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The Tanking Twenties

Credit Analysis

Panic disorder

Monday was a move for the ages, with the largest 1 day widening ever in high-grade. Such extreme price action reflects long investors searching for an out, when there just hasn't been one...a move made more vicious, perhaps, by the long-term consequences of monetary largesse. Repricing, though, has been extreme in any context: almost 50% of IG bonds have seen their spreads widen by more than 5 standard deviations since Feb; autos, consumers and healthcare bonds look very good value now on this metric, and single-Bs have gone from trading as tight as their 20th percentile, a fortnight ago, to suddenly their 80th. There is longer-term value once again in corporate debt spreads.

"Capitulation" and "catalysts" needed to mark the bottom

The four major sell-offs of the last 20yrs have all been followed by V-shaped spread recoveries. But they have needed two big ingredients to demark the bottom: capitulation and catalysts. While the last week has been about capitulation, the move still needs CCCs to finally crack, we think, before investors get the green light to go all in. Thursday should see the ECB help sentiment with more QE, but the wish list is really for a coordinated fiscal response. And of course, the most important catalyst has to be a declining spread of Covid-19 infections across the world (not yet, as chart 1 shows).

Pressure points to keep an eye on

If policy makers procrastinate, and equities fade again, the focus will likely gravitate back to the credit market's vulnerable spots. We see 4 themes that could linger: 1) "Zombies" (energy companies), 2) BBBs that are still tight to BBs (industrials), 3) sectors that have experienced strong credit growth during the QE years (real estate) and 4) names where leverage was already rising pre-virus (media).

"Super Thursday"?

Two things could be on the agenda for Thursday's ECB: SME-targeted TLTROs and more corporate bond purchases. If SME support arrives, sectors with a greater share of "smaller" companies should see a sentiment boost (bullish for leisure, services and transport). Conversely, if ECB CSPP is increased or tweaked, then we think Lagarde has scope to quickly wade into the auto, cap goods and insurance sectors.

The key to market recovery: number of counties experiencing rising daily COVID-19 cases



Source: BofA Global Research, Haver. Johns Hopkins University. Accelerating cases: rising daily change in (absolute) # of reported cases.

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Panic disorder

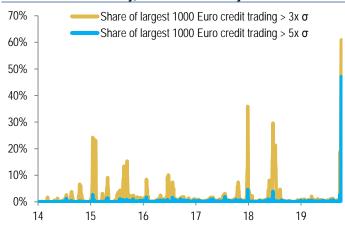
9th March 2020....a day of price action for the ages: high-grade spreads widened by 29bp (largest 1 day move ever), the Crossover index widened by 155bp at the open, oil-related names fell up to 10pts and many auto bonds were up to 50bp wider. These were moves on par with the depths of the Global Financial Crisis in October 2008. Such extreme price action reflects long investors searching for an out...when there just hasn't been one (a problem exacerbated by some futures markets being shut limit down on Monday, for instance).

Last Friday and this Monday were about historic moves, as investors rushed to de-risk. Chart 1 shows how extreme the "breadth" of the sell-off in Euro corporate debt has been. Almost 50% of € high-grade bonds have now seen their spreads widen by more than 5 standard deviations. And there are plenty of sectors where a majority of bonds have been repriced violently wider over the last few days: chart 2 shows that the most battered sectors in Europe look to be **autos**, **consumers** and **healthcare** (~70% of the sectors' bonds have widened by more than 3 SDs).

Such a dramatic repricing has also meant that credit has gone from being a hitherto afterthought – in terms of value proposition – to something genuinely interesting again. **Single-Bs**, for instance, have gone from trading as tight as their 20th percentile just a fortnight ago (425bp), to now trading at their 80th percentile. Even **single-As** – despite their historically low leverage – have seen spreads jump back to their 78th percentile (see the appendix for more on where spreads currently shake-out percentile-wise).

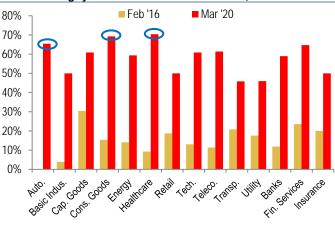
All this bodes well for the return of long-term capital to the credit market, we think.

Chart 1: Extreme breadth: Around half of Euro IG bonds have widened by 5 standard deviations lately, 61% have widened by more than 3SDs



Source: BofA Global Research, ICE Data Indices LLC. Using 6m Z-scores of spread levels.

Chart 2: Autos, consumer and healthcare sectors have truly suffered (% bonds widening by more than 3 Standard Deviations)



Source: BofA Global Research, ICE Data Indices LLC. Using 6m Z-Scores.

Monetary policy's day of reckoning

Investor "panic" is best encapsulated by the dramatic U-turn of credit inflows over the last fortnight. Euro high yield funds suffered one of their biggest outflows ever last week – amounting to 1.7% of assets (chart 4). Likewise for investment-grade <u>flows</u>.

But for some time, there has been a concerning trend of investors heading for the doors sooner upon a change of events, as chart 5 reflects. Why are credit flows proving to be more fickle these days? We suspect it reflects investors' unease with the "dark side" of monetary largesse – namely the speed at which credit markets have grown.

Consider since Draghi's "Whatever it takes" moment (Jul-'12):

- The size of the €-denominated IG market has grown by 70% (from €1.5tr to €2.5tr)
- The number of high-grade bonds has risen by 90%
- The number of IG companies (in the ER00 index) has more than doubled



 And sectors like Reverse Yankees have almost surpassed French credits as the largest share of the Euro-denominated credit market.

And it has required significant inflows – often from non-dedicated credit investors – to absorb this credit creation. And herein lies the weakest link for Euro credit markets.

Chart 3: Euro spreads widening less than US spreads due to ECB QE



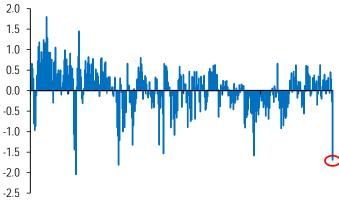
Source: BofA Global Research, ICE Data Indices LLC. IG spread differences (RHS).

Chart 5: Fickle flows? Investors showing a greater tendency to "rush for the doors" now, upon smaller and smaller losses in corporate bonds



Source: BofA Global Research, EPFR Global. Using excess returns.

Chart 4: Euro HY outflows last week were one of the sharpest (% assets)



Apr-12 Apr-13 Apr-14 Apr-15 Apr-16 Apr-17 Apr-18 Apr-19 Source: BofA Global Research, EPFR Global.

Chart 6: V-shaped rebounds tend to be the norm in credit, but they need capitulation + catalysts (spreads heading into, and out, of market wides)



Source: BofA Global Research. Examining the periods of: Lehman failure ('08), Sovereign crisis ('11), China slowdown ('16) and Fed rate hikes ('19)

"Capitulation" and "catalysts" will mark the bottom

Chart 6 shows that the last four big sell-offs in corporate bonds have all given way to a V-shaped rebound in spreads. Two ingredients usually demark turning points though: investor *capitulation* and policy *catalysts*.

Capitulation close...

The good news is that capitulation is clearly underway...albeit more a case, we think, of investors selling what they *could*, not what they would ideally *like to*. Note since 21st Feb:

- Front-end bonds have underperformed longer-duration bonds. 1-3yr IG bonds 95% wider (+60bp) vs. 63% widening in 7-10yr IG bonds (+67bp).
- Big (i.e. "liquid") bonds have widened more than small (i.e. "illiquid") bonds. Chart 7 shows that bonds with a face value of €750m or greater have widened 11bp more than bonds with a face value of less than €750m.



 Defensives have underperformed cyclicals. Chart 8 shows that spreads for "defensive" sectors in the high-grade market have underperformed spreads for "cyclical sectors".

Yet, to signal "full" capitulation, we think the classic credit "canary" – CCCs – needs to crack. So far, CCCs have been the conspicuous <u>outperformer</u> in this sell-off (just 38% wider since Feb 21st, and with spreads still only at their 48th percentile).

Thus we would view another leg of CCC widening as marking the end of this correction.

Chart 7: Increasingly about selling what you can...not what you'd love to. Spreads of small and large bonds (OAS spreads)



Source: BofA Global Research, ICE Data Indices LLC. Difference between large and small bonds (RHS). "Small" defined as 750m outstanding or smaller. "Large" is the rest.

Chart 8: Defensives underperforming cyclicals in the widening (OAS spreads)



Source: BofA Global Research, ICE Data Indices LLC. Splitting ER00 index by cyclical vs. non-cyclical sectors. Data as until $8^{\rm th}$ March.

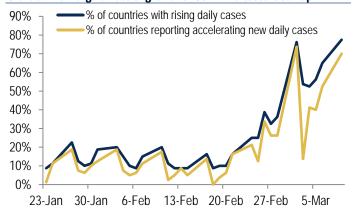
On catalysts

For catalysts, two things matter.

Firstly, markets need to get comfortable, of course, with the global spread of COVID-19. However, as chart 9 shows, the <u>percentage of countries</u> across the globe reporting accelerating new daily cases (in terms of absolute number of daily reported cases) is still rising. This needs to fall for markets to start rallying strongly.

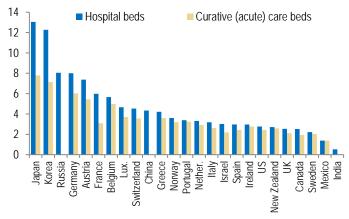
Moreover, strains on public health services pose a further risk if infections continue to rise rapidly. Chart 10 shows the number of hospital beds per 1000 people. Note Germany is at 8, Greece is at 4.2, Italy is at 3.2, and Spain is at 2.9.

Chart 9: The marginal rate of growth of COVID-19 cases is still up



Source: BofA Global Research, Haver. Johns Hopkins University. Sample set of 80 countries. Accelerating cases defined as rising daily change in (absolute) number of reported cases.

Chart 10: Hospital beds, per 1000 inhabitants



Source: BofA Global Research, OECD.



Secondly, policy makers will likely be kicked into action soon.

A co-ordinated fiscal response – to alleviate the economic fallout – would be the most positive in our view (*co-ordinated* being the key here, rather than piecemeal fiscal responses across European countries).

And while monetary policy feels a blunter tool now to fight a public health crisis, we think the ECB could deliver a package of measures on Thursday (see below for more), which should provide a partial boost to sentiment.

Pressure points still to watch

But if policy makers procrastinate, and equity markets wobble again, investors should keep an eye on the credit market's vulnerable spots. In particular, we highlight:

- The biggest sectors: those that have grown rapidly in size since 2012.
- Leverage: and the rising share of IG companies with 4x or more leverage
- BBB pricing, which sectors have BBB spreads that are much tighter than BBs still?
- "Zombies". Which sectors have a greater share of "Zombie" companies

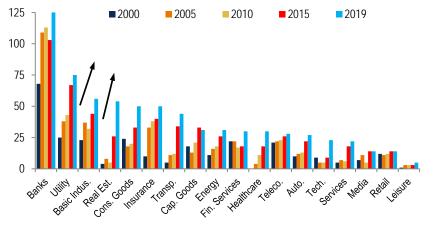
Who grew the most?

Chart 11 shows the growth in the <u>number of issuers</u> in ICE's ER00 index (Euro high-grade credit market).

Real estate, in particular, has seen strong credit market growth in the last decade (it barely existed as a sector in 2012, now there are around 60 real estate issuers in Europe).

In addition, **industrials** have seen a conspicuous rise in the number of new debt issuers in the Euro market (albeit with Reverse Yankees adding to the number here).

Chart 11: Number of companies in Euro IG (ER00), by sector



Source: BofA Global Research, ICE Data Indices LLC. Number of issuers in the ER00 index.



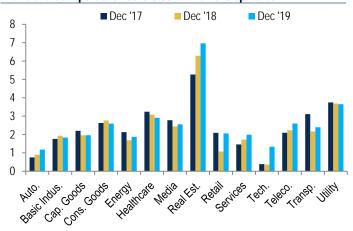
Leverage - the 4x worry

The two charts below show which sectors across the high-grade market were already experiencing rising leverage before the Covid-19 developments.

While the overall high-grade leverage was broadly stable through the final quarter of last year, some sectors were already seeing an uptick: note the rise for **media**.

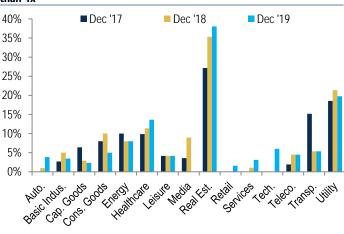
In addition, note the share of *highly-levered* IG companies (defined as net debt/EBITDA > 4x) has been steadily rising too.

Chart 12: Leverage (net debt/EBITDA) has been rising for real estate, media and transport even before COVID-19 developments



Source: BofA Global Research, Bloomberg. Large sample of non-financial corporations constituent of FROO.

Chart 13: Share of companies with leverage (net debt/EBITDA) greater than 4x



Source: BofA Global Research, Bloomberg. Large sample of non-financial corporations constituent of ER00.

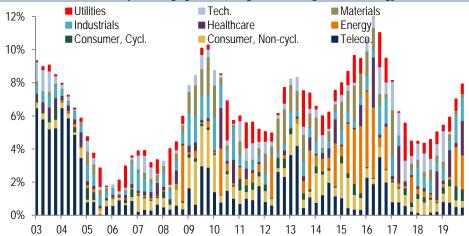
"Zombies" at dawn

Easy monetary policy has meant that financially vulnerable companies have been able to sail-on, rather than being forced to restructure and default. But the moribund primary market could end up being the biggest threat to these "zombie" companies.

Chart 14 shows the percentage of Stoxx 600 companies with interest coverage <1x, the classic definition of a "zombie" company.

We find that not only has the percentage of zombies been rising over the last year (now back to March '17 levels), but the sector that contributes most to the share of zombies in Europe is the energy sector (and this was pre Monday's huge fall in the oil price).

Chart 14: "Zombies" in Europe – rising again, and a big share coming from the energy sector



Source: BofA Global Research, Bloomberg. Proportion of non-financial corporations in Euro Stoxx 600 with 12m-rolling interest coverage ratio < 1x.



BBBs - where are they pricing today?

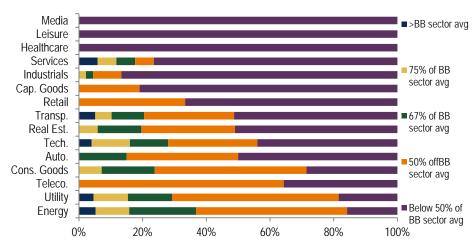
If Covid-19 results is a more pronounced economic slowdown that expected, then focus will likely migrate back to those sectors with a greater share of BBB-rated debt (see chart 2 in our note here).

Chart 15 shows the pricing of BBB spreads, by sector, in relation to BB spreads from the same sector.

Sectors where BBB spreads are far away from their respective BBs should be watched for vulnerabilities. we think:

- As can be seen, industrial BBB bonds are trading tight to their corresponding BB sector average.
- Conversely, some BBBs from the utility, telecom and consumer sectors are already trading wider than their corresponding BB sector average.

Chart 15: Share of debt trading near or above BB peers in their corresponding sector.



Source: BofA Global Research, ICE Data Indices LLC, Bloomberg. Option Adjusted Spreads (OAS).

It's QE time (again)

Tomorrow is ECB day. Our <u>economists expect</u> a policy response. Two options stand out for them:

- First, our economists argue the case for targeted liquidity support to the SME sector, the backbone of Europe. For example, TLTROs could be offered at subsidized rates (below the ECB depo rate) conditional on the bank lending being directed to the SME sector.
- Second, the ECB could help shield the corporate sector by re-emphasizing the importance of the Corporate Sector Purchase Programme. Thus, we could see an upping of the monthly total QE purchase amounts (from €20bn per month, to €30bn say). Or a formal promise to divert more purchases towards corporate bonds.

We see upside trades in credit for both of these scenarios:

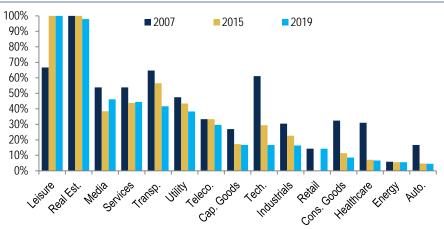
SME support

If the ECB announce TLTRO support for the SME sector, then investors should buy sectors that have a greater share of "small" companies (defined, in this case, as those with less than €5bn of revenues. Note that the median IG non-financial revenue is €7bn).

• As chart 16, over the page shows, leisure, services and transport are small. These sectors should see a sentiment boost from a new TLTRO.



Chart 16: % of sector with < €5bn of revenues



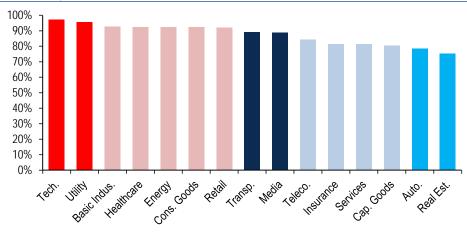
Source: Bloomberg, BofA Global Research

ECB QE: more credit purchases likely

More CSPP purchases would obviously help Euro corporate bond spreads in the weeks ahead.

Chart 17 shows the % of eligible bonds that the ECB currently own. In other words, if the ECB needed to ramp-up credit purchases quickly, there may be a stronger bid for auto, cap goods and insurance bonds, we think.

Chart 17: % of eligible bonds, per sector, that the ECB own. The ECB have scope to buy more bonds in the consumer, telecom and healthcare sectors.



Source: BofA Global Research, ICE Data Indices LLC, ECB. Share of potentially eligible bonds (constituents of ICE Euro corporate IG index ER00) held by the ECB.

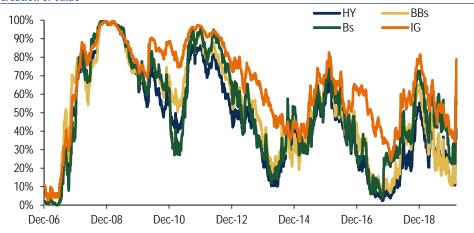
Appendix

The chart below shows how quickly Euro credit spreads have moved back to offering a value proposition within just a week. We use long-term spread percentiles for this analysis (see here for more detail). Single-B spreads, for instance, are now back at the 80th percentile, and IG credit is back at the 79th percentile.

The least attractive, in our view, is CCCs – which have only widened back to their 45th percentile.



Chart 18: Single B spreads back to 80th percentile, IG spreads back to 79th percentile – a rapid creation of value



Source: BofA Global Research, ICE Data Indices LLC.

The table below shows the largest drops in terms of spreads and bond price across IG and HY since Feb 21^{st} .

Table 1: Top (Bottom) 15 bonds (ISIN) with largest (smallest) OAS % change since most recent € IG trough in spreads.

Consumity Name	OAS		Price
Security Name	% ch	ch in bp	% ch
OMVAV 5 1/4 PERP	666%	193	-2.58%
CCL 1 7/8 11/07/22	516%	392	-8.87%
LHAGR 0 1/4 09/06/24	354%	283	-10.29%
RYAID 1 7/8 06/17/21	353%	219	-2.42%
SHAEFF 3 1/4 05/15/25	326%	306	-1.78%
TALANX 8.3673 06/15/42	308%	234	-4.49%
RURAIL 3.3744 05/20/21	301%	235	-2.53%
ASSGEN 10 1/8 07/10/42	301%	289	-5.74%
ASSGEN 7 3/4 12/12/42	300%	279	-6.32%
PEMEX 2 1/2 08/21/21	276%	304	-3.88%
CNPFP 6 7/8 09/30/41	261%	188	-2.62%
EZJLN 1 3/4 02/09/23	238%	188	-3.98%
RYAID 1 1/8 03/10/23	230%	191	-4.46%
AIFP 1 7/8 06/05/24	229%	71	-1.35%
MHK 2 01/14/22	218%	131	-1.64%
GRAVAS 4.781 09/30/39	9%	16	2.79%
JINJII 1 09/25/24	9%	15	1.05%
VIASOL 2.957 08/31/43	8%	12	3.92%
DERSTG 1 5/8 12/09/24	8%	34	0.11%
DERSTG 2 3/8 12/08/27	6%	31	0.57%
AABHFH 0 1/2 09/13/21	6%	7	0.39%
ENGIFP 5.95 03/16/11	4%	12	12.89%
UTX 1 1/8 12/15/21	4%	2	0.43%
DWNIGY 1 5/8 06/03/31	2%	3	4.23%
IGYGY 3 1/2 10/26/37	1%	2	6.71%
BOCOM 3 5/8 10/03/26	0%	0	0.41%
PLD 1 3/8 05/13/21	0%	0	0.11%
SOCPRO 3 3/8 12/31/38	-6%	-19	7.03%
UTX 1 7/8 02/22/26	-10%	-8	2.55%
GLENLN 3.7 10/23/23	-12%	-20	1.89%

Source: BofA Global Research, ICE Data Indices LLC.



Table 2: Top (Bottom) 15 bonds (ISIN) with largest (smallest) bond price change since most recent € HY trough in spreads

Security Name		OAS	
	% ch	ch in bp	% ch
TRVLEX 8 05/15/22	306%	3851	-48.6%
VKFP 2 1/4 09/30/24	217%	1238	-38.9%
VKFP 6 3/8 10/15/23	226%	1407	-33.7%
VKFP 6 5/8 10/15/22	287%	1742	-32.0%
MULCEN 6 1/2 08/01/23	120%	1398	-31.5%
EUROCA 4 1/8 11/15/24	144%	821	-27.3%
CDRSM 6 3/4 11/01/21	207%	2168	-26.3%
EUROCA 4 04/30/26	111%	620	-26.1%
INLOTG 6 3/4 09/15/21	62%	2677	-24.9%
PRMHLD 6 3/4 08/15/23	91%	970	-23.4%
ATALIA 4 05/15/24	94%	769	-23.3%
ATALIA 5 1/8 05/15/25	71%	601	-23.2%
TPEIR 9 3/4 06/26/29	118%	599	-22.2%
INLOTG 5 1/4 09/15/24	28%	847	-22.0%
MONTE 5 3/8 01/18/28	117%	524	-21.8%
BULENR 3 1/2 06/28/25	24%	49	-0.6%
UNIIM 4 3/8 03/05/21	82%	67	-0.6%
NOKIA 1 03/15/21	110%	78	-0.5%
TVOYFH 2 1/8 02/04/25	33%	46	-0.4%
TVOYFH 2 05/08/24	34%	45	-0.3%
MAXGPE 3 1/4 09/13/23	22%	45	-0.3%
CTLT 4 3/4 12/15/24	16%	57	-0.3%
TVOYFH 2 5/8 01/13/23	40%	44	-0.3%
ATCNA 6 1/4 02/15/25	-	0	-0.3%
ERICB 0 7/8 03/01/21	72%	50	-0.2%
SRNSBE 5 1/8 02/05/22	-	0	-0.2%
MEOGR 1 3/8 10/28/21	49%	43	-0.2%
NWL 3 3/4 10/01/21	26%	28	-0.1%
SPMIM 3 03/08/21	0%	0	0.3%
FARMIT 1 3/4 05/23/23	1%	1	1.1%

Source: BofA Global Research, ICE Data Indices LLC



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Buy	≥ 10%	≤ 70%
Neutral	≥0%	≤ 30%
Underperform	N/A	≥ 20%

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