

Uncommon truths

Are credit spreads wide enough?

Have credit spreads widened enough? We think the answer depends upon what happens to the economy and we use US credit markets to give historical context. This leaves us more concerned about high-yield than investment-grade but we believe spreads could still widen in both.

As is often the case during recessions, credit markets have received a lot of attention. Spreads have widened and liquidity has been difficult at times (according to my trader colleagues). So, how bad has it become and what does the credit market tell us about the state of the economy?

In what follows, we focus on US credit markets but we were able to take a broader look in the recently published <u>Big Picture</u> document. Considering a range of possible economic scenarios, we found that investment-grade credit (IG) was favoured by our optimisation process in all cases. High-yield credit (HY), on the other hand, was only favoured in the milder economic scenarios.

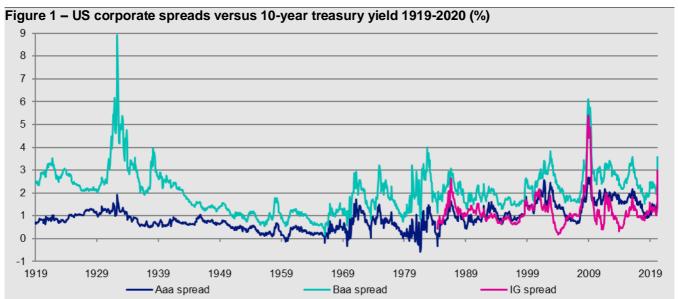
Focusing on US credit markets, **Figure 1** shows not only the extent of the widening in the IG spread but also the rapidity of that widening. It is hard to find any comparable widening since 1919 that occurred so abruptly (we use Moody's Aaa and Baa yields as a proxy for IG yields in those earlier periods). Historically, such widening has been a gradual process, not a vertical ascent. The widening of spreads usually suggests problems for the corporate

sector, as it not only implies that funding has become more expensive just when it is needed the most and usually signals the drying up of funds.

Unfortunately, the US corporate sector entered this recession with a lot of debt (BIS data suggests that non-financial sector corporate debt was 75% of GDP in 2019 Q3, a record). Such a debt burden is no problem when rates are low and the economy is doing well but becomes an Achille's heel under current circumstances. US businesses will need to cut back on a lot of expenditure, including dividends and share buybacks, in our opinion.

The only time the IG spread was wider was during the Global Financial Crisis (GFC). Interestingly, during times of stress, the IG spread detaches from that of Aaa bonds and resembles more that of the Baa segment. That Baa spread has only been noticeably higher during the GFC and the Great Depression. On that basis, it would appear the IG market has priced-in a "normal" recession but not something of the nature of the Great Depression nor the GFC.

As a reminder, during the Great Depression US industrial production declined by 54% (from top to bottom) and GDP declined in 1930 (-8.6%), 1931 (-6.4%), 1932 (-13.0%) and 1933 (-1.3%). By comparison, the GFC was a mild recession, with US industrial production and GDP falling by 17% and 4%, respectively (from top to bottom). GDP fell by 0.1% in 2008 and 2.5% in 2009.



Monthly data from January 1919 to March 2020 (as of 31 March 2020). "Aaa spread" and "Baa spread" are based on the Moody's seasoned corporate Aaa and Baa yields, with both compared to the 10-year US treasury yield. "IG spread" compares the yield to maturity on the BAML US Corporate Index to the 10-year US treasury yield. Past performance is no guarantee of future results.

Source: BAML, Global Financial Data, Federal Reserve Bank of St. Louis, Moody's, Refinitiv Datastream and Invesco



Of the four scenarios we considered in The Big Picture, the very worst-case implied a 3.5% drop in global GDP in 2020, which is consistent with a 4.5% decline in US GDP. That sounds roughly equivalent to the top-to-bottom drop during the GFC but this is likely to be a very different situation.

In fact, that very worst-case scenario implies a top-to-bottom drop in global GDP of 20%-25% in the space of two quarters. That sounds more like the Great Depression than the GFC. However, we also assume a rapid rebound during 2020 H2, hence the full year GDP decline being limited to 3.5%. Without the intervention of policy makers, we suspect the impact on credit spreads would be somewhere between what happened during the GFC and the Great Depression. In that case, we would expect a further widening of IG spreads and investment losses.

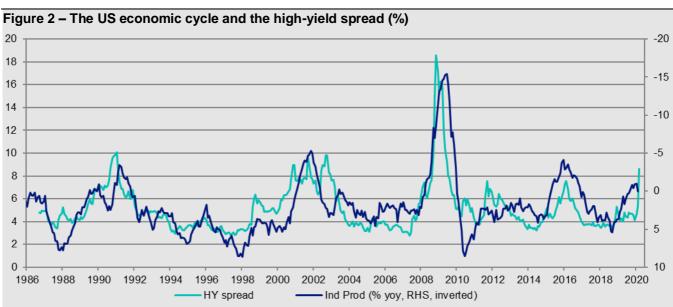
However, policy makers have intervened in two important ways: first, governments and central banks are trying to protect the cash flows of households and businesses, thus cushioning the economic decline. Second, many central banks have launched asset purchases programmes and an increasing number now include corporate debt. Taken together, these actions should limit the drop in GDP and the widening of spreads. Consequently, the worst we can imagine is a widening of spreads to GFC levels. That would be painful for IG investors but we believe that other asset classes would fare even worse under such a scenario (equities, real estate and commodities, say).

We include US HY in the list of assets we would want to avoid under that worst-case outcome. **Figure 2** shows the relationship between the US HY spread and the economic cycle (as expressed by growth in industrial production). Unsurprisingly, spreads widen during economic downturns. More surprising is that US HY spreads had not already reacted to the deceleration in US industrial production evident since late 2018. In our opinion this was the credit market counterpart of the US equities hitting all-time highs as profits decelerated. With hindsight, financial markets were in a state of suspended animation (or perhaps delusion).

Two things suggest to us there is a risk of HY spreads widening further: first, the Covid-19 inspired decline in industrial production hasn't even started to show in **Figure 2** and there is a risk spreads could widen again when it does. Second, those spreads have not even reached normal recession levels, never mind what was seen during the GFC. Indeed, another ten percentage points of spread widening would be needed to reach GFC proportions. Add on top of that a default rate of 16% (as reported by BAML at the time of the GFC) and it is not hard to imagine a 30% one-year loss on US HY (the result under our very worst-case scenario).

That may be overly bearish but it does highlight the downside risk to HY under the worst economic scenarios. Unsurprisingly, our optimisation process found no place for HY in the worst-case scenarios, though it did suggest that we adopt maximum exposure to IG under all scenarios (even with a projected loss for US IG of 11% in the very worst-case). IG seems to offer a good combination of risk, reward and diversification.

Unless stated otherwise, all data as of 03 April 2020.



Note: Monthly data from January 1986 to March 2020 (as of 31 March 2020). "HY spread" is the difference between the yield on the BAML US High-Yield Corporate Index and that on the 10-year US treasury. "Ind Prod" shows the year-on-year percentage change in US industrial production. Past performance is no guarantee of future results. Source: BAML, Global Financial Data, Refinitiv Datastream and Invesco



Figure 3 - Asset class	total returns
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Figure 3 – Asset clas	o iviai itiui	1113										
Data as at 03/04/2020		Current					Total Return (Local Currency, %)					
	Index	Level/RY	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Equities												
World	MSCI	425	-2.4	-18.3	-3.8	-24.3	-15.6	-1.9	-17.0	-3.5	-22.6	-14.1
Emerging Markets	MSCI	832	-1.2	-18.8	-1.9	-25.1	-20.6	-0.3	-15.4	-1.3	-20.1	-15.2
US	MSCI	2364	-2.3	-17.4	-3.9	-22.7	-11.9	-2.3	-17.4	-3.9	-22.7	-11.9
Europe	MSCI	1277	-2.7	-21.0	-4.8	-27.9	-21.1	-0.8	-18.0	-3.5	-24.4	-17.6
Europe ex-UK	MSCI	1564	-2.6	-20.5	-4.4	-26.1	-17.9	-0.4	-17.6	-3.0	-23.3	-15.2
UK	MSCI	789	-2.9	-22.8	-6.0	-33.0	-29.6	-2.1	-19.3	-4.9	-27.6	-24.4
Japan	MSCI	2672	-7.9	-12.0	-5.6	-21.3	-12.6	-7.6	-11.2	-5.1	-21.4	-14.9
Government Bonds												
World	BofA-ML	0.33	-0.6	-1.3	-0.3	2.4	6.9	0.1	0.3	0.3	4.1	7.9
Emerging Markets	BBloom	8.37	-1.6	-18.8	-1.2	-16.5	-8.9	-1.6	-18.8	-1.2	-16.5	-8.9
US (10y)	Datastream	0.59	2.1	6.0	0.9	15.3	23.6	2.1	6.0	0.9	15.3	23.6
Europe	Bofa-ML	0.30	-3.3	-6.6	-1.8	-3.7	0.7	-1.0	-3.3	-0.2	0.1	4.7
Europe ex-UK (EMU, 10y)	Datastream	-0.44	-2.8	-5.4	-1.8	-1.3	0.6	-0.5	-2.1	-0.2	2.6	4.6
UK (10y)	Datastream	0.27	-0.6	-3.6	-0.9	-2.5	1.3	0.2	8.0	0.3	5.4	8.8
Japan (10y)	Datastream	-0.02	0.0	-1.8	-0.2	0.2	2.6	0.3	-0.9	0.4	0.0	-0.1
IG Corporate Bonds												
Global	BofA-ML	3.14	0.5	-8.3	-0.2	-5.7	1.2	1.1	-7.1	0.2	-4.2	2.7
Emerging Markets	BBloom	7.52	0.0	-16.3	-0.2	-13.6	-3.7	0.0	-16.3	-0.2	-13.6	-3.7
US	BofA-ML	3.68	1.6	-7.7	0.3	-3.8	5.1	1.6	-7.7	0.3	-3.8	5.1
Europe	BofA-ML	1.84	-2.3	-10.1	-1.7	-9.7	-7.1	0.0	-7.0	-0.1	-6.2	-3.3
UK	BofA-ML	2.85	1.1	-10.1	0.2	-10.6	-4.5	1.9	-6.0	1.4	-3.3	2.5
Japan	BofA-ML	0.50	-0.3	-1.8	-0.5	-0.1	2.9	0.0	-0.9	0.0	-0.3	0.1
HY Corporate Bonds												
Global	BofA-ML	9.85	-0.9	-15.4	-1.8	-15.7	-10.3	-0.5	-14.8	-1.5	-15.0	-9.6
US	BofA-ML	9.90	-1.0	-14.8	-2.4	-15.2	-10.0	-1.0	-14.8	-2.4	-15.2	-10.0
Europe	BofA-ML	6.98	-1.6	-16.7	-1.5	-17.8	-13.8	0.8	-13.7	0.0	-14.6	-10.3
Cash (Overnight LIBOR)												
US		0.00	0.0	0.0	0.0	0.3	1.9	0.0	0.0	0.0	0.3	1.9
Euro Area		0.00	-3.0	-3.3	-2.0	-3.7	-4.3	0.0	0.0	0.0	-0.1	-0.5
UK		0.00	-1.6	-4.3	-1.3	-7.4	-6.2	0.0	0.0	0.0	0.1	0.6
Japan Barter (BEITa)		0.00	-0.5	-1.2	-0.9	0.1	2.7	0.0	0.0	0.0	0.0	-0.1
Real Estate (REITs)		4004					00.4					
Global	FTSE	1334	-7.4	-30.2	-7.6	-33.8	-29.4	-5.1	-27.7	-6.1	-31.2	-26.6
Emerging Markets	FTSE	1745	-0.8	-22.4	-1.0	-29.3	-23.7	1.6	-19.7	0.6	-26.6	-20.6
US	FTSE	2037	-11.4	-33.5	-10.3	-36.3	-32.1	-11.4	-33.5	-10.3	-36.3	-32.1
Europe ex-UK	FTSE	2625	-3.4	-29.4	-5.9	-30.1	-22.6	-1.1	-26.9	-4.4	-27.3	-19.5
UK	FTSE	998	-5.2	-28.8	-7.2	-37.0	-26.8	-4.5	-25.6	-6.1	-31.9	-21.4
Japan	FTSE	2047	-7.0	-27.1	-8.6	-31.3	-21.9	-6.8	-26.5	-8.1	-31.4	-24.0
Commodities	0001	4544	0.0	20.0	2.2	10.4	40.4					
All	GSCI	1544	0.9	-29.6	3.3	-40.4	-40.4	-	-	-	-	-
Energy	GSCI	218	7.2	-44.0	12.4	-56.2	-55.9	-	-	-	-	-
Industrial Metals	GSCI	987	-0.6	-12.4	-1.7	-19.0	-23.4	-	-	-	-	-
Precious Metals	GSCI	1875	-0.9	-1.8	2.6	4.8	22.8	-	-	-	-	-
Agricultural Goods	GSCI	306	-3.7	-8.5	-3.0	-12.1	-9.6	-	-	-	-	
Currencies (vs USD)*		4.00	2.0	2.2	2.0	2.0	2.0					
EUR		1.08	-3.0	-3.3	-2.0	-3.6	-3.8	-	-	-	-	-
JPY		108.47	-0.5	-1.2	-0.8	0.1	2.8	-	-	-	-	-
GBP		1.23	-0.8	-4.4	-1.1	-7.5	-6.8	-	-	-	-	-
CHF		1.02	-2.7	-2.2	-1.7	-1.0	2.1	-	-	-	-	-
CNY		7.09	0.0	-1.8	-0.1	-1.8	-5.4	-	-	-	-	-

Notes: *The currency section is organised so that in all cases the numbers show the movement in the mentioned currency versus USD (+ve indicates appreciation, -ve indicates depreciation). Past performance is no guarantee of future results. Please see appendix for definitions, methodology and disclaimers.

Source: Refinitiv Datastream and Invesco



Figure 4 – World equity sector total returns relative to market (%)

Data as at 03/04/2020			Global		
	1w	1m	QTD	YTD	12m
Energy	10.8	-11.6	6.3	-22.5	-28.2
Basic Materials	2.0	-0.9	1.6	-5.6	-7.8
Basic Resources	2.8	-1.7	2.7	-6.9	-7.7
Chemicals	1.2	0.0	0.4	-4.1	-8.1
Industrials	-3.1	-4.8	-1.8	-6.4	-7.0
Construction & Materials	-1.8	-7.8	-1.8	-7.4	-7.3
Industrial Goods & Services	-3.2	-4.4	-1.8	-6.2	-6.9
Consumer Discretionary	-2.7	-1.6	-1.6	-2.5	-4.1
Automobiles & Parts	-8.0	-10.7	-4.1	-12.4	-16.1
Media	-0.5	-1.7	-1.6	-5.4	-5.3
Retailers	1.0	8.7	0.8	13.2	11.0
Travel & Leisure	-6.2	-15.3	-4.6	-23.0	-24.2
Consumer Products & Services	-3.7	-1.0	-1.8	-1.2	-1.7
Consumer Staples	3.6	9.8	2.8	10.9	7.6
Food, Beverage & Tobacco	3.5	7.4	2.7	7.6	4.9
Personal Care, Drug & Grocery Stores	3.6	14.4	3.1	17.1	17.7
Healthcare	4.6	13.4	2.0	16.6	25.2
Financials	-3.1	-9.3	-1.4	-12.2	-13.4
Banks	-4.5	-11.8	-1.9	-16.4	-19.4
Financial Services	-2.2	-8.8	-0.9	-9.4	-6.3
Insurance	-1.6	-5.1	-1.2	-6.9	-8.3
Real Estate	-2.1	-8.2	-1.4	-4.4	-4.2
Technology	0.3	5.8	-0.8	11.6	17.4
Telecommunications	1.3	8.5	2.2	11.9	12.0
Utilities	-1.3	-1.5	-0.6	6.3	8.0

Notes: Returns shown are for Datastream sector indices versus the total market index. Past performance is no guarantee of future results. Source: Refinitiv Datastream and Invesco



	Neutral	Policy Range	Allo	cation	Position vs Neutral	Hedged	Currency
Cash	5%	0-10%	1	10%			
Cash	2.5%			5%			
Gold	2.5%		1	5%			
Bonds	45%	10-80%	↓	40%			
Government	30%	10-50%	1	20%			
US	10%		1	9%			
Europe ex-UK (Eurozone)	8%			0%			
UK	2%		1	3%			
Japan	8%			4%			
Emerging Markets	2%			4%			
Corporate IG	10%	0-20%		20%			
US Dollar	5%			10%			
Euro	2%		1	2%			
Sterling	1%		1	4%	i e		
Japanese Yen	1%		į	1%			
Emerging Markets	1%		1	3%			
Corporate HY	5%	0-10%	Ţ	0%			
US Dollar	4%		ij	0%			
Euro	1%		i	0%			
Equities	40%	20-60%	_	30%			
US	24%			14%			
Europe ex-UK	6%		į	2%			
UK	3%		1	6%			
Japan	3%		į	6%			
Emerging Markets	4%		i	2%			
Real Estate	8%	0-16%		16%			
US	2%		1	5%			
Europe ex-UK	2%			2%			
UK	1%		1	1%			
Japan	2%		1	5%			
Emerging Markets	1%		· 1	3%			
Commodities	2%	0-4%	<u> </u>	4%			
Energy	1%		<u> </u>	2%			
Industrial Metals	0.3%			1%			
Precious Metals	0.3%			0%			
Agriculture	0.3%		1	1%			
Total	100%			100%			
Currency Exposure (including	a effect of heda	ıina)					
USD	49%	ı <i>a</i> ;	1	47%			
EUR	20%			7%			
GBP	7%		↓	16%			
JPY	15%		I ↑	18%			
EM	8%		I	13%			
Total	100%		+	100%			

Notes: This is a theoretical portfolio and is for illustrative purposes only. See the latest <u>The Big Picture</u> document for more details. It does not represent an actual portfolio and is not a recommendation of any investment or trading strategy. Arrows indicate the direction of the most recent changes.

Source: Invesco



Figure 6 – Model allocations for Global sectors

	Neutral	Invesco
Energy	5.7%	Neutral
Basic Materials	4.3%	Overweight
Basic Resources	2.3%	Overweight
Chemicals	2.0%	Neutral
Industrials	13.0%	Underweight
Construction & Materials	1.6%	Neutral
Industrial Goods & Services	11.4%	Underweight
Consumer Discretionary	13.8%	Neutral
Automobiles & Parts	2.1%	Neutral
Media	1.3%	Overweight
Retailers	4.3%	Underweight
Travel & Leisure	2.3%	Overweight
Consumer Products & Services	3.7%	Neutral
Consumer Staples	7.4%	Overweight
Food, Beverage & Tobacco	4.8%	Overweight
Personal Care, Drug & Grocery Stores	2.5%	Overweight
Healthcare	9.8%	Overweight
Financials	17.6%	Underweight
Banks	8.6%	Neutral
Financial Services	4.8%	Underweight
Insurance	4.2%	Underweight
Real Estate	4.3%	Overweight
Technology	15.6%	Underweight
Telecommunications	4.8%	Underweight
Utilities	3.8%	Underweight

Notes: These are theoretical allocations which are for illustrative purposes only. They do not represent an actual portfolio and are not a recommendation of any investment or trading strategy. See the latest Strategic Sector Selector for more details.

Source: Refinitiv Datastream and Invesco



Appendix

Definitions of data and benchmarks for Figure 3

Sources: we source data from Datastream unless otherwise indicated.

Cash: returns are based on a proprietary index calculated using the Intercontinental Exchange Benchmark Administration overnight LIBOR (London Interbank Offer Rate). The global rate is the average of the euro, British pound, US dollar and Japanese yen rates. The series started on 1st January 2001 with a value of 100.

Gold: London bullion market spot price in USD/troy ounce.

Government bonds: Current levels, yields and total returns use Datastream benchmark 10-year yields for the US, Eurozone, Japan and the UK, and the Bank of America Merrill Lynch government bond total return index for the World and Europe. The emerging markets yields and returns are based on the Barclays Bloomberg emerging markets sovereign US dollar bond index.

Corporate investment grade (IG) bonds: Bank of America Merrill Lynch investment grade corporate bond total return indices, except for in emerging markets where we use the Barclays Bloomberg emerging markets corporate US dollar bond index.

Corporate high yield (HY) bonds: Bank of America Merrill Lynch high yield total return indices

Equities: We use MSCI benchmark gross total return indices for all regions.

Commodities: Goldman Sachs Commodity total return indices

Real estate: FTSE EPRA/NAREIT total return indices

Currencies: Global Trade Information Services spot rates



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