RAPIDLY SHIFTING TIDES IN THE ECONOMIC AND CREDIT CYCLE

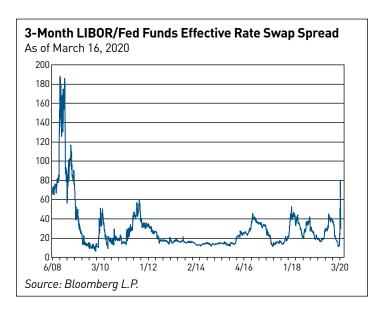
MARCH 17, 2020

Since our last update just two weeks ago, market volatility has surged, sparked by growing fear from the novel coronavirus (COVID-19) pandemic, leading to dislocations and material losses across virtually every asset class and region. While the domestic economy appeared to be on steady ground heading into this period, heightened risk aversion has caused the markets' collective focus to skew decidedly negative, as many participants seem to be searching for their footing. In our view, current consensus opinion points to the likelihood of a near-term, but short-lived recession with a sharp return to growth once we've successfully "flattened the curve" of new virus cases and life returns to normal. So it seems what markets are struggling to discount is the "unknown-unknown" we previously mentioned, or the breadth and depth of what happens in between.

In fixed income markets, liquidity has become challenged across a variety of asset classes. During the past week, we saw pronounced dislocations in the U.S. Treasury market, with rapid yield changes resulting in widening bid-offer spreads and pricing discrepancies between on-the-run and off-the-run securities. In addition, spreads on interest rate swaps remain highly volatile and imply building stress across core sources of funding and liquidity. Corporate treasurers appear to be quickly moving into liquidity preservation mode by drawing on credit facilities.

The Federal Reserve has moved decisively in the last two weeks to help keep capital markets functioning, unleashing substantial stimulus and liquidity-boosting measures. First, the Fed deployed two emergency policy rate cuts (March 3 and March 15), resulting in a cumulative 150 basis point (bp) reduction to the federal funds target rate range, which puts us back at the zero-bound. In addition, the Fed has significantly expanded the scope of the repurchase programs it launched last fall (\$1.5 trillion plus an emergency operation overnight on Monday for up to \$500 billion) while committing to unrestricted expansion of quantitative easing through purchases of U.S. Treasury securities (at least \$500 billion) and agency mortgage-backed securities (at least \$200 billion). Finally, on Tuesday, the Fed agreed to restart the Commercial Paper Funding Facility (CPFF) to ensure high-quality commercial paper issuers have uninterrupted access to the market.

In corporate credit, we've witnessed a pronounced re-pricing of risk, while funding availability has contracted. Corporate issuance in the term market has shifted to "catch as catchcan" tactics, while yields on commercial paper (in particular tier-two issuers) remain elevated. Liquidity in the secondary



market is challenged, and we are seeing considerable pressure on shorter maturities, which tend to exhibit more stable prices for a given change in spreads. The Bloomberg Barclays Credit Index widened by 65 bps last week and now exceeds widened spread levels from early 2016, which is also the last time oil prices were significantly pressured. The high-yield market is also under considerable stress, with yields on non-investment grade Energy sectors in the Credit Index above 20%, implying a significant near-term reckoning is underway.

Within the investment grade market, we've observed a more negative tone across a number of idiosyncratic situations and broader industries, such as auto manufacturing and retail, in the last 12 months. Throughout much of the recovery following the Great Recession and up until this point, financial conditions remained supportive of industrial firms carrying higher levels of leverage. Companies capitalized on a combination of low rates, narrow spreads, and healthy investor demand to maintain elevated levels of debt with minimal impact on their ability to service it. In addition, certain companies engaged in late-cycle acquisition activity that significantly increased their leverage, believing that through cost cutting and/or asset sales, their credit metrics would moderate. However, as we get into later stages of the economic and credit cycle, execution challenges for some of these highly levered issuers may be increasing.



RAPIDLY SHIFTING TIDES IN THE ECONOMIC AND CREDIT CYCLE

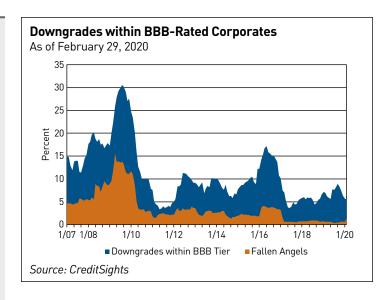
Energy Dealt a One-Two Punch

Prior to the most recent market developments, commodity prices were already under pressure due to concerns about slowing global growth and the potential impact of COVID-19, with oil trading into a bear market by late February. Unfortunately, the escalation of tensions between Russia and Saudi Arabia after OPEC+ production talks brokedown sent shock-waves through the capital structures of companies across the oil and gas markets. Debt spreads across both investment grade and high yield widened materially, producing significant negative excess returns.

Since the energy downturn in 2014-15, we saw many energy companies clean up their balance sheets and improve their credit metrics. In conjunction, we have focused our energy-related exposure on those issuers that we believe can perform well through the inevitable peaks and troughs of the commodity cycle, and the developments over the past weeks are no exception.

We seek to avoid highly levered issuers unless there is a clear credit improvement story. We have also avoided much of the acquisition financing over the past several years from heightened M&A in the sector. While the recent OPEC+ developments have increased market volatility, we are comfortable with our current energy holdings and will seek to opportunistically add to higher-quality issuers. That said, we will be closely watching how the ratings agencies respond to both supply and demand shocks and the potential implications for the credit profiles of oil-related issuers.

As of 3/13/20			
Index	<u>Duration</u>	Spread (bps)	Year-to-Date Excess Return
Bloomberg Barclays Credit Index	7.57	202	-8.4%
Bloomberg Barclays Investment Grade Energy Index	7.42	410	-20.6%
Bloomberg Barclays High Yield Energy Index	3.77	1,755	-35.4%
Source: Bloomberg Barclays			



We believe the tide could be turning for credit issuers, particularly as any concerns about forward fundamentals will likely be exacerbated by the current volatile environment. In our view, there is increasing execution risk that could lead to more aggressive downgrade activity during the fallout from COVID-19 and the sharp decline in oil prices. In many cases, we believe the rating agencies contributed to this cycle by taking a prospective view of these deals, resulting in higher ratings than what was historically consistent for the same level of leverage.

With BBB-rated issuers constituting approximately 50% of the overall corporate investment grade market (up from approximately 33% pre-crisis), investors are intently focused on the potential for adverse ratings actions to impact the sector. The transition of an investment grade issuer to high yield (commonly referred to as a "fallen angel") can create significant pricing dislocations and contribute to underperformance of that issuer relative to its peers. While still below historical averages, Moody's most recent default study forecasts an increase in fallen angels from 2% in 2019 to 3.3% in 2020. This view is consistent with industry research from CreditSights, which demonstrates relatively low, but rising downgrade activity.

One recent fallen angel example is Kraft Heinz Company, which is notable in that the ratings agencies reacted almost immediately to a poor earnings report. Management avoided more aggressive tactics to reach leverage targets consistent



RAPIDLY SHIFTING TIDES IN THE ECONOMIC AND CREDIT CYCLE

with investment grade ratings. Now the company has the distinction of being third-largest fallen angel ever and the second-largest issuer within the ICE BofAML U.S. High Yield Index.

We Are Cautious Amid Volatility, but Confident in Our Process

As the country moves from social distancing towards increasing degrees of isolation, the near-term shock will have an acute impact across the economy, both in specific and readily identifiable sectors such as travel, leisure, and discretionary retail, as well as areas that take time for the effect to surface. Because volatility remains elevated, we are cautious of making large changes to portfolio risk allocations as we focus on preserving liquidity and capital for our

clients. That said, we are seeing better risk symmetry across a variety of sectors and issuers. Within corporate credit, we believe subsector allocation and issuer selection decisions will become an increasingly important source of alpha for our clients, particularly if downgrade activity continues to rise. When risk appetites weaken and investors are more discerning in allocating capital, we've learned success can be driven by what you don't own as much as by what you do own, as well as your discipline to pull the trigger on a great opportunity or pull the plug when an investment thesis no longer holds. We will continue to employ our disciplined, risk-focused process that we believe has positioned us well for the challenges we face in the coming months.

Presentation of Performance of Market Indices

Definitions for various indexes referenced herein can be accessed here https://www.pnc.com/en/personal-banking/investments-and-retirement/index-catalogue.html. Indices are unmanaged, not available for direct investment, and not subject to management fees, transactions costs or other types of expenses than an account may incur.

Important Disclosures

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, "Barclays"), used under license. Bloomberg or Bloomberg's licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

This publication is for informational purposes only. Information contained herein is believed to be accurate, but has not been verified and cannot be guaranteed. Opinions represented are not intended as an offer or solicitation with respect to the purchase or sale of any security and are subject to change without notice. Statements in this material should not be considered investment advice or a forecast or guarantee of future results. To the extent specific securities are referenced herein, they have been selected by the author on an objective basis to illustrate the views expressed in the commentary. Such references do not include all material information about such securities, including risks, and are not intended to be recommendations to take any action with respect to such securities. The securities identified do not represent all of the securities purchased, sold or recommended and it should not be assumed that any listed securities were or will prove to be profitable. Past performance is no guarantee of future results.

PNC Capital Advisors, LLC claims compliance with the Global Investment Performance Standards (GIPS®). To receive a list of composite descriptions of PNC Capital Advisors, LLC and/or a presentation that complies with the GIPS® standards, please send an email to pcacompliancegroup@pnc.com.

PNC Capital Advisors, LLC is an indirect subsidiary of The PNC Financial Services Group, Inc. PNC Capital Advisor's strategies and the investment risks and advisory fees associated with each strategy can be found within Part 2A of the firm's Form ADV, which is available at https://pnccapitaladvisors.com.

© The PNC Financial Services Group, Inc. All rights reserved.

INVESTMENTS: NOT FDIC INSURED - NO BANK GUARANTEE - MAY LOSE VALUE

