

8 April 2020 **Credit Strategy**

Spreads & future default rates

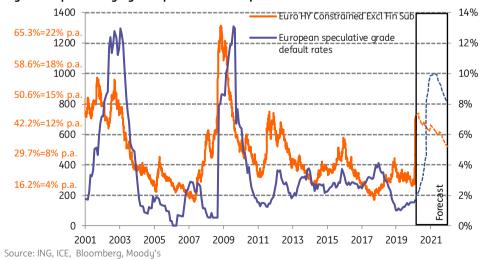
Spreads price in all but GFC style default rates



Current valuations are synonymous with default rates in excess of those seen in all recent times of recession except for the systemic challenge that was associated with the global financial crisis some ten years ago. We believe that given the ING base case economic scenario containing a bounce back in economic activity in 3Q, spreads are more than fairly valued and we would be cautiously optimistic from here.

Framing credit spreads at times of turmoil is never an easy exercise but looking back at default rate levels, the depth of the economic downturn and the accompanying spreads will give us some guidance where spreads could or should be trending from here. This is highlighted in Figure 1 and backed up by the theoretical compensation for these spreads on the basis of loss given default calculations assuming 40% recovery rates (ie, how high should credit spreads be to compensate for certain cumulative or annual default rates).

Fig 1 Corporate high yield spreads show implied default rates



As can be seen above, spreads can be used as a theoretical basis for the calculation of the level of default rates for the duration of the particular index. We have decided to use the cash non-financial high yield index as the best current proxy (due to the speculative grade nature of default rates its best to frame this valuation through high yield markets), on the left hand side we see the ASW level the index trades and the parallel lines show the commensurate cumulative default rates for the duration of that index.

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Reading the graph; the index and the accompanying 1yr default rate that is being priced into spreads currently shows that we are looking at a scenario where default rates are expected to approach levels seen during the recession of the early-2000s (dot-com bubble) and will only stay below those seen during the global financial crisis some 10 years ago.

Looking at the right hand side, we see the comparison to historical default rates according to Moody's data, and unsurprisingly we see additional risk premium as spreads factor in more possible downside in times of stress.

To be able to plot these movements against our expectations and frame them properly, we need to have a look at a number of economic scenarios and hold these up to rating agency expectations in terms of default rates.

So let's have a look at the **ING economic scenarios** first. Our best case scenario is most accurately described as a quick 2Q recovery as the virus fades. The base case with slow lifting of restrictions but a decent bounce in 3Q GDP, whilst it doesn't come with the return of the virus as factored into the winter lockdowns scenario. Scenario 4 entails a huge hit in GDP as the lockdowns last into 2021. The base case suggests the recovery truly starts in 3Q. All in all, the GDP hits across the eurozone are worryingly similar to the 2009 global financial crisis when GDP took a year-on-year hit of no less than 5.7% at its peak.

Fig 2 ING GDP scenarios (%)

| | 1Q20 | 2Q20 | 3Q20 | 4Q20 | FY20 | 1Q21 | 2Q21 | 3Q21 | 4Q21 | FY21 |
|------------------|-------|------|------|------|-------|------|------|------|------|------|
| EUR | | | | • | | | | | • | |
| Base Case | -15.2 | -16 | 13 | 7.5 | -5 | 2.5 | 2 | 2 | 2 | 3.2 |
| Winter lockdowns | -15.2 | -16 | 13 | -6 | -5.8 | 1 | 5.5 | 2.5 | 2.5 | 0.5 |
| Best Case | -15.2 | -4.5 | 10 | 4 | -3.2 | 2.5 | 2 | 2 | 2 | 3.1 |
| Worst Case | -15.2 | -50 | -8 | 0 | -16.1 | 4 | 30 | 20 | 10 | 3.3 |
| USD | • | · | · | · | · | · | · | · | · | |
| Base Case | -6 | -40 | 22 | 10 | -7 | 5 | 4 | 3.5 | 3 | 3.4 |
| Winter lockdowns | -6 | -40 | 22 | -9.5 | -8.1 | 1 | 9 | 13.5 | 9 | 1.2 |
| Best Case | -6 | -24 | 15 | 6.5 | -3.6 | 4.5 | 3 | 3 | 2.5 | 3.4 |
| Worst Case | -6 | -55 | -10 | 0 | -14.9 | 3 | 23 | 21 | 9 | 1.2 |

Source: ING

The different **rating agencies** have recently published their updated expectations of default rates for the next 12 months and longer. This in conjunction with our ING economic scenario projections and the compensation for these defaults priced into spreads gives us a basis to value markets.

- Fitch Ratings has revised the 2020 forecasts for European high-yield corporate
 default rates to 4-5% for bonds and 4% for loans, up from its initial forecast of 2.5%
 for both. They expect bond and loan default rates to increase further in 2021
 towards 8% and 7%, respectively. Forecast defaults to reach 14% in 2021 under the
 "severe economic scenario".
- Moody's also published its own update for Global HY, with three scenarios for projected default rates 12 months out in February 2021, with 6.8% for "short, sharp downturn" (V-shaped recovery effectively), 16.1% for a "GFC-style" crisis (to compare, default rates peaked at 13.4% in 2008-2009) and as much as 20.8% for a "severe recession" (ie, something beyond the 2008-2009 economic impact). This compares to 3.1% in Feb 2020. As shown in Figure 4, Moody's also expect high yield spreads to rise over the coming year.
- Lastly, to round up the three rating agencies, S&P in its report published last week expects the European trailing 12-month HY corporate default rate to jump to 8% within the next 12 months, from 2.2% in December 2019, with the "pessimistic scenario" at 11%.

Fig 3 Moody's global speculative-grade default rate to rise as spreads widen

| High Yield Spreads | May-20 | Aug-20 | Nov-20 | Feb-21 |
|----------------------|--------|--------|--------|--------|
| Base Scenario | 494 | 580 | 562 | 525 |
| Pessimistic Scenario | 621 | 1249 | 1281 | 981 |

Source: ING, Moody's

Whether we look at the most plausible ING scenarios and the accompanying default rate assumptions presented by the ratings agencies or we look quite simply at recent recessionary environments and accompanying default rates, the nuts and bolts remain the same, a 7% annual speculative grade default rate is a given even in the most sanguine developments of the virus. The truth might well lie in between the elevated levels of the Global Financial Crisis and that most 'optimistic' scenario. This, however, at least for the time being, is not a systemic crisis but one that will lead to higher corporate leverage and pressure speculative grade issuers, as such default rates might well hit 10% but the GFC peak at c.13% should be out of reach.

"We expect to lie in between the elevated levels of the Global Financial Crisis and that most "optimistic" scenario"

So what does this mean in terms of current pricing?

The High Yield Non-Financial index under Figure 1, at 635bp entails a 1yr default rate at no less than 12.1% for the index, which is only just shy of the 13.4% peak for the Global Financial Crisis. The Investment grade Non-Financial index with a level of 190bp has a 1yr default rate at 3.8%. Looking back at what US and European High Yield markets are pricing into their synthetic indices identifies that the current iTraxx index and the Crossover index at 100bp and 535bp respectively, entails a 1yr default rate at 2% and 10.3%, respectively.

1210/0 1yr default rate for High Yield Non-Financial index

Markets often gyrate between overbought and oversold, whilst spreads seen in Jan of this year fall clearly into the former category we must conclude that any outcome whereby ING base case scenario or even scenario 2 with winter lockdowns return prevalent would mean that the market is already currently in oversold territory. The ING base case currently is looking for a year on year GDP decline of 5% for the Eurozone and 7% for the US.

These numbers are close to the GFC drops but this crisis has one big difference in terms of financing, markets are not closed, at last alpha drives investment decisions and issuers can tap markets when prepared to pay and to be flexible, offering collateral and high coupons even the most challenged sectors are tapping markets. Bond markets have evolved significantly over the past 10 years and will guarantee liquidity for many challenged issuers in all but the worst case economic scenario. Bank balance sheets too are stronger and will be able to absorb more, and let's not forget government support measures (not just QE) is also dissimilar to the GFC and will also offer some bankruptcy protection. Hence, as stated before, we feel comfortable with **default rates approaching 10% but not getting to GFC levels.**

"The V or even swoosh shaped recovery is not priced in"

In terms of valuation, at around 635bp for high yield, the **1yr implied default rate at 12.1%** computes to a **5yr default rate at some 42.8%**, in other words the V or even swoosh shaped recovery is not priced in.

Looking at what is being priced into Investment grade indices taking the Investment grade Non-Financial index as the spread level of 190bp we use to compute implied default rates, we ascertain that **1yr default is priced at 3.8%** and **5yr at no less than 15%**, which again overcompensates for mainstream expectations. And here financing routes through bond markets are well and truly open.

Fig 4 Global Speculative grade default rates and spreads per sector

| | Default rates (%) | | | Spreads (bp) | |
|------------------------------------|-------------------|------|------|--------------|------|
| | 2002 | 2008 | 2002 | 2008 | 2020 |
| Aerospace / automotive / cap goods | 4.6 | 1.0 | 750 | 2400 | 950 |
| Consumer / service sector | 1.5 | 4.4 | 825 | 1400 | 875 |
| Energy and natural resources | 0.0 | 0.0 | 800 | 1050 | 1440 |
| Building products / homebuilders | 0.0 | 0.0 | 550 | 1500 | 750 |
| Health care / chemicals | 2.6 | 1.9 | 575 | 1075 | 850 |
| Technology / computers / equipment | 0.0 | 0.0 | 1375 | 1450 | 750 |
| Insurance | 1.0 | 0.0 | 1725 | 1050 | 900 |
| Leisure time / media | 6.1 | 10.0 | 800 | 1800 | 1050 |
| Real estate | 0.0 | 7.1 | 575 | 1475 | 775 |
| Telecommunications | 24.4 | 6.8 | 1350 | 1150 | 950 |
| Transportation | 3.3 | 2.4 | 1050 | 1575 | 1250 |
| Utility | 0.8 | 0.0 | 1025 | 950 | 750 |

Source: ING, S&P, ICE (Spreads based on USD High Yield)

The analysis between previous spread peaks and previous default peaks by sector gives strong indications on the future trajectory of default rates by sector. Looking at the sector breakdown of default rates in the early-2000s financial crisis and the global financial crisis in 2008, it is clear to see the sectors standing out. It is also evident that the higher spreads have indeed led to higher default rates.

- In general spread levels are much lower compared to the Global Financial Crisis peak
 in 2008, the notable exception is the energy sector and natural resources. Indeed, we
 expect default rates to exceed other sector peak default rates seen in previous crisis
 periods as oil and commodity pricing translates into business models where
 corporates have reduced covenants during restructuring in previous heavy oil price
 declines (late 2015).
- Telecoms, during the dot-com bubble peaked at a substantial 24% default rate in 2002, but only 7% in 2008, currently spreads are tighter than in the previous crises which we expect will translate to a default rate in single digit territory.
- Healthcare/Chemicals' spreads have fallen in the middle of the previous crisis, which
 means the default rates may likely fall between 1.9% and 2.6%. However, we feel
 that given the nature of this crisis this seems overstated.
- Building products and construction sees spreads in excess of 2002 whilst activity continues.
- Utility spreads are one of the few at lower levels than both previous peaks but historical default rates indicate that rating migration rather than defaults itself are more of the concern here.
- Spreads on aerospace, automotive and cap goods seem somewhat low to us compared to 2008 levels and current sector incapacity.

BB Spreads (bp) 600 500 400 300 200 DAX Index 100 10000 9500 10500 11000 12000 7000 7500 8000 8500 9000 11500

Fig 5 BB Spreads vs Equities

Source: ING, ICE, Bloomberg

One last point is that when we look at historical pricing for BB rated Euro debt and compare it to equity markets (Dax in this case), it seems evident that as the scatter diagram (Figure 5) indicates BB spreads are trading at a far more elevated level than is historically seen compared to current equity levels. Another indication that credit could already be pricing in the most realistic scenario and then a bit more.

Nonetheless, as indicated spread markets always price in a little more and its evident that support mechanisms are beneficial for all industry but the backstop of QE for investment grade is clearly a huge differential in these times where liquidity is key and securing finance is of the utmost importance. Hence **high yield is still stuck between a rock and a hard place** with infrequent true bankruptcy protection along country lines and that lack of QE, in primary, secondary or CP format.

Something else to note, and needs to be priced in, is the **surge in downgrades**, particularly in the high yield space and the fallen angels from investment grade to high yield. Thus far, S&P has reported 500 downgrades in the US year to date, of which 435 in high yield and includes 20 fallen angels. In Europe we are looking at 167 downgrades of which 119 in high yield and 7 fallen angels.

435 Downgrad

Downgrades in High Yield in the US

Fig 6 ING base case scenario credit outlook

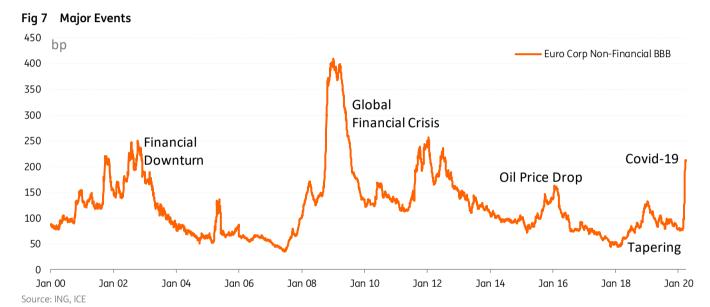
| | 1Q20 | 2Q20 | 3Q20 | 4Q20 | FY20 |
|--------------|------|------|------|------|------|
| Spread (BBB) | 225 | 200 | 175 | 150 | 150 |
| Curve (BBB) | -10 | 10 | 20 | 30 | 30 |
| Supply (€bn) | 112 | 140 | 90 | 60 | 402 |
| Fallen Angel | 6 | 12 | 16 | 14 | 48 |

Source: ING

Using ING's base case scenario as a proxy, we identify some potential forecasts for the credit markets within the upcoming year. As per Figure 7, using BBB non-financial spreads we identify the wide spread of 225bp in 1Q, we expect that to gradually tighten over the coming year and with what we expect the curve to steepen considerably from the inverted point of 1Q. Initially we had forecast a 2020 corporate supply of €340bn, however now we estimate around the €400bn to mark in another record-breaking year. This is despite the expectation of considerably less reverse yankee supply. The majority

of the supply has and will come in the first half of the year as many corporates are refinancing and front loading. Because of the significant liquidity financing paired with the reduced earnings will be detrimental to leverage ratios which will in turn lead to higher level of downgrades. Although many corporates will happily take the risk of downgrade in return for shoring liquidity to ensure long term survival. Therefore, we forecast fallen angles to increase, we expect fallen angels to reach up to 10% of the BBB-universe, and pencil in around 48.

As In conclusion, we do expect a rise in default rates, as poor earnings and liquidity issues and of course rating migrations add more default risk. However, as this is not a systematic crisis we do not expect defaults to rise to the c.13% levels seen in the global financial crisis. We expect default rates to rise to between 7% and 10%. We are currently not in the same financial environment as in 2008, and we are seeing significant support across the investment grade space in both Euro and USD, and although not supported as directly High yield corporates can still meet their refinancing needs albeit at high levels.



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