movements of an issuer's equity price. EDF rose rapidly to 10.6% on 3/18/20, then eased to 9.5% when the Fed announced its support of HY bonds. However, a statistical relationship shows that the present EDF level correlates with a higher default rate.

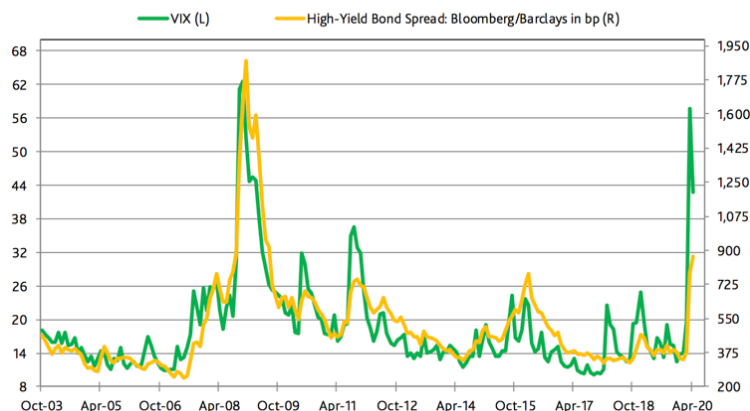
Figure 2: Average High-Yield Expected Default Frequency (EDF) Metric Now Favors an 8.4% Midpoint for December 2020's Default Rate

sources: Moody's Investors Service, NBER, Moody's Analytics



- 6. A high level of the CBOE VIX index:** The VIX is expected forward market volatility derived from options on the S&P 500. According to Moody's, persistently high (>40) readings of the VIX index "preserve the possibility of new highs for corporate bond yield spreads." The VIX hit a record high (>74 points) on 3/20/20 and has eased sharply since. However, past statistical relationships indicate that the high yield spread should be approximately 1,500bp which is far higher than today's level. Note that the model used to calculate EDF relies on options theory, which uses volatility. (Hence, there's some "double counting" here as EDF and the VIX move together.)

Figure 3: An Ultra-High VIX Preserves the Risk of a Wider Than 1,500 Basis Points High-Yield Bond Spread
sources: CBOE, Moody's Analytics



- 7. Rising level of downgraded credits:** The number of downgrades versus total rating actions at credit rating agencies is a reliable indicator of corporate stress. According to a 4/2020 S&P research report, the number of U.S. corporate downgrades rose to 301 and the share of downgrades rose to 90% (meaning only 10% were upgraded). Downgraded companies included several fallen angels such as Delta, Ford, Kraft-Heinz and Occidental Petroleum. More importantly, the Downgrade Potential list increased at an unprecedented rate (S&P's records go back to 1995). These are issuers that are on negative-creditwatch or have a negative outlook. It is worth noting that the industry sectors with downgrade potential aren't just Energy, Retail and Leisure but span a broad array of industries, implying that the economic damage is large.

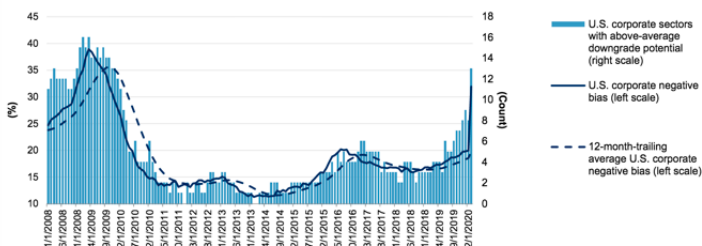
The U.S. Corporate Downgrade Ratio Reaches Recession Level



Note: Downgrade ratio is downgrades divided by total rating actions. Shaded areas are periods of recession as defined by the National Bureau of Economic Research. Data as of March 31, 2020. Source: S&P Global Ratings Research.

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Rising Downgrade Potential In The U.S. Is Spreading Across Sectors



Note: Negative bias is the percentage of ratings with negative outlooks or that are on CreditWatch with negative implications. Count of U.S. corporate sectors with above-average downgrade potential shows the number of sectors with a negative bias that is above the long-term negative bias for that sector. Source: S&P Global Ratings Research.

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- 8. The probability of lower equity prices:** I'm not trying to time the market. But one does wonder how the market can be just 12-15% from its all-time high and trading near its highest valuations (using forward P/E ratios) on record?! While it's true the market discounts the future, one month of decline seems too short for a bear market as economic data points and 1Q'20 earnings are only beginning to be reported. Despite an alphabet-soup of shaped recoveries postulated by economists, the market's V pattern is indicating investors expect a V-shaped recovery. Nevertheless, the unknown path to be taken by the Coronavirus warns against concluding that the worst is behind us. Since high yield bonds are highly correlated with equities, it's illogical to be bullish on stocks yet bearish on high yield. It is worth noting that stock market declines during recessions tend to destroy several years of market gains. This occurred during the recessions of 2009, 2002, 1982 and 1974.



Years since S&P 500 last so low

March 2009	12.5 years
Oct. 1974	10.8
Aug. 1982	2.3
March 1978	2.2
Feb. 2016	1.8
Dec. 1987	1.8
Dec. 2018	1.7
Oct. 1990	1.5
July 1984	1.4
March 2020	1.3
Oct. 2011	1.1

Note: Since 1962

Sources: Refinitiv, Prof. Robert Shiller

Conclusion

I think we can conclude with some probabilities. There's a high probability that the current weakness in GDP is worse than 2008. It can also be said that the Fed's and Congress' response have been stronger and quicker compared to past recessions. Still, a simultaneous global recession makes it doubtful that corporate bonds can return to their previous highs.

I believe the Fed will likely support ETFs **only** if they fall below a certain level (let's call the March low the "Strike Price") and in this manner we can consider this the Powell Put. On the high yield side, despite the Powell Put, there is more downside risk than upside; hence I would recommend either shorting HYG or avoiding the whole corporate bond market. One can buy a [AAA rated](#), coronavirus-resistant equity such as Johnson & Johnson and receive a 3% (recently raised) dividend. **So why take credit risk with corporate bonds?**

Be Safe Everyone !

