SPECTRUM
Asset Management

Junior-Subordinated Capital Securities Markets

January 2022 Updates

This was the worst start to a new year since 2009 and one of the worst overall months on record for preferred securities. There have been worse months (e.g., March 2020 when COVID hit markets), but when considering that there was nothing necessarily abnormal happening to disrupt credit fundamentals, this move requires some explanation – inflation! Remembering that the Fed always gets what the Fed wants, the Fed wanted inflation for the better part of the past thirteen years (i.e., since the Subprime Crisis). A year ago, we wrote in "A US Treasury bear is born" that bear markets typically begin cloaked in a spirit of denial. There is no question that the Fed had been in a spirit of denial throughout 2021 – its embrace of inflation as merely "transitory" is proof. The bond markets tried to warn the Fed that inflation was coming over a year ago, but the Fed refused to hear it and the markets were forced to comply to Fed's own version of ongoing mandates – deep negative interest rates from balance sheet expansion. Financial markets have developed positive feelings for their central bank captors – so much so that they also have developed negative feelings for the thought of having to price without them. The Fed's increasingly hawkish communications this month are convincing markets that policy accommodations will be waning like the vaccines, and run-off maturities may even pull back hopes for reinvestments as a booster program. Real rates on the front end of the curve (e.g., UST 5yr TIPS) ended the month 37bps higher at -1.29%; the 5yr implied breakeven inflation rate (i.e., the difference in yields between the 5yr UST and the 5yr Treasury Inflation Protected Security) slipped 2bps to close at 2.89%. On the back end of the treasury curve, the 30yr bond closed yielding 2.11% (21bps higher) and the 10yr note closed yielding 1.78% (27bps higher) -- the

yield differential between the two longer US treasuries flattened 6bps to +33bps. The VIX (i.e., Chicago Board Options Exchange Volatility Index) spiked by 44% to 24.83 as the S&P 500 broke under its 200-day moving average for the first time in almost two years. Credit spreads widened in hybrids and the combination wider spreads and higher yields negatively impacted price performance in January.

Before we talk hybrids, let's look at performance in some of the more senior corporate credit sectors for comparative references on returns and yield changes:

- The junk market (measured by the ICE BofA High Yield ***h0a0*** index) fell 2.75% to close yielding 5.31% (99bps higher).
- Global bank credit (measured by ICE BofA ***e0ba*** index) fell 2.23% to close yielding 2.44% (48bps higher).
- The BBB rated 5-10yr corporate sector (measured by ICE BofA ***c6a4*** index) fell 2.60% to close yielding 3.04% (48bps higher).

Review of Market Structure:

The market for hybrids or **global junior-subordinated capital securities** (*i.e.,* "**Jsubs**") as we call them is comprised of two core sectors:

1. Preferred Securities, and
2. Contingent Capital Securities

Each sector has evolved with unique technical, structural, and fundamental features that are discussed and updated below:

Global junior subordinated capital securities are comprised of two sub-sets that represent a broad group of global junior-subordinated capital securities, which can be referenced by

two ICE BofA indexes: 1) The ICE BofA US All Capital Securities Index (***i0cs***) and 2) The ICE BofA US Dollar Contingent Capital Index (***cdlr***).

Our litmus test for hybrids satisfies two core characteristics:

1) any non-payment of distributions would not accelerate an event of default (i.e., distributions are "junior-subordinated" to ordinary interest obligations) and,

2) balance sheet classification is something other than common stock under GAAP disclosure.

The US All Capital Securities (***i0cs***) benchmark of preferred securities represents $356 billion (face amount) of investment grade and below investment grade instruments in both the retail $25par market (37%) and the institutional $1,000par market (63%). The USD Contingent Capital Index of US dollar denominated junior-subordinated capital securities ***(cdlr)*** represents $160 billion (face amount) of investment grade and below investment grade fixed-rate instruments with contractual triggers that could subordinate them to common stock in a reorganization that would not fall into a receivership after the bail-in. These two benchmarks combine for a $516 billion universe of fixed-rate junior-subordinated USD capital securities with preferred securities (measured by ***iocs***) being a 70% subset and contingent capital securities (measured by ***cdlr)*** being a 31% subset of the total global USD junior subordinated group.

Preferred Securities

In the preferred securities sleeve, there are four sub-component indexes in the US All Capital Securities Index (***i0cs)*** – this entire index is comprised of global "preferred securities". A **"preferred security"** can represent a capital security issued either through charter amendment (i.e., as a stock) or through indenture (i.e., as a bond) typically within

the context of a "gone-concern" statutory authority (*e.g.,* US banks). As a gone concern, a company reorganization would be processed through a bankruptcy court. Preferred security payments are in priority to common stock dividends, yet can be deferred (i.e., payments are cumulative) or eliminated (i.e., payments are non-cumulative) without causing an immediate event of default; any principal loss absorption on a preferred security would be forced only *ex-post* through a statutory resolution in a bankruptcy proceeding.

The four sub-components of the *i0cs* benchmark that consolidate into the retail and institutional sectors of rated preferred securities are:

1. **ICE BofA Fixed Rate Preferred Index (*p0p1*) @ 42% *of i0cs***
   - Comprised of IG $25par and IG $1,000par (incl. US AT1)
     - The *p0p1* fell 2.97% this month to close yielding 3.63% (+89bps)
     - Headcount was unchanged; face value rose by $1.4billion
2. **ICE BofA US Capital Securities Index (*c0cs*) @ 23% of *i0cs***
   - Comprised of dated IG $1,000par dated hybrids (excl. US AT1)
     - The *c0cs* fell 1.57% this month to close yielding 3.58% (+33bps)
     - Headcount was unchanged; face value declined $0.295 billion
3. **ICE BofA High-Yield Capital Securities Index (*h0cs*) @ 6% of *i0cs***
   - Comprised of BIG $1,000par legacy Tier1 and BIG $1,000par hybrids
     - The *h0cs* fell 2.14% this month to close yielding 4.31% (+71bps)
     - Headcount was down 1; face value declined by $1.736 billion
4. **ICE BofA High Yield Fixed Rate Preferred Index (*p0hy*) @ 29% of *i0cs***
   - Comprised of BIG $25par and BIG 1,000par (incl. US AT1)
     - The *p0hy* fell 2.55% this month to close yielding 4.52% (+96bps)
     - Headcount was down 1; face value declined by $1.412billion

Overall, the ICE BofA All US Capital Securities Index (***i0cs***) fell 2.46% in January to close yielding 3.91%, which was 82bps higher than last month's closing yield and a spread of +188bps over comparable US Treasury securities (27bps wider).

Contingent Capital Securities

A **"contingent capital security"** (i.e., a "CoCo") represents a capital security issued through indenture typically within the context of a "going-concern" type regulatory regime for banking, which would reorganize a potentially insolvent bank through the contracts of its capital before falling into a conservatorship proceeding. CoCos payments are non-cumulative and *pari passu* to common stock dividends and can be reduced or eliminated without causing an event of default. Principal loss absorption on a CoCo could be forced ex-ante through a regulatory action in advance of any bankruptcy proceeding (note that an actual bankruptcy may not happen because enough loss absorbing bail-in capital, including tier-2 capital, could be available through the "living will" of the entity's core capital). The ICE BofA USD Contingent Capital Index (***cdlr***) is comprised of US dollar denominated constituents (exclusively), which represent 60% of the mature master multi-currency benchmark (*coco*). We will utilize the USD benchmark (*cdlr*) as it more meaningfully reflects the contingent capital currency primarily held in our portfolios. The ICE BofA USD Contingent Capital Index (***cdlr***) fell 1.61% this month to close yielding 4.45%, which was 58bps higher from last month and a spread of +281bps over comparable US Treasury securities (17bps wider).

Snapshot of Junior Subordinated Spread Sector Moves:

Capital Securities Spread Value Matrix	p0p4 (a) Retail	p0p4-e0ba (b) Retail	stb8 (a) NoCo	stb8-e0ba (b) NoCo	cdlr (a) CoCo	cdlr-e0ba (b) CoCo
Sample Periods	03/31/2017 to Date		03/31/2017 to Date		03/31/2017 to Date	
Jr-Subs	*Absolute	**Relative	*Absolute	**Relative	*Absolute	**Relative
High	588	251	481	201	660	313
Low	-178	-267	175	53	223	143
Range	766	518	306	148	437	170
Average	40	-66	241	136	325	220
Stdev	118	103	46	27	63	35
Monthend	138	45	213	120	281	188
Sector Spread Score[1]	0.95		-0.60		-0.81	
Last Month's Score[1]	0.41		-0.40		-0.99	

1: Sector Spread Score = {[Monthend(a)-Ave(a)]/Stdev(a)+[Monthend(b)-Ave(b)]/Stdev(b)}/2

Monthend statistical position to average per unit of standard deviation

	p0p4 (a)	p0p4-e0ba (b)	stb8 (a)	stb8-e0ba (b)	cdlr (a)	cdlr-e0ba (b)
*Absolute	0.83		-0.61		-0.70	
**Relative		1.08		-0.59		-0.91

* Absolute = Option Adjusted US Government Spread

** Relative = spread to global financials measured by e0ba ICE Bond Index

Monthend estimate of spread duration benefit (units of stdev.)

	Retail	NoCo	CoCo
Spread/mdurMat	-1.49	0.66	0.59
Probability Estimate to Spread Benefit	6.76%	74.44%	72.34%
		Memo: e0ba	0.79%

Source: Bloomberg, ICE Bond Indices

Implications of Market Activity:

$25par Retail Preferred Securities Sector

The retail preferred securities sector fell $4.34 in January to $101.47 which was a 3 standard deviation move lower for the month. The combination of significantly lower equity prices and significantly higher US Treasury yields combined to impel the retail sector lower. Public Storage priced at 4.1% at the beginning of the month and fell $0.80 to $24.20, which was 14bps cheaper on current yield or 11 wider against the limited move in 30yr

treasury rates. For retail, longer term interest rates are getting some play against valuations but the biggest impact during January came from equity volatility. Bank America priced a fixed-for-life preferred stock at 4.75% towards the end of the month that was free to trade at a $0.15 discount. Duration in the retail sector is at an all-time high because the coupon is at an all-time low. The new Bank of America's have a duration of 21 so a 10bp rise in yield will see the price drop by 2.1%. For now, the limited rise in long bond yields has helped to stem the fall in the retail sector from being any worse, but the strong labor markets and an end to Omicron is likely to put more upward pressure on $25par yields as the Fed figures out how it's going to combat entrenched inflation. The low z-score of 6.76% reflects the higher price risk for the retail sector.

$1,000par Institutional Preferred Securities Sector

The $1,000 par institutional sector of the preferred securities market fell $2.25 in January. Relative values to more senior financials are below average as spreads on junior subordinated paper tightened more than on product up the capital structure. The chart below shows the option adjusted spread of NoCos (i.e., *stb8*: a custom weighted combination of ICE BofA's *cips* and *hips*) vs. Eurodollar Banking Index spread (i.e., *e0ba*) since 2013:

Source: Bloomberg

We look back to 2013 to include three intra-cycle sparks or shocks within the broader economic cycle from 2013's QE-III to 2020's QE-IV: 1) the aftermath (2014) of the bottom of QE3's Taper Tantrum (2013), 2) the commodity implosion and high yield (oil) market bust (2016) and 3) the market's revolt to the Fed's overshoot on rates (2018) – and now, the ongoing fear of and recovery from the COVID-19 pandemic and associated variants (2020+). NoCo spreads to comparable treasuries closed 1bp wider (+213). Relative to more senior financials, NoCos moved 12bps tighter closing at +121bps; spreads for NoCos are -0.59 standard deviations less than average. We expect the yield compression on junior subordination to more senior credit to continue grinding tighter as interest rates rise though not without some moves wider along the way from as the Fed figures outs how aggressively it will need to pull back its policy accommodation to combat rampant inflation. Chairman Powell said that inflation has been persistent for longer than the Fed anticipated, and that the priority now is to ensure that it doesn't get entrenched. He said that the labor

markets should be able to withstand "quite a bit" of rate increases so the belly of the curve rose aggressively as the Fed explained itself during the press conference. This elevated hybrid yields causing the estimated probability of spread duration benefiting NoCo capital to rise to 74.44% from 66.39% last month as yields rose and duration edged lower.

Contingent Capital Securities Sector

The CoCo sector followed the NoCo sector closely this month and declined $2.23 even though European bank equity rose. By the end of the month, the accelerating hawkishness of the Fed began to rub off on the European Central Bank. President Lagarde described her growing concerns about inflation and argued for a rethink of the ECB's stance in March and June. Just last month, she has said, *"lift-off conditions are very unlikely to be satisfied next year...undue tightening of financial conditions is not desirable at a time when purchasing power is already being squeezed by higher energy and fuel bills, and it would represent an unwarranted headwind for the recovery."* The duration of the CoCo sector is 0.8yrs lower than NoCos, so with prices off by about as much, CoCo spreads widened by 17bps – 15bps more than the NoCo sector. CoCo yields are now 25bps higher than their average over the last 3yrs.

The graph below shows the spreads in CoCos (i.e., *cdlr*) relative to the spreads measured in Eurodollar bank credit that is not CoCo (i.e., *e0ba*) since the benchmark's inception (Dec-13) – note that CoCos were improved in 2016 after the Pillar-2 capital stack was redefined, thus

reducing payment trigger risks for CoCos:

Source: Bloomberg

Since the 2015-2016 high spread zones reflected higher pre-Pillar-2 risks that weakened payment probabilities. But since then, Pillar-2 regulations have improved, loan quality is stable and core capital is much improved -- which leads us to conclude that this data sample over-tests extreme downside risks in CoCos given those fundamental improvements. It is important to note that we believe there to be an improved “normal” for CoCos since 2016 (one that not even the pandemic could break) because the subordination spread spike from the pandemic held to be 2 standard deviations lower than the spread spike in 2016 leading into the Pillar 2 reform.

This month, the relative OAS differential between CoCos and more senior financials widened by 3bps with a difference of 188bps in favor of CoCos as the more senior sector

widened 14bps and the CoCo sector widened 17bps. Despite the relative value opportunity in CoCos compared to more senior financials being below average (albeit, an over-risked below average), the 188bps pickup still appears reasonable on a relative basis because of the sector's low default and low duration. The CoCo sector's spread score of -0.81 is the lowest of the three junior subordinated sectors, but 68bps of additional spread to NoCos (16bps more than last month) and 143bps of additional spread to retail preferred securities (2bps less than last month) still makes CoCos the best combination of spread and low duration of the three sectors. Importantly, the incremental yield available in the sector reflects the second-best probability estimate of spread benefit at 72.34% (down from 54.03% in December), which is still multiple times higher than what we estimate is available for more senior financials (*e0ba*). The implication here is that the defensive down in capital structure play in CoCos can still defend the goal with generous income that should be increasing.

Outlook:

The Fed's public jawboning tour is essentially acknowledging that it is behind the curve on fighting inflation – otherwise, why would they be saying taper faster and hike sooner? As a result, the yield curve is shifting up significantly and pricing in a lift-off as early as March; and perhaps one that is sooner and faster at 50bps. Last month we said that markets are not accustomed to the Fed raising rates in being an inflation fighter because inflation has not been a problem since before the Great Financial Crisis. The implication is that equity and bonds will have to reprice and clear valuations without liquidity being guaranteed by the Fed, but instead discovered by traders who are unaccustomed to the Fed being so cheap. Consequently, elevated equities are logically at risk of higher volatility in 2022 because human nature will want to keep what's been made over the last three years. Last month, the S&P500 corrected below its 200-day for the first time in 22months. Deep

negative real UST rates should rise because chronic negative rates are a signal of economic dysfunction and central bank inabilities -- in other words, if real UST 10yr rates stay negative for much longer than 2 ½ years, then we'd view that as a signal of economic weakness and central bank policy failure. Indeed, the Fed cannot be judged as a failure because it wouldn't be able to control (or bully) bond markets sufficiently to accomplish its dual mandate – especially after inflation had been its goal but is now the problem. The Fed, for one, is in a horse race with inflation and is playing this necessary but "tricky trifecta" bet:

1. Quantitative Easing (QE) is in run-off
2. Federal Funds are to lift-off
3. Quantitative Tightening (QT) is to kick-off

The trick is to achieve success in cutting inflation fast enough, so it doesn't become entrenched and to do it without creating a recession through a Fed policy mistake. The headline play is all about interest rates – that is, hiking interest rates.

So, the Fed's tricky trifecta is morphing into the market's terrible trifecta (i.e., losses) in that, asset prices appear far too high yet because aggregate liquidity (i.e., the Fed's balance sheet) is still far too big (in fact, it's still growing) – this explains why the Fed had its first discussion in December about potentially shrinking its balance sheet and this ongoing messaging has continued throughout January. The last time the Fed was simultaneously hiking rates and cutting its balance sheet was 2018 and it ultimately led to equity losses and spread blowouts because of the Fed's overzealousness for tightening.

Markets this month began to realize that the Fed may move not only soon, but aggressively in playing all three tools in rapid succession. Therefore, playing defense will be key for investors as the Fed goes on its offensive against inflation. Hybrids (i.e., preferred securities

and Cocos) offer a good fundamental defensive plan and investors an opportunity for a *triple play* against the Fed:

	Hybrids		Corporates	
1/31/2022	**Preferreds**	**CoCos**	**IG Corps**	**BIG Corps**
Bloomberg Index	*cips+hips*	*cdlr*	*c6c0*	*h0a0*
Mod.Duration	4.16	3.35	6.37	4.40
Yield-to-Worst	3.87	4.45	2.86	5.31
Inflation[1] Adjustment	2.89	2.89	2.89	2.89
Real Yields	0.98	1.56	-0.03	2.42
Default[2] Adjust	-0.11	-0.11	-0.04	-2.57
YTW, net, net	**0.87**	**1.45**	**-0.07**	**-0.15**
Composite Rating	BBB2	BB1	BBB1	B1

[1] *Inflation assuption based on the UST5yr breakeven inflation rate*
[2] *Default assuption based on Sprectrum's 10yr annual default study through 2020*

The illustration above shows this defensive playbook for hybrids relative to investment grade corporates and (not so) high yield bonds. Defense and capital preservation through income and structure are our primary investment objectives for 2022. The triple play for hybrid capital securities can:

1. Defend against income erosion with high quality nominal yields
2. Defend against inflation with positive real yields, net of the UST5yr break evens
3. Defend against credit risks with low historical default measured by Spectrum

Once all this defense is accounted for, real yields are still positive for hybrids but negative for both corporates and junk bonds. The structure of hybrids with intermediate coupon re-fixings can also roll up portfolio income at the margin as rates rise over time, which should also help to preserve some capital as these central bank war games advance -- tightening cycles are usually not short-lived and there is nothing "usual" about this paradigm shift for markets. As the equity market corrects from the Fed's expected liquidity withdrawals soon,

we expect intermittent better buying opportunities to prevail. If the Fed were to impel the bond market to flatten too much (i.e., 3mo. Bill yields rise to equal 10yrUST note yields) later this year, we would expect the Fed to twist its balance sheet by selling long bonds and buying 3mo. Bills – this would be a spread tightening action for credit because it would be forestalling the risk of a recession, which would have been the primary reason for the market to have flattened to that degree.

Phil Jacoby
CIO, Spectrum Asset Management
February 7, 2022

Spectrum Asset Management, Inc. is a leading manager of institutional and retail preferred securities portfolios. A member of the Principal Financial Group® since 2001, Spectrum manages institutional portfolios for an international universe of corporate, insurance and endowment clients, mutual funds distributed by Principal Funds Distributor, Inc., and preferred securities separately managed account solutions distributed by Principal Global Investors, Inc.