

Credit/Equity Strategy

The Credit Crunch of 2020

Stocks: risks to EPS and DPS, but this is not 2008

We expect S&P 500 earnings and EPS to decline 15% YoY in 2020, assuming some resumption of “business as usual” in the 2H. We believe Energy is likely to see the biggest earnings and dividend hits. Health Care earnings are likely to hold up best (but keep in mind that Health Care is one of the few sectors where leverage is higher than in 2008.) We expect no net buyback benefit – corporates are beginning to suspend programs already – and more dividend cuts: our analysts cite risks in >30 S&P 500 companies (nearly 10% of covered dividend payers). Refinancing risk is greatest in S&P 500 Consumer Discretionary, which has the shortest weighted average debt maturity of the 11 sectors. But this is not 2008/09: most S&P 500 companies have locked in long-dated (~9yrs avg.) debt obligations; and Financials leverage is half of where it was in '08.

Point of credit pain: Russell 2000 & preferreds

Small cap EPS will likely be hit harder – the average Russell 2000 earnings recession is a ~30% decline vs. ~20% for the S&P 500. Balance sheet/refinancing risks are most acute for small caps amid record leverage and shorter average debt maturities, and at the sector level, refinancing risk is greatest in Energy. Rising HY spreads pose particular risk to small caps, where ~70% of debt is HY vs. <10% for large caps. In both segments, we would focus on high quality stocks and those with secure dividends and avoid levered stocks with refinancing risk (see our large/small cap screens). Preferreds have also been hit hard amid the risk-off backdrop/credit concerns. While we don't think the current downturn will be as dramatic as the ~65% decline during the Financial Crisis, more downside is possible.

IG Credit Strategy: Adding another large buyer of IG

The new Primary Market Corporate Credit Facility (PMCCF) and Secondary Market Corporate Credit Facility (SMCCF) directly address the two main causes of stress in the IG corporate bond market. Under the PMCCF, IG rated companies can issue directly to the Fed, which eventually removes liquidity risk for large, solvent US IG companies. The SMCCF is designed to buy maturities five years and shorter (~40% of IG), or potentially a broader range of maturities via IG corporate bond ETFs. Although today's action is the ultimate Band-Aid to strains in IG, there is nothing the Fed can do about the underlying reason for the liquidity crisis – that the pandemic has everyone scrambling for cash.

HY Credit Strategy: The Credit Cycle Has Turned

Events played out at a dizzying speed in the last several weeks, making even 2008 parallels pale in comparison to the situation at hand. The leveraged finance credit has come under enormous pressure, with HY spreads exceeding 1,000bps this week, and braking all historical records in terms of the speed of their ascent from low 300s. We now think this credit cycle has turned and expect defaults to reach 9% for overall HY and 6% ex-energy. Fallen angel downgrades are likely to increase going forward, reaching \$200bn/yr, in our estimate. With this backdrop in mind, we think spreads are reflecting this fundamental weakness to a considerable degree, and recommend continued increase in portfolio credit risk here.

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Refer to important disclosures on page 17 to 19.

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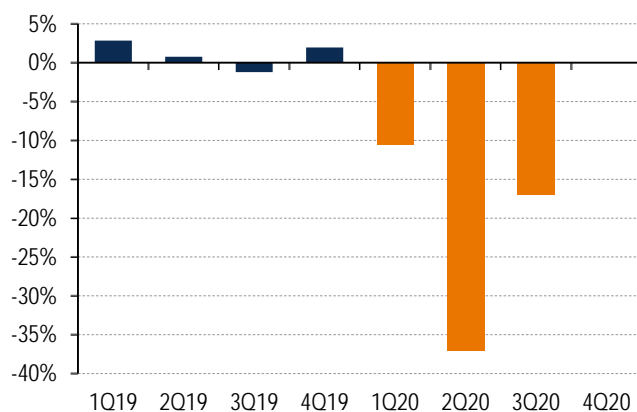
US Equity Strategy

Economic recession = earnings recession

Our economists expect a meaningful [recession](#), and our S&P 500 2020 [EPS forecast](#) reflects this: our 2020 forecast of \$138, -15% YoY. 2Q will likely represent the trough in growth (Chart 1) assuming some resumption of business as usual in the second half. Energy and Financials should see the worst earnings declines, whereas Health Care earnings will likely hold up best (Chart 2). But as we note below, note that Health Care has more leverage today vs. in 2008.

Chart 1: We expect earnings growth to trough in 2Q20

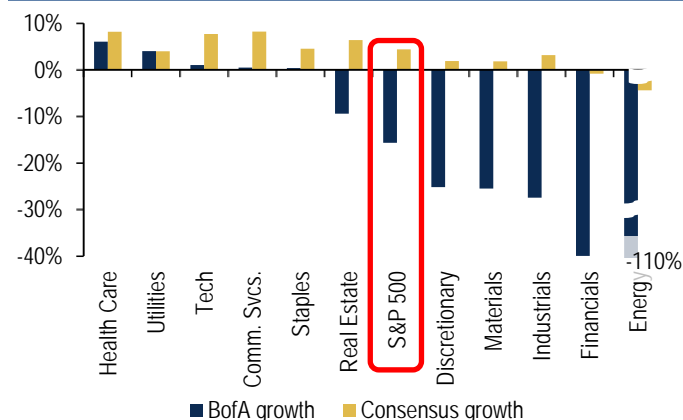
S&P 500 quarterly YoY EPS growth: 1Q19-4Q20E (orange = BofA US Strategy forecasts)



Source: BofA US Equity & Quant Strategy, FactSet

Chart 2: Our earnings forecast is well below consensus, particularly for cyclicals, where we bake in a recession in 2020

S&P 500 earnings growth forecast in 2020 (BofA Strategy vs. consensus)



Source: BofA US Equity & Quant Strategy, FactSet

This is not 2008/09

As we discuss later in the section, most S&P 500 companies have locked in long-dated (~9yrs avg.) debt obligations. And Financials leverage is half of where it was in '08. Note that while we expect Health Care earnings will likely to hold up best during the current earnings recession, keep in mind that Health Care is one of the few sectors where leverage is higher than in the last cycle.

Table 1: 2020 EPS recession vs. 2001 and 2008/09

YoY %	2001	2008	2009	2020E
Tech	(275.4%)	1.9%	5.5%	1.0%
Health Care	3.9%	6.6%	2.6%	6.0%
Discretionary	(59.3%)	(48.7%)	42.2%	(25.2%)
Staples	(12.0%)	(1.2%)	3.0%	0.4%
Industrials	2.1%	(13.1%)	(33.2%)	(27.5%)
Financials	1.3%	(115.1%)	(349.4%)	(40.0%)
Energy	(14.0%)	16.6%	(58.3%)	(109.7%)
Comm. Svcs.	(11.5%)	(1.7%)	(12.4%)	0.5%
Materials	(59.3%)	(5.7%)	(23.9%)	(25.5%)
Utilities	12.1%	8.8%	(3.2%)	4.0%
Real Estate	28.9%	(9.4%)	(6.7%)	(9.4%)
S&P 500	(13.8%)	(23.0%)	(3.2%)	(15.3%)

Source: BofA US Equity & Quant Strategy, FactSet

Note: Based on current constituents

Energy = biggest loser; Financials = better than GFC

The 15% YoY decline we forecast for 2020 falls right in the range between 2001's -14% and 2008's -23%, but it looks very different at a sector level.

We think Energy will be the biggest loser in this downturn, while Financials, the biggest loser during the financial crisis, will likely fare better given the much improved balance sheets. Health Care earnings should hold up best, though we note that Health Care is one of the few sectors where leverage is higher today vs. '08 (chart below).



Chart 3: Financials sheets are healthier: Financials' total assets-to-equity ratio stands at record lows

S&P 500 Financials: Total Assets/Equity (1987-present)



Source: FactSet, BofA US Equity & Quant Strategy

Chart 4: One risk to Health Care: leverage is >2x today vs. ~0.5x in 2008

Health Care Net Debt to EBITDA, 1986-present



Source: FactSet, BofA US Equity & Quant Strategy

Small cap earnings get hit harder during EPS recessions

During a “typical” earnings recession, S&P 500 earnings have declined ~20% peak-to-trough. Small cap earnings are hit harder, typically falling ~30% peak-to-trough.

Table 2: Historical avg/median earnings recessions for large caps vs. small caps

Based on S&P 500 data since 1935 and Russell 2000 data since 1989

	S&P 500	Russell 2000
Median earnings recession	-17%	-27%
Avg. earnings recession	-19%	-36%

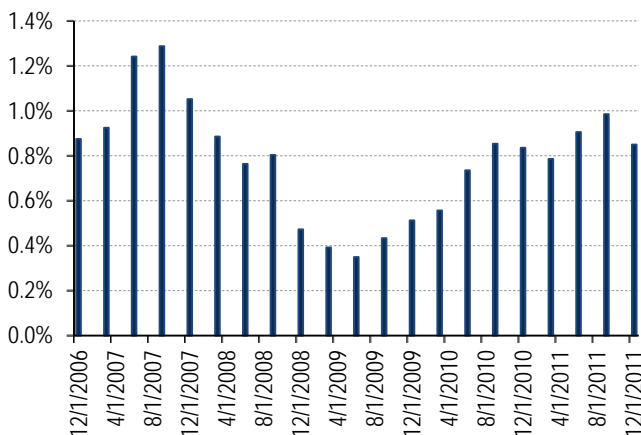
Source: BofA US Equity & Quant Strategy, FactSet

Slowing buybacks: expect no net EPS benefit in 2020

Buybacks are pro-cyclical—they peaked just before the 2007 market peak and troughed one quarter after the market in '09 (Chart 5). Our [corporate client flows](#) show lower buybacks since COVID-19 (Chart 6); Banks, Hotels, and others have begun to announce buyback suspensions as they focus on balance sheet. With a forecast economic downturn and elevated corporate leverage, we expect this to dampen the pace of buybacks (Chart 7). Our S&P 500 2020 EPS forecast incorporates no net buyback benefit vs. the 1-2ppt benefit of recent years (Chart 8).

Chart 5: Buybacks peaked/troughed with the market last cycle

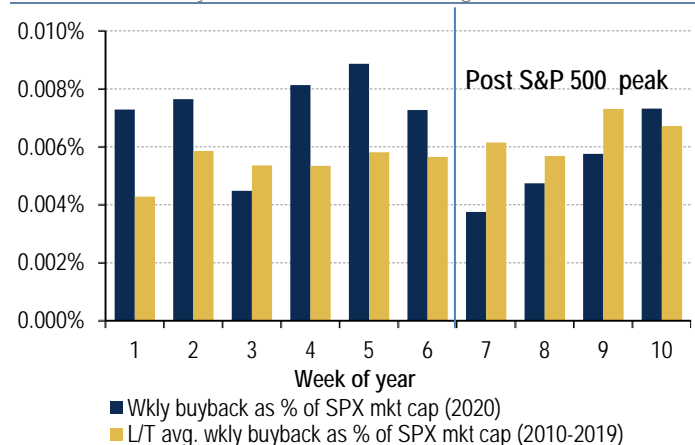
S&P 500 quarterly gross buybacks as a % of index market cap (12/2006-12/2011)



Source: Haver Analytics/S&P, BofA US Equity & US Quant Strategy

Chart 6: Our corp client buybacks have been weaker than avg. post-peak

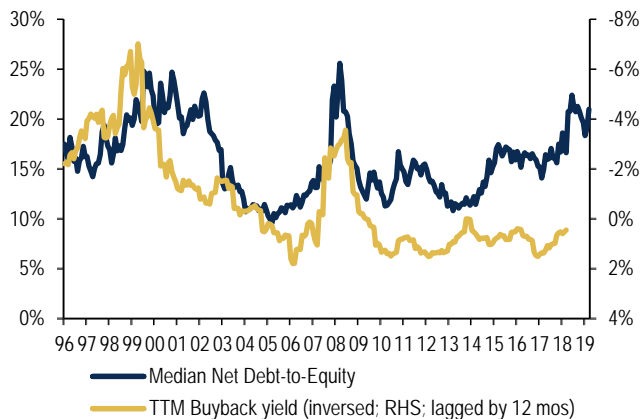
BofA Securities corporate client weekly buybacks as % of S&P 500 mkt. cap – first 10 weeks of the year in 2020 vs. 2010-2019 avg.



Source: BofA Securities, BofA US Equity & US Quant Strategy

Chart 7: We expect rising leverage and the focus on balance sheet amid the economic downturn to dampen the pace of buybacks

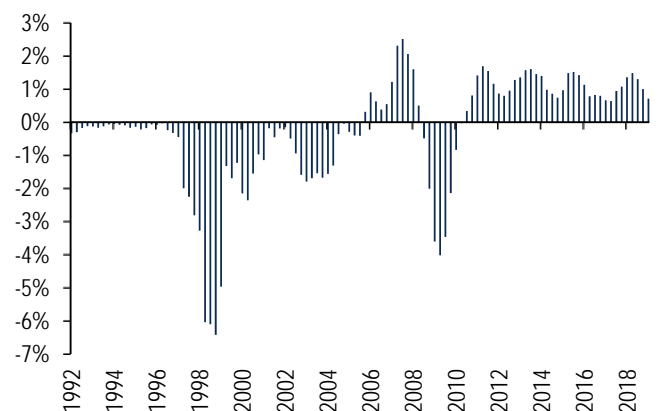
S&P 500 median net debt/equity vs. buyback yield w/ 12m lag (inverted), 1996-now



Source: FactSet, BofA US Equity & Quant Strategy

Chart 8: Buybacks have contributed 1-2ppt/yr to S&P EPS growth over the last five years, but in 2020 we expect no net benefit

S&P 500 net buyback (net issuance) impact to EPS growth (YoY, 1992-4Q19)



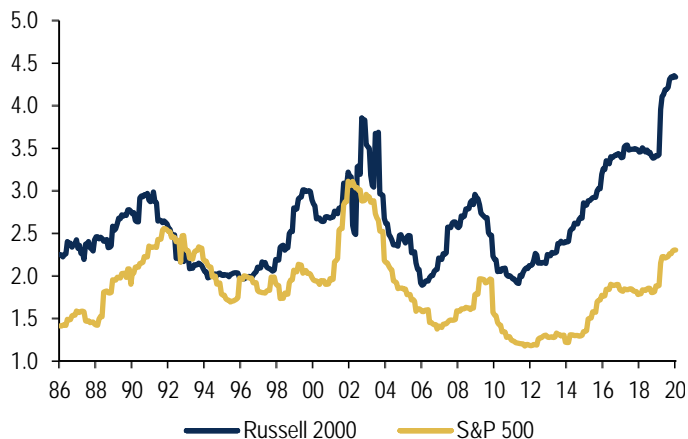
Source: FactSet, BofA US Equity & Quant Strategy

For small caps, risks are greater: more leverage/re-fi risks

Small caps have record leverage, with net debt/EBITDA well above levels heading into prior recessions as small caps have thrived on access to cheap capital post-crisis. Large cap leverage is also above highs of the last cycle, though below all-time records (Chart 9). Another risk to small caps amid a downturn/turn in the credit cycle: more refinancing risk, with shorter average debt maturities vs. large caps (~5yrs vs. ~9yrs, Table 3). The lowest maturities are in Energy within small caps and Consumer Discretionary in large caps. For levered stocks with refinancing risk, see our recent stock screens in both [large caps](#) and [small caps](#).

Chart 9: Corporate leverage has been rising, and is extreme in small caps

Russell 2000 vs. S&P 500 non-Financials net debt/EBITDA, 1986-now



Source: FactSet, BofA US Equity & US Quant Strategy

Table 3: Small caps have shorter average debt maturities

S&P 500 vs. Russell 2000 weighted average debt maturities by sector (as of 2/2020)

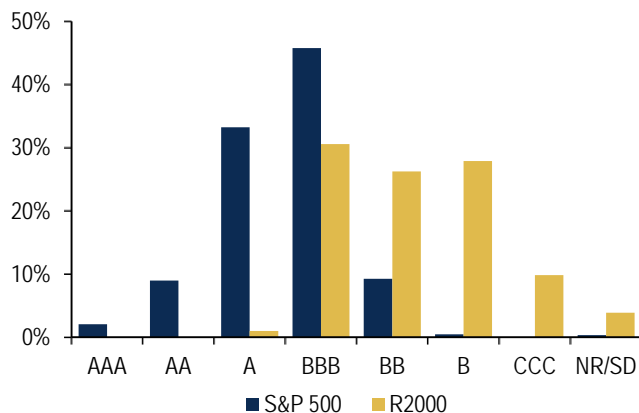
Estimated Weighted Avg Maturity (Years)		
Sector	Russell 2000	S&P 500
Comm. Svcs.	5.2	11.1
Cons. Disc.	5.2	5.5
Cons. Staples	4.2	7.4
Energy	4.1	9.1
Health Care	4.2	8.8
Industrials	4.6	7.2
Technology	4.2	8.3
Materials	4.3	8.0
Utilities	10.6	13.1
Total	5.1	8.7

Source: FactSet, BofA US Equity U US Quant Strategy

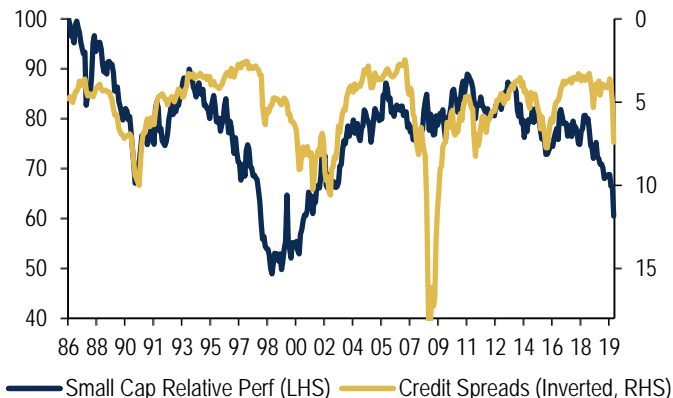
And rising high yield credit spreads pose risk to small caps

Nearly 70% of small cap debt is high yield, vs. <10% of large cap debt, a risk as spreads widen (Chart 10). Small caps' relative performance is historically negatively correlated with high yield credit spreads, which have now widened to 900bp (Chart 11). Note that we moved to a more [cautious stance](#) on small caps earlier this month.



Chart 10: Large vs. small caps by credit rating

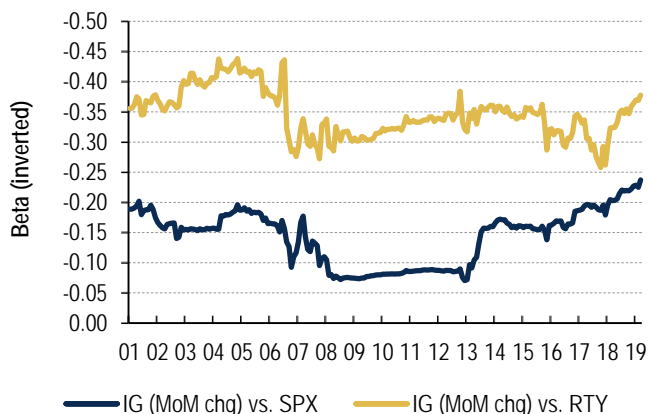
Source: FactSet, BofA US Equity U US Quant Strategy

Chart 11: Russell 2000 relative performance (vs. Russell 1000) and high yield credit spreads (H0A0 Index OAS, inverted), 1986-present

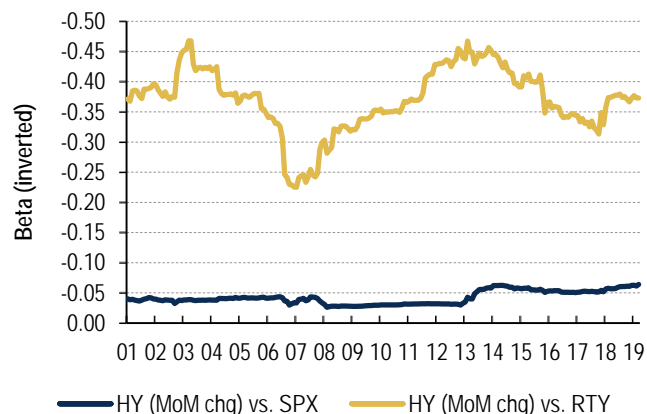
Source: ICE BofA, Bloomberg, BofA US Equity & US Quant Strategy

Betas/correlations to credit spreads have risen

Equities have become increasingly sensitive to credit spreads – the rolling 5-year betas and correlations of both the S&P 500 and the Russell 2000 to IG and HY credit spreads are at or near multi-decade highs (charts below).

Chart 12: 5yr beta: equity performance vs. changes in IG credit spreads (S&P 50 and Russell 2000), 2001-present

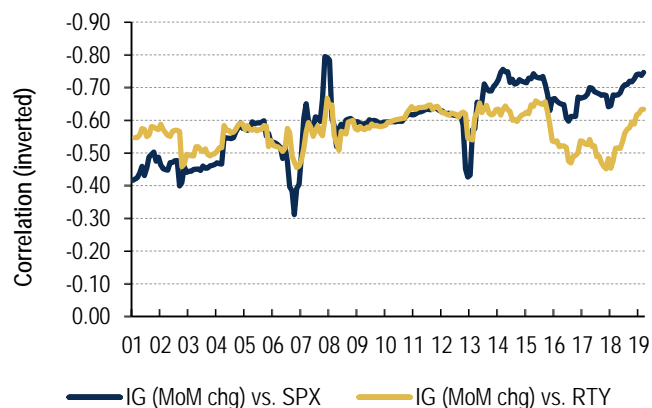
Source: Bloomberg, BofA US Equity & US Quant Strategy

Chart 13: 5yr beta: equity performance vs. changes in HY credit spreads (S&P 50 and Russell 2000), 2001-present

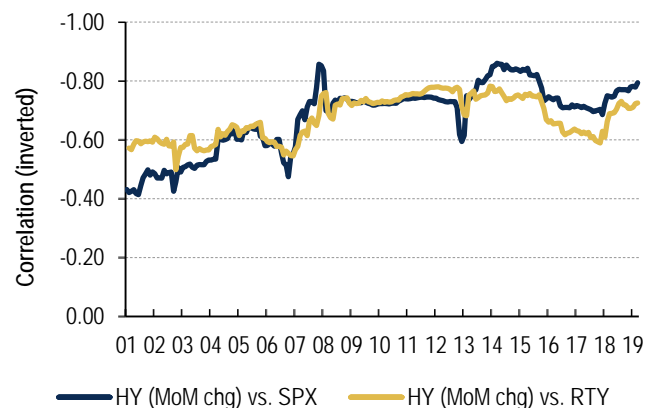
Source: Bloomberg, BofA US Equity & US Quant Strategy

Focus on dividend safety

Dividend cuts are picking up, and our analysts now rate the dividends as unsecure for 6% of total S&P 500 companies (or 9% of covered dividend-paying large caps), and 2% of total Russell 2000 companies (or 25% of covered dividend-paying small caps). By sector, dividends are most at risk Energy, Discretionary and REITs in both size segments (Table 4-Table 5). We recommend investors focus on high quality companies with low leverage and payout ratios where dividends are less likely to be at risk. See our [Theme Screens](#) for ideas plus our latest [SMID cap factor screen](#).

Chart 14: 5yr rolling correlation: equity performance vs. changes in IG credit spreads (S&P 50 and Russell 2000), 2001-present

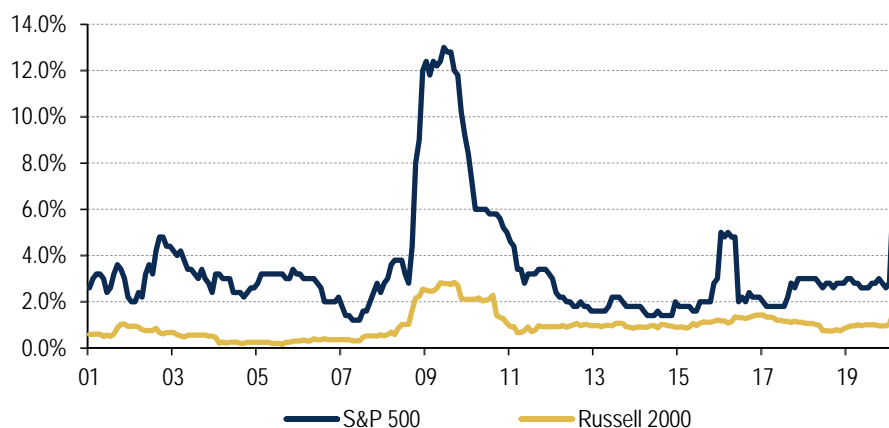
Source: Bloomberg, BofA US Equity & US Quant Strategy

Chart 15: 5yr rolling correlation: equity performance vs. changes in HY credit spreads (S&P 50 and Russell 2000), 2001-present

Source: Bloomberg, BofA US Equity & US Quant Strategy

Chart 16: Stocks with unsafe dividends on the rise

% of total S&P 500 and Russell 2000 stocks with an "8" (unsecure) dividend rating by BofA as of 3/20/20



Source: BofA Global Research, BofA US Equity & US Quant Strategy

Table 4: 9% of BofA-covered S&P 500 div payers are rated 8 (unsecure dividend)

Sector	Total Co's	Covered co's	Covered div payers	Unsecure divs (8)	Unsecure divs as % of covered div payers
Communication Services	26	23	11	0	0%
Consumer Discretionary	64	58	44	10	23%
Consumer Staples	33	29	29	2	7%
Energy	28	28	28	9	32%
Financials	66	49	48	0	0%
Health Care	60	52	32	0	0%
Industrials	70	54	50	1	2%
Information Technology	71	59	41	3	7%
Materials	28	26	26	2	8%
Real Estate	31	30	29	4	14%
Utilities	28	28	28	1	4%
S&P 500	505	436	366	32	9%

Source: BofA Global Research, BofA US Equity & US Quant Strategy

Table 5: 25% of BofA-covered Russell 2000 div payers are rated 8 (unsecure dividend)

Sector	Total Co's	Covered co's	Covered div payers	Unsecure divs (8)	Unsecure divs as % of covered div payers
Communication Services	71	7	2	1	NM
Consumer Discretionary	213	56	23	8	35%
Consumer Staples	58	5	1	0	NM
Energy	112	30	6	2	33%
Financials	400	28	22	5	23%
Health Care	427	69	3	1	NM
Industrials	259	34	15	2	13%
Information Technology	210	26	4	0	NM
Materials	73	8	5	1	20%
Real Estate	112	35	30	10	33%
Utilities	37	11	10	0	0%
Russell 2000	1972	309	121	30	25%

Note: NM for sectors with <5 covered stocks that pay a dividend

Source: BofA Global Research, BofA US Equity & US Quant Strategy



Preferreds have suffered along with broader risk assets

Less downside than equities but more downside than credit since S&P peaked

Similarly to most other asset classes, preferred markets have seen a period of remarkable volatility in recent weeks, with record daily moves: the \$25 par market (POP4 index) declined 16.1% on 3/18, the worst day in our history since 1989. Subsequently, on 3/19 and 3/20, the index jumped 10%, recovering much of the 3/18 loss. Since the start of the selloff (Feb. 19 market peak), the index lost 22.7% of its value, retracing over three years' worth of gains. The worst-performing segments in the sell-off were Foreign preferreds (-30.1%); meanwhile, Hybrids, DRD Eligible preferreds and REITs declined least (-19.0% to -20.0% losses). Year-to-date, the \$25 par market is down 21.8%.

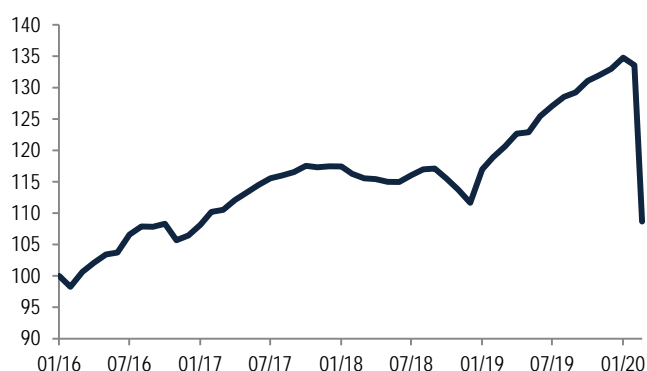
The \$1000 par index (the combination of Investment Grade (CIPS) and High Yield (HIPS) Capital Securities indices) saw price moves of similar magnitude – the index is -20.4% since 2/19 and -18.3% so far this year. For comparison, Investment Grade bonds (COAO Index) are -12.7% since 2/19 and -10.4% YTD, while High Yield bonds (HOOA Index) are -19.7% since 2/19 and -18.7% YTD.

Chart 17: \$25 par total return index saw a 22.7% decline since 19 Feb.



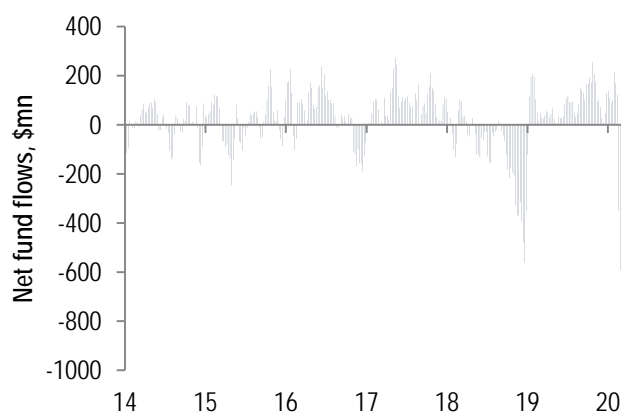
Source: BofA Global Research, Bloomberg, LLP

Chart 18: \$1000 par total return index lost 20.4% since 19 Feb.



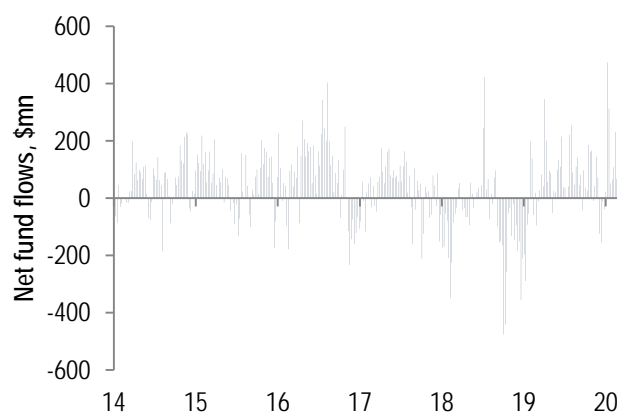
Source: BofA Global Research, Bloomberg, LLP

Chart 19: Preferred mutual funds saw record three week outflows



Source: BofA Global Research, EPFR

Chart 20: Preferred ETFs saw lost a record \$513mn in the week ending 3/18



Source: BofA Global Research, EPFR

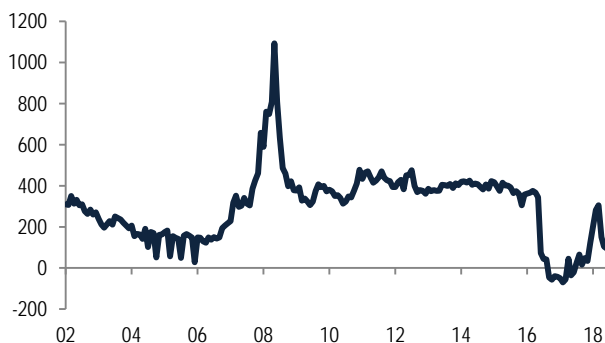
Redemptions/credit concerns have plagued preferreds, but opportunity emerges

As market participants have scrambled for liquidity in the face of the uncertainty caused by the coronavirus spread shutting down of large swaths of the economy, investors have shed exposure to all kinds of risk assets, including preferreds. Outflows from preferred mutual funds and ETFs accelerated in March, as mutual funds lost \$776mn in assets in the three weeks ending 3/18, the greatest amount in our data history since 2014, while

ETFs lost \$1,004mn for the same period (with a record \$513mn weekly outflow of funds occurring in the last week).

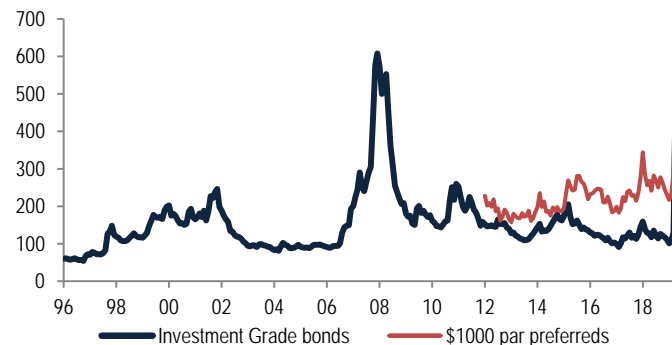
The selloff leaves preferreds at distressed valuation levels: the \$25 par market spread jumped to 675bps, a level last seen in 2009. The \$1000 par spread widened to 513bps, the widest in our data history since 2012. We compare this level of spreads to Investment Grade bonds (COAO index) spreads, which widened to 387bp (widest since 2009), and assume that the \$1000 par market trades at historically comparably (i.e. the Financial Crisis comparable) distressed levels. Credit spread levels haven't reached the peak of the Financial Crisis era, but this downturn is not stemming from the financial industry. In fact, our Banks research team doesn't see a [risk to current dividends](#) with banks' high capital and liquidity levels. Preferreds' heavy exposure to Financials (over 60%) might help mitigate credit losses in this downturn, as default risk to large Financials was much higher in 2008/2009.

Chart 21: \$25 par spread to worst



Source: BofA Global Research, Bloomberg, LLP

Chart 22: \$1000 par spread to worst vs Investment Grade Bonds spreads



Source: BofA Global Research, Bloomberg, LLP

For long-term investors, current depressed valuation levels of preferreds might present a good entry point, in our view. However, while the policy response has been unprecedented, it has failed to quell the equity and preferred markets, as of the time of this writing, and more volatility might be seen in coming weeks, creating relative value within the market, which we intend to highlight in our ongoing research.

On 23 March the Fed announced a number of new liquidity facilities, including “the Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds.” The \$1000 par market (which generally tends to trade in closer association with corporate bonds than the \$25 par market does) appears to be enjoying the benefits of the new liquidity facilities, along with the corporate bonds, as both market are up after the announcement, while the \$25 par preferreds continued to slump.

IG Credit Strategy

Adding another large buyer of IG

The new Primary Market Corporate Credit Facility (PMCCF) and Secondary Market Corporate Credit Facility (SMCCF) directly address the two main causes of stress in the IG corporate bond market – supply pressure and record outflows. Under the PMCCF, IG rated companies can issue directly to the Fed, which eventually removes liquidity risk for large, solvent US IG companies. The SMCCF is designed to buy maturities five years and shorter (~40% of IG) in the secondary US IG corporate bond market, or potentially a broader range of maturities via IG corporate bond ETFs. Although today's action is the ultimate band-aid to strains in IG, there is of course nothing the Fed can do about the underlying reason for the liquidity crisis – that the COVID-19 pandemic has everyone scrambling for cash.



Each program is funded initially with \$10bn equity, which then typically can be leveraged 10x. However, the stimulus package included \$425bn additional capacity for the Fed to inject leverage-able equity across its programs. Properly capitalized we estimate the PMCCF provides \$719bn of additional borrowing capacity for US IG companies (on top of potentially large scale refinancings) while the size of the SMCCF could reach as much as \$547bn. Clearly more equity would make them more credible.

Our key concern is that it will take some time before the Fed has developed details of the new programs, and are set to begin actual purchases. However, hiring a money manager or even starting to buy ETFs this week would send a strong signal and encourage other investors to take the other side of recent relentless selling. Seeing one or two large US IG companies issue to the Fed's primary facility would be helpful as well. However, in either case we expect a very gradual normalization over time of strains in the IG corporate bond market including tighter credit spreads and steeper maturity spread and quality curves. Perhaps the most important development would be to see improvement in the underlying driver of the present liquidity crisis – COVID-19.

SMCCF

Under the announced Secondary Market Corporate Credit Facility (SMCCF), we estimate an eligible universe of \$2,479bn of individual corporate bonds in the US including banks and brokers and \$1,785bn excluding them as eligible for purchase, of which \$515bn including banks and brokers and \$417bn excluding them could be purchased with the 10% by issuer limit (Figure 1, Figure 2). Note the Fed's document does not explicitly exclude banks and brokers. We do not expect the Fed to buy bank bonds, except as part of broader ETFs. US listed ETFs with broad exposure to the IG corporate bond market are also eligible under SMCCF, currently sized at \$140bn with 20% of that or \$28bn eligible to be purchase with the by ETF asset limit (Figure 3).

Figure 1: SMCCF eligibility criteria

Individual corporate bonds

1. Rated at least BBB-/Baa3 (by at least one major NRSRO, two or more if rated by multiple NRSROs);
2. Have a remaining maturity of five years or less;
3. Issued by U.S. businesses with material operations in the U.S.* We interpret this statement as bonds from issuers with US country of risk and material US revenue share (at least 5%).
4. "Eligible issuers do not include companies that are expected to receive direct financial assistance under pending federal legislation."

Corporate bond ETFs

1. US-listed;
2. Investment objective is to provide broad exposure to the US IG corporate bond market.

Maximum purchase limits

1. 10% for any eligible issuer's maximum bonds outstanding on any day between 3/22/2019 and 3/22/2020;
2. 20% of the assets of any particular ETF as of 3/22/2020.

Source: Federal Reserve

Figure 2: Individual corporate bond universe eligible for SMCCF

Individual corporate bond categories	Estimated amount (\$bn)
Eligible universe	2,479
With 10% by issuer limit	519
Eligible universe, excluding banks & brokers	1,785
With 10% by issuer limit, excluding banks & brokers	422

Note: Includes 0-5 year IG corporate bonds from US issuers with at least 5% of US revenue share, at least \$250mn notional outstanding, both fixed and floating rated, and no more than 10% of maximum total bond outstanding per issuer between 3/22/2019 and 3/22/2020. NEM, PM and QCOM are excluded due to material operations outside the United States.

Source: Federal Reserve, ICE Data Indices, LLC, Bloomberg Barclays, BofA Global Research

Figure 3: Corporate bond ETF universe eligible for SMCCF

ETF categories	AUM as of March 20, 2020 (\$bn)
Short Term Corporate Bond ETF	63
Intermediate Term Corporate Bond ETF	41
Long Term Corporate Bond ETF	36
US IG Corporate Bond ETF AUM	140
20% of AUM Eligible for SMCCF	28

Source: EPFR Global, BofA Global Research

PMCCF

Under the announced Primary Market Corporate Credit Facility (PMCCF) US IG issuers can borrow directly from the Fed in the form of either loans or bonds with maturities of up to 4 years. The borrowing rate will be based on the market plus 100bps “commitment fee,” suggesting the program is intended as a backstop. Crucially such backstop means companies can be more measured and patient in terms of when they come to the primary market. In terms of size companies participating in the PMCCF can increase total borrowing relative to the maximum over the last 12M by 40% for AAA-rated issuers all the way down to 10% for BBB-rated issuers (Figure 4). We estimate the Fed can provide US IG non-financial issuers with an additional \$719bn of debt through PMCCF, on top of \$4.8tr of existing debt outstanding as of 4Q-19 (Figure 5).

Figure 4: Summary of Primary Market Corporate Credit Facility (PMCCF)

Category	Description
Eligible companies	US IG issuers with “with material operations” in the US
Bond and loan maturity	Up to 4 years
Amount	Under the program debt can not to exceed the following share of the max debt over the last 12M: 140% for AAA issuers, 130% for AA issuers, 120% for single-A issuers and 110% for BBB issuers.
Interest rate	Market rate + 100bps commitment fee

Source: Federal Reserve

Figure 5: Size of Primary Market Corporate Credit Facility (PMCCF)

Average rating	Non-financial US IG issuer debt (4Q-19, \$bn)	Fed additional debt limit	Fed additional debt maximum amount (\$bn)
AAA	116	40%	46
Double-A	385	30%	115
Single-A	1,274	20%	255
BBB	3,024	10%	302
Total	4,799		719

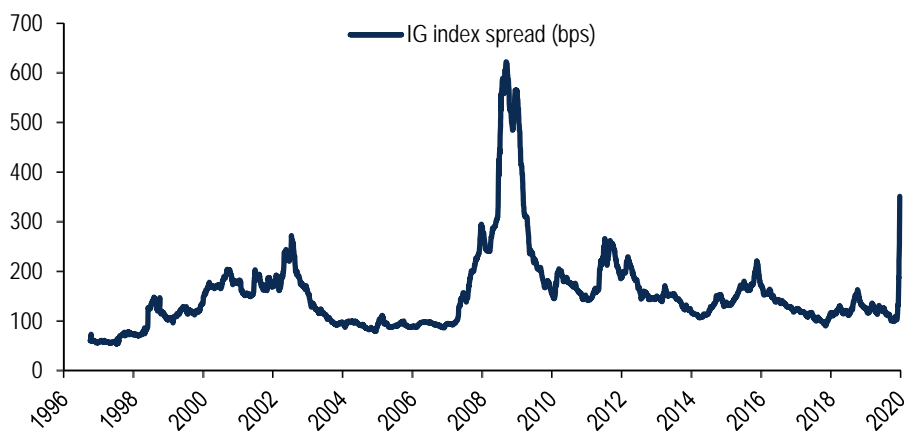
Source: BofA Global Research

Super cheap

At 351bps US IG corporate bonds present an opportunity for long term investors, in our view – only during the financial crisis were spreads wider but back then – unlike now – there was a lot of default risk in IG due to the large financial sector (Figure 6).

Foreigners are beginning to recognize that and are buying in size (**Error! Reference source not found.**). We also note relative value to HY with the ratio of spreads have declined to 2.8x from 3.9x this month instead of the normal recession reaction, which would be an increase. But in the short term, the market is broken. Record outflows triggered by plunging bond prices and heavy supply pressures – both due to the liquidity crisis.

Figure 6: A unique buying opportunity for long term investors



Source: ICE Data Indices, LLC

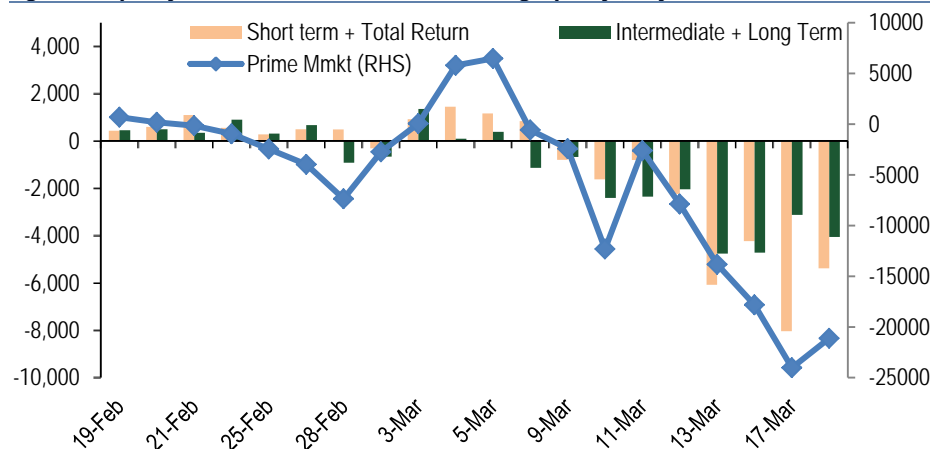
Flattening the quality curve

To be clear, there are two major developments right now wreaking havoc on the US IG corporate bond market. The first is an economic recession, which always translates into declining credit quality, defaults and much wider credit spreads and normally HY underperformance relative to IG. The second major issue is that investors, companies and people need cash because the US economy is being shut down for an unknown period of time. That means liquidating cash-like positions, translating into large



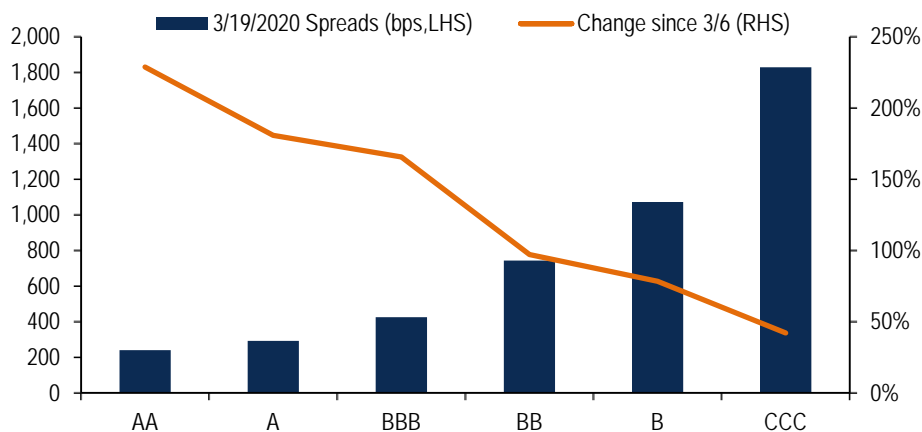
outflows from prime money market and short term/total return IG bond funds. We showed on Tuesday how this led to a significant flattening in the IG corporate bond spread curve and thus underperformance of the safest paper ([Situation Room 17 March 2020](#)). From a credit quality perspective, the current liquidity crisis has also led to massive underperformance of higher rated corporate bonds, as spreads for A-rated paper widened 181% since Friday, March 6th while CCCs are only 42% wider (Figure 8). In contrast orderly spread changes tend to be similar percentages across ratings.

Figure 7: Liquidity crisis led to record outflows from high quality (daily IG bond fund/ETF flow, \$mn)



Source: Crane, Epfr Global, BofA Global Research

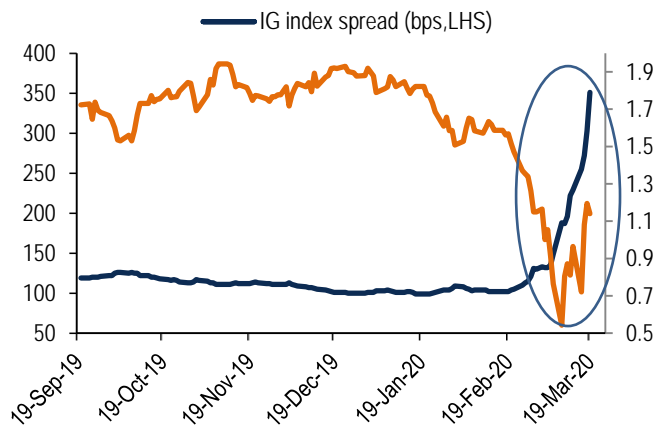
Figure 8: Dramatic underperformance of highly rated corporate bonds



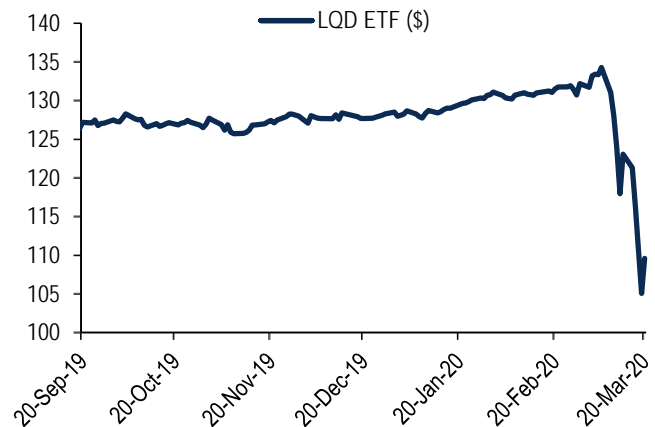
Source: ICE Data Indices, LLC, BofA Global Research

Plunging bond prices drive record outflows out the curve

To make matters worse the COVID-19 induced liquidity crisis means selling everything including Treasuries. Hence, the last two weeks we have seen a large increase in interest rates (and not the offsetting decline normally expected given negative macro) and significant credit spread widening (Figure 9), which combined led to plunging bond prices (Figure 10) and, as we argued Wednesday (see: [Situation Room 18 March 2020](#)), triggered record IG bond fund and ETF outflows also out the curve.

Figure 9: Higher (not lower) rates, wider credit spreads

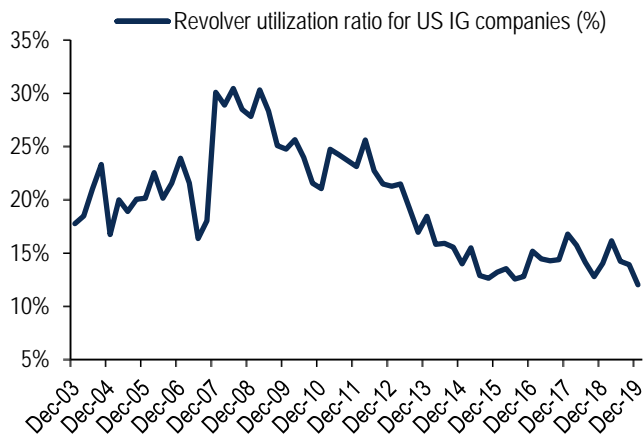
Source: ICE Data Indices, LLC, Bloomberg, BofA Global Research

Figure 10: Plunging bond prices

Source: Bloomberg

Perfect storm for IG

So in IG we are seeing a perfect storm of record outflows, heavy issuance on days the macro is stable and an economic recession. Contrast that with HY which is mostly facing the headwinds of a recession and has only small outflows. Hence, this month HY credit spreads have compressed from about 4x IG spreads to 3x, whereas in a normal recession like in 2001 we see decompression (**Error! Reference source not found.**). Spreads compressed similarly in 2008, but that made sense because it was a financial crisis and financial companies were mostly IG. This time IG is underperforming not for fundamental reasons, but because shutting down the economy to combat VOVID-19 led to a stampede for cash.

Figure 11: Revolver utilization ratio for US IG companies

Source: BofA Global Research, Bloomberg

Drawing credit lines

Over 50 companies have announced intentions to draw down credit lines. Note that US IG companies increased utilization to 30% back in 4Q07 and stayed near that level for about 2 years (Figure 11). So far we've seen ~\$42bn of credit line drawdowns announced over the last couple of weeks, plus a few more companies increasing the sizes of their revolver/credit facilities, which would bring the utilization ratio to 17-20% now in our guesstimate from 12% as of 4Q19 for US IG.



Listing large CP issuers

Figure 12: Large CP issuers

Ticker	Issuer	Total CP issued as of 4Q19 (\$bn)
XOM US	Exxon Mobil Corporation	18.6
PFE US	Pfizer Inc.	13.9
KO US	The Coca-Cola Company	10.0
PG US	The Procter & Gamble Company	6.2
BA US	The Boeing Company	6.1
AAPL US	Apple Inc.	6.0
DIS US	The Walt Disney Company	5.3
DHR US	DH Europe Finance II SARL	5.1
CVX US	Chevron Corporation	4.7
CSCO US	Cisco Systems Inc.	4.2
HON US	Honeywell International Inc.	3.5
UPS US	United Parcel Service Inc.	3.2
MAR US	Marriott International Inc.	3.2
FIS US	Fidelity National Information Services	2.7
MDLZ US	Mondelez International Inc.	2.6
NEE US	Nextera Energy Capital Hldgs Inc	2.5
WBA US	Walgreens Boots Alliance Inc.	2.4
SLB US	Schlumberger Finance Canada Ltd	2.2
AEP US	American Electric Power Co Inc.	2.1
ES US	Eversource Energy	2.1
ETR US	Entergy Corporation	1.9
DD US	Dupont De Nemours Inc	1.8
SO US	Southern Power Company	1.7
ED US	Consolidated Edison Company of New York Inc.	1.7
MYL US	Mylan NV	1.7
LLY US	Eli Lilly and Company	1.5

Source: Bloomberg, BofA Global Research

HY Strategy: The Credit Cycle Has Turned

Events continued to play out at dizzying speed in the last few days, making even 2008 parallels pale in comparison to the situation at hand. Needless to say that access to capital for the HY and leveraged loan issuers remains completely shut for the time being, while critical segments of the global debt markets such as rates, commercial paper, and IG are impaired. In the meantime, HY issuers are tapping their bank revolver lines en masse, cutting their capex budgets, furloughing their workers, and announcing other measures to preserve cash. Given that the duration of the complete shutdown of major economies remains unclear, leveraged credit issuers are, without an exaggeration, fighting for their survival.

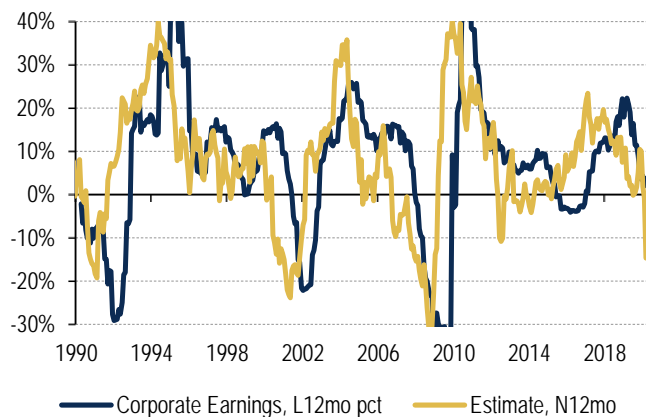
A large and growing number of issuers have tapped their revolver credit lines in recent days, including in gaming (CZR, MGM, PENN, WRF), lodging (HLT, STAY), retail/consumer (LB, TLRD, NMG, KSS), REITs (AIV, GLPI, WRI, OHI, EPR), financials (AMGFN), food (ARMK), media (SBGI/DSPORT), and autos (F; GM announcing intentions). We estimate the cumulative amount of outstanding revolver commitments to be north of \$1.5trln, of which 2/3rd is IG and the rest is leveraged credit.

We have previously described how our [earnings model](#) is likely to point to a 10% earnings contraction after a -300k payrolls print; given the input from our economics team (a 1mn/month contraction in payrolls) we are now seeing earnings contracting temporarily well over 20% in Q2, and recovering somewhat later in the year to net out -15% yoy over the next 12mo (Figure 13). We have never seen a 15% drop in earnings without the credit cycle turning.

Expected earnings are one of the key drivers for credit availability, as measured by the Fed's sr loan officer survey in Figure 14. Here we are projecting the lending standards

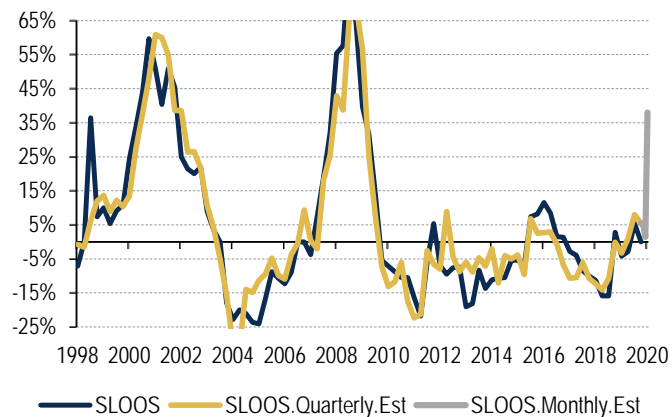
for large/medium firms to tighten sharply in coming months, getting to around 40% net tightening between the next survey in April or the following one in July. If achieved, this degree of tightening in lending standards would be reflective of the environment prevailing in late 2000 and early 2008, just prior to previous credit cycles turning.

Figure 13: US corporate earnings growth, actual vs estimated



Source: BofA Global Research

Figure 14: C&I lending standards, actual vs estimated



Source: BofA Global Research

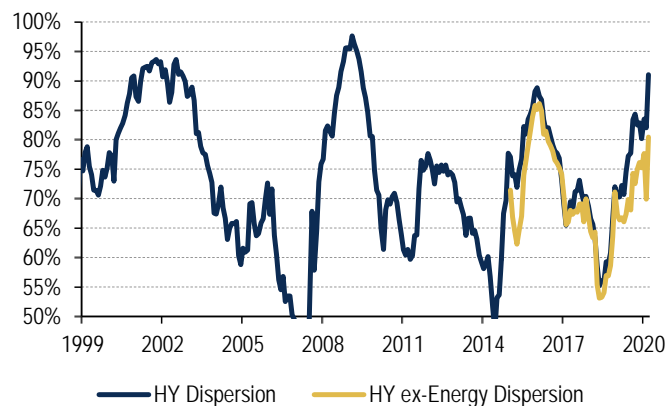
Turning the page to HY-specific indicators of credit stress we are watching closely Figure 15 shows the proportion of distressed bonds in our index (spreads over 1,000bps). At 30% here, this indicator is at levels we have previously seen in Nov 2000 and Mar 2008 going into previous cycles. We can also observe that this ratio has spent most of the time in the 30-40% range during the 2001-2002 recession, so we are getting there. In '08 it temporarily peaked at 90% temporarily and it is difficult to say whether this a good comp to how the market is going to behave in this cycle. Even if 2008 is the right playbook to go by here, the peak distress lasted for less than four months back then.

Figure 15: HY distress ratio, pct of face value at 1,000bps or more



Source: BofA Global Research

Figure 16: HY dispersion, pct of face value +/-100bp away from index



Source: BofA Global Research

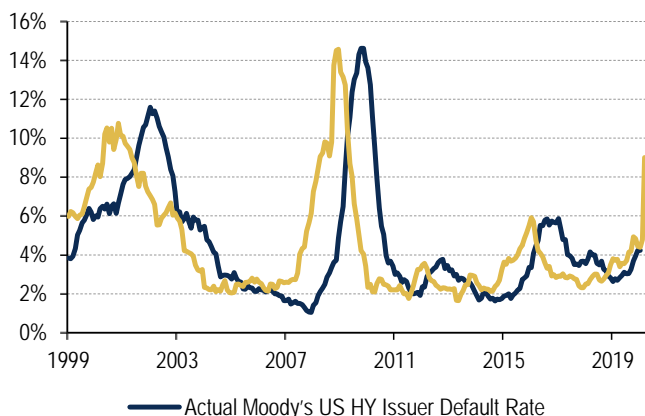
The dispersion in Figure 16 effectively tells us what proportion of bonds in HY is trading away from the index level (+/-100bps or further). Today, it happens to be 91% of the index; in other words when we see 900bps on the HY index, in reality only a small proportion of bonds are actually at that level, and everything else is either materially tighter or wider. Wide levels of dispersion are not helpful to normal market functioning, and the current level is as wide as it has been in Apr 2001 and Aug 2008.

Based on these indicators, a week ago was equivalent of Dec 2000 in the context of the first credit cycle, and May 2008 in the second. Now we are tracking at levels consistent



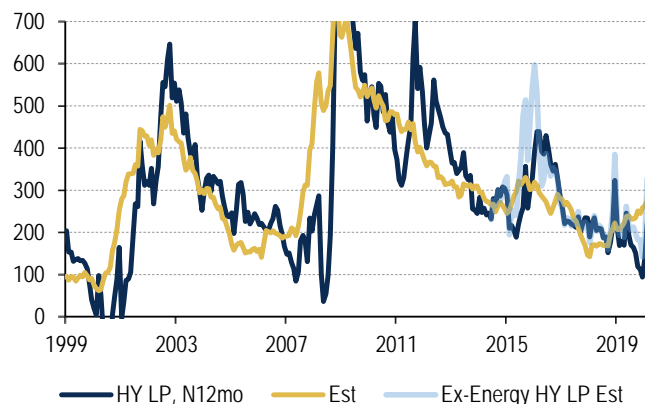
with Mar 2001 and Jul 2008. So things continued to move at 3x-4x their normal speed observed in previous credit cycles.

Figure 17: HY default rate, actual vs estimated



Source: BofA Global Research

Figure 18: HY liquidity premium, actual vs estimated



Source: BofA Global Research

Between the sharp expected hit to payrolls, earnings, lending standards on one side of the ledger and observable shocks to oil prices and implied volatility in equity and rates on the other, our [default rate model](#) has moved materially higher and reached 9% estimate for overall HY issuer-weighted default rate over the next 12mo. The model also indicates potential energy defaults at 25-30%, leaving us with 6% in ex-energy HY default rate estimate (Figure 17).

Only [a week ago](#), we summarized all key leading indicators of credit stress in a table below, where we compared the current level on each one of them, to the point in time closest to it going into the two previous credit cycles. Marking Apr 2001 and Sept 2008 as the points of no return corresponding to 1,000bps levels on the HY index, we argued that the whole collection of indicators was about 3-4 months away from such threshold, where a turn in the credit cycle becomes inevitable and irreversible.

As things continued to move at lightning speed over the past several days, those same indicators are now averaging only 1.5-2 months of cushion before they reach such a point. Based on those timelines, today's market environment is equivalent to Feb 2001 and Jul 2008.

Figure 19: Cyclical turn indicators

Indicator	Current	Cyclical turning points			
		2000-2002		2007-2009	
		Apr-01	Months	Sep-08	Months
OAS level	900	Jan-01	3	Sep-08	0
Distress ratio	30.0%	Nov-00	5	Mar-08	6
Dispersion	91%	Apr-01	0	Aug-08	1
BBs ex BBBs OAS	300	Sep-01	0	Oct-08	0
Expected earnings growth	-15%	Dec-01	0	May-08	4
SL00S % tightening	40%	Dec-00	4	Mar-08	6
Expected default rate	9.0%	Mar-01	1	Mar-09	0
S&P500 drop from peak	-33%	Sep-01	0	Oct-08	0
Average		Feb-01	1.6	Jul-08	2.0

Source: BofA Global Research

The US Surgeon General has opined¹ that the current level of containment measures may need to be in place for 6-8 weeks to achieve the peak in new infections in the US. Given this timeline and the projections for the timing of irreversible damage being done

¹ See Bloomberg News, Mar 16, 2020

to credit conditions, we think the turn in this credit cycle is now inevitable and should be adopted as the base-case scenario.

In the past credit cycles, HY default rates have averaged between 10-12% per annum, although they temporarily peaked at 14% in 2009. Our estimate of a 9% default rate still leaves some room for a more benign outcome, assuming the recovery in economic activity following the gradual lifting of containment measures takes hold quickly. If such a recovery takes longer to play out, these estimates are likely to see further upward revisions.

Figure 18 goes on to show liquidity premiums, which have also widened in recent days as a function of sharply steeper Trsy yield curves and dislocations in the money market space. Our [model](#) suggests that these two components (liquidity premium + credit loss) add up to a 900bps overall HY spread and 700bps ex-energy as fair value targets. We note that the ex-energy HY spread closed at 825bps and likely to be further wider after the session closes today. We are getting to attractive levels in leveraged credit, even light of our call that this credit cycle has most likely ended.

With the backdrop of a turn in the credit cycle in mind, we believe overall levels of spreads here provide good compensation for long-term value-oriented HY investors. We cannot be certain when/how the volatility will subside, and whether we need to trade a few hundred basis points wider to get there. But what we do know is that in the 40 year history of our HY indexes, long-term investors have not lost money from these levels.

Our data shows that for overall HY index, an average 12mo return from 900-1000bps spread range is +15%, and even the bottom quartile is only -2.5% negative. In other words even in more pessimistic scenarios, the downside is generally limited from here. Again, investors can still lose money in the near-term, but we are looking at levels that have provided good entry points for long-term performance in the past.

Here is an even stronger argument: in BBs, the return from 700bps levels, where we are today, is 35% average over the subsequent 12mo, 24% bottom quartile, and 22% bottom decile. Let us repeat and rephrase this: even if we are in a scenario that is worse than 90% of times BBs were at these levels, the historical track record would still suggest a potential for double-digit positive returns.



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