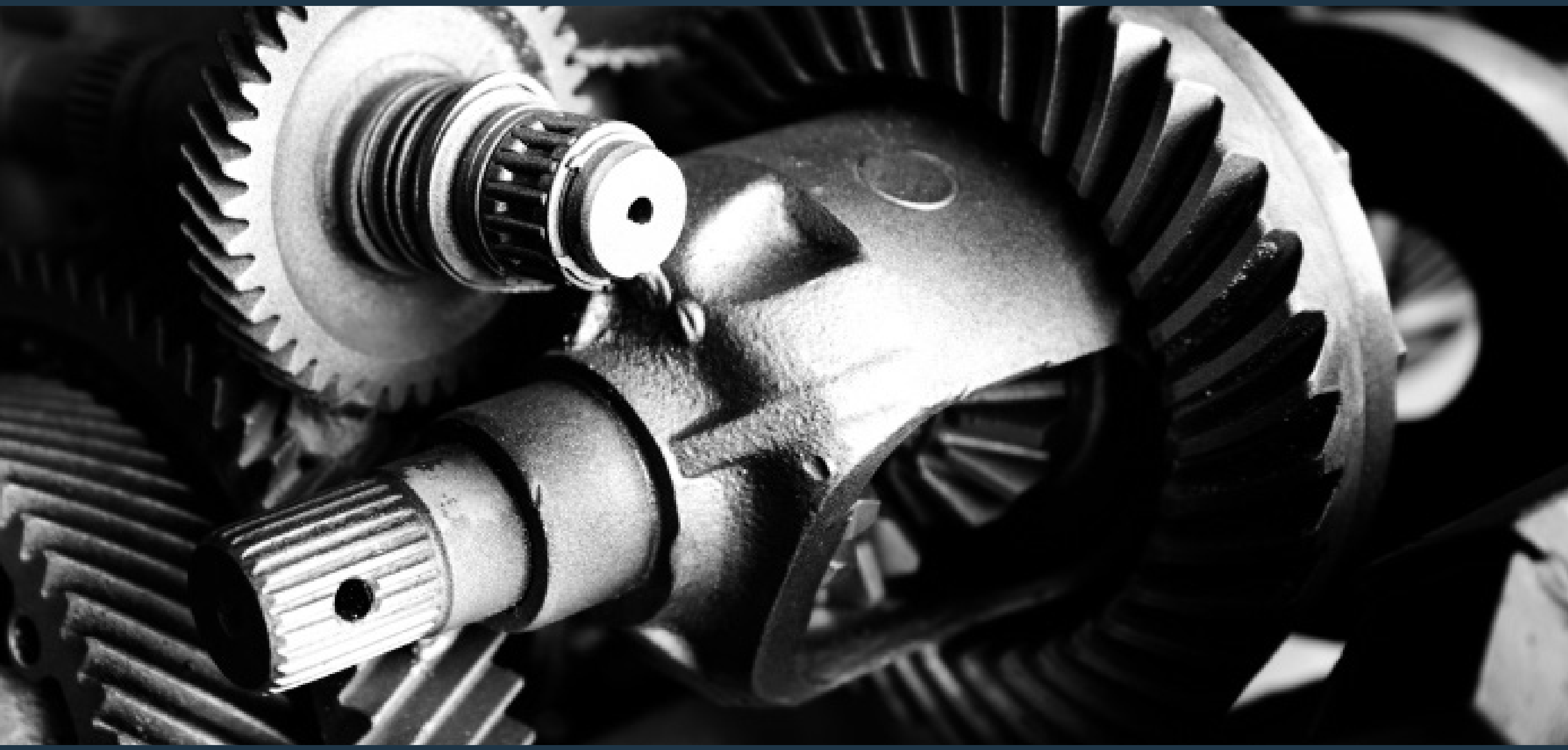
This document is for professional clients/qualified investors only. It is not to be distributed to, or relied on by retail clients.

WHITEPAPER

The case for private debt

Identifying investment strategies post-COVID

September 2020



For today's investor

Contents

3 The case for private debt: Identifying investment strategies post-COVID

3 A growing opportunity for investors

6 Private loans positioning in a portfolio

8 Key considerations for portfolio construction

10 Appendix 1: Assumptions used in our models

The case for private debt: Identifying investment strategies post-COVID

The private debt market is a growing focus for institutional investors. Having delivered strong performance against a benign economic background[1], we look at the outlook for the sector in what could be a more challenging period, as well as the characteristics that make it a useful diversifier in portfolios. The private debt universe includes many secured assets such as infrastructure debt and real estate debt, but the focus for this report is private corporate debt.

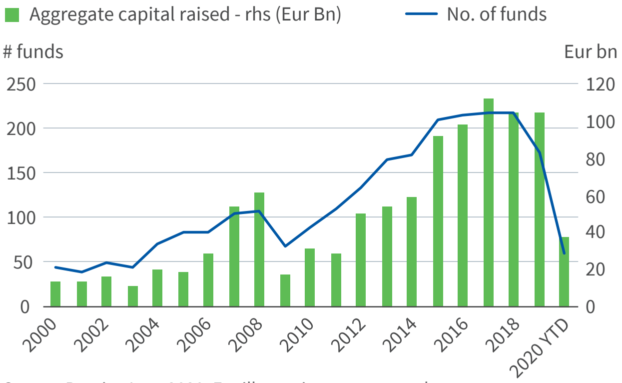
The balance sheets of many companies have been stressed and stretched by COVID-19. This report looks at the potential impact of the crisis on private corporate debt and the key considerations when building resilient portfolios.

A growing opportunity for investors

1) Investors' entry into the market

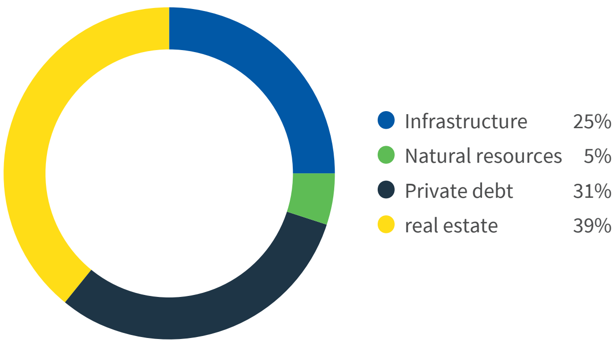
Over the last decade, private debt has become a core part of the alternative income sector, cementing its place alongside real estate and infrastructure.

Figure 1. **Private debt fundraising**



Source: Preqin, June 2020. For illustrative purposes only

Figure 2. **Alternative income Fundraising excluding private equity 2017-2020**



Source: Preqin, June 2020. For illustrative purposes only

2) A diverse investment universe

The private corporate debt universe is vast and varied: from floating rate loans to fixed rate private placements; investment grade to unrated; senior to junior; and large to small borrowers. Each offers a different risk and return profile. Here, we focus on unrated or non-investment grade loans and private placements. A typology of this market is presented below (figure 3).

Leveraged loans are familiar to most investors. These are syndicated loans extended to companies owned by private-equity sponsors, often to back an acquisition (leveraged buyouts or LBOs). This market has been largely disintermediated from banks. According to Leveraged Commentary & Data, institutional investors, demand took up approximately 70 per cent of primary leveraged loans issuance in 2019 – 60 per cent of this came from collateralised loan obligations (CLOs).

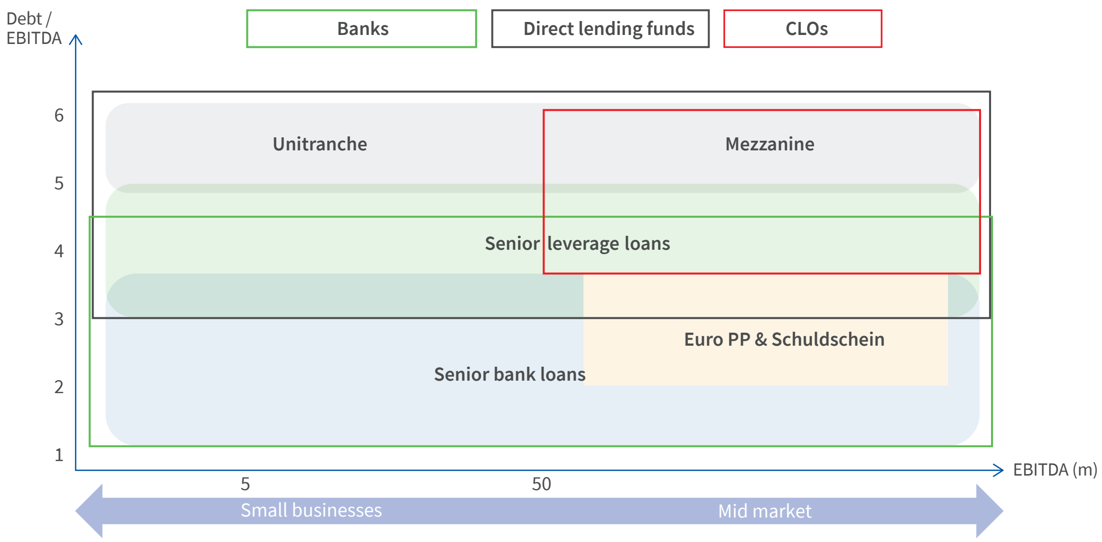
Institutional money has also flowed to smaller companies, including some that are not owned by private equity sponsors – a market which, in Europe at least, used to be the preserve of banks. The mid-market[2] sector attracts a higher margin than debt from larger companies of an equivalent credit rating. These loans are generally provided as club deals or bilateral loans, which can offer more negotiating power to lenders.

Whether sponsor owned or not, companies can now borrow from institutional investors via floating-rate loans, or fixed-rate private placements. Several markets have developed in Europe to facilitate access to institutional investors. The Schuldschein market gives better-known issuers the ability to raise large volumes of bilateral unsecured loans under simple standard documentation. Schuldschein transactions are increasingly popular with international investors and issuers. In France, the smaller euro private-placement market (euro PP) offers an alternative to the USPP market for mid-sized companies of BB quality. Issuance is predominantly fixed rate and covenanted with tenors of around seven-to-eight years.

Each of these markets can offer different risk and return profiles. Figure 4 on the next page, presents a schematic of the various segments of the private debt market.

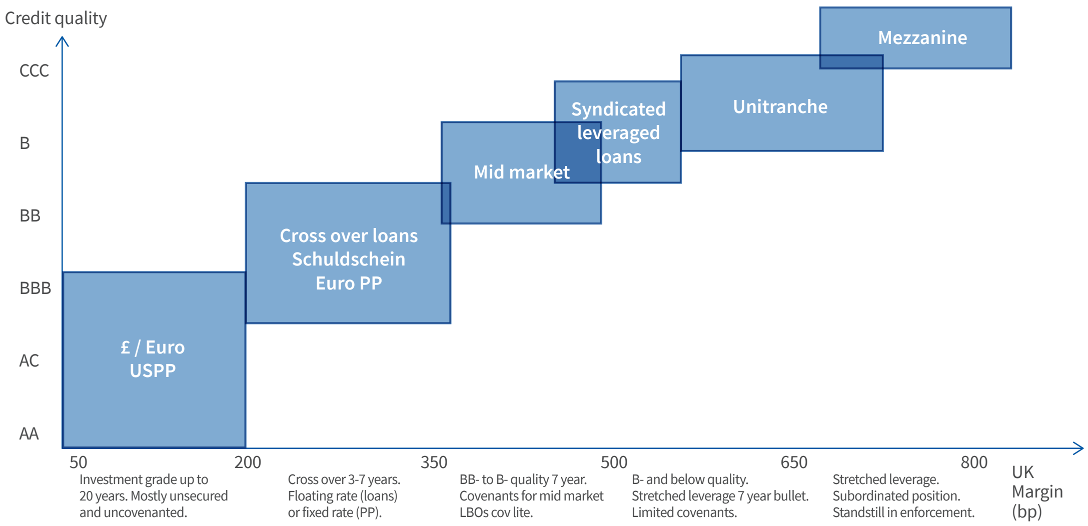
1. See Figure 5 below
2. Definitions of mid-market vary. S&P refers to mid-market as companies with less than €1.5bn turnover and €500m of debt. Many market players refer to less than €/£50m EBITDA. EU defines Small Businesses as having less than €50m turnover

Figure 3. **Typology of private loan market and players**



Source: Aviva Investors as at June 2020. For illustrative purposes only

Figure 4. **Focus on direct lending**



Source: Aviva Investors as at June 2020. For illustrative purposes only

3) Recent market trends

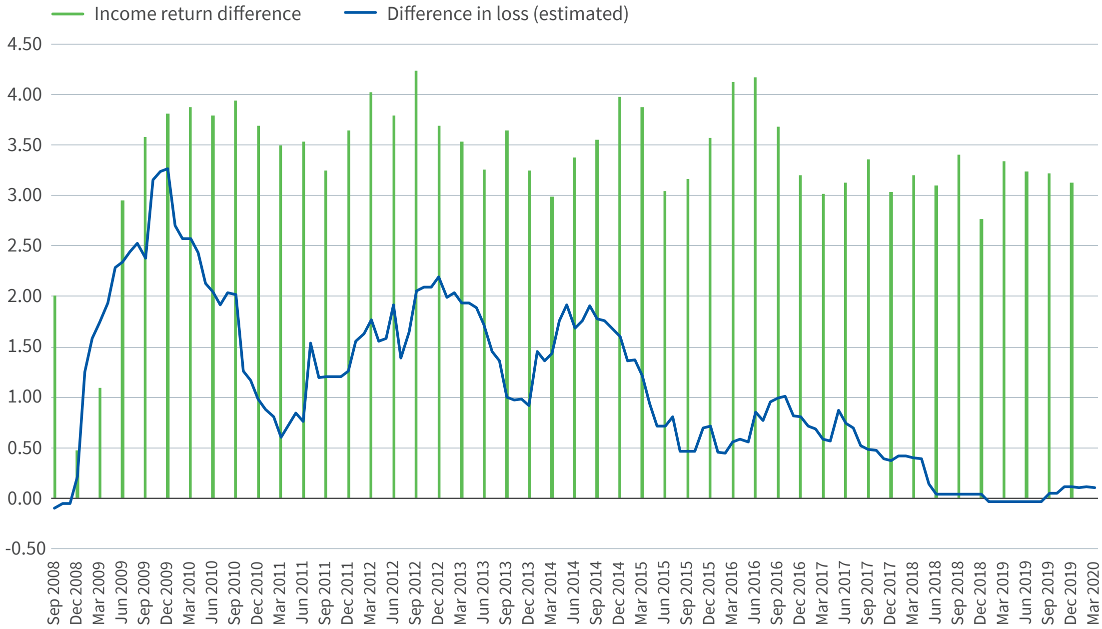
While helping grow the market, the appetite of funds and CLOs had, until the start of 2020, driven a progressive loosening of credit terms. Syndicated leveraged loans have become covenant-lite – meaning there are no maintenance financial covenants on term loans – while covenants are still standard in the mid-market sector. Higher leverage (as measured by debt/EBITDA) has been widely available by inserting a second-lien tranche or providing a unitranche loan (a single loan with leverage consistent with a senior-plus mezzanine structure).

Such loans represented the majority of European mid-market funds' transactions in Q1 2020, according to GCA Altium.[3]

Despite this, the performance of the sector has remained strong in the face of lower interest rates and a benign credit environment. During the last decade, the 2.5 per cent to 3.5 per cent additional yield margin for leveraged loans over investment-grade bonds far outweighed the credit losses for the asset class.

3. GCA Altium – Mid Cap monitor, Q1 2020

Figure 5. **IG Bonds & leveraged loans: Difference in spread & credit loss**



Source: Bloomberg, Moodys, LCD, Aviva investors estimate as at June 2020. For illustrative purposes only

Past performance is not a guide to the future.

More recently, COVID-19 has disrupted all markets, including private debt. In the first couple of months of the crisis, transaction volumes plummeted and secondary prices fell. Since late May, new lending activity has started to pick up and secondary prices for resilient sectors have largely recovered.

Many companies have been using liquidity reserves and new loans to withstand the immediate shock, resulting in an increase in leverage. Lenders have shown forbearance, waiving the resulting covenant breaches. While all eyes are focused on cash preservation, the full impact of the pandemic on businesses will not be known for some months. Nevertheless, the following trends can be expected over the next 12 months:

- **Default rates are likely to rise**, particularly in sectors that remain affected by social distancing measures. Credit spreads will reflect these sectorial differences more fundamentally than in the past.
- **Massive monetary and fiscal incentives** have been put in place by governments and central banks across Europe to cushion companies against the impact of the recession. This includes government-guaranteed loans, which could depress demand for institutional corporate loans in the short term. However, these loans come with restrictions and there will be strong incentives for banks and borrowers to refinance them, creating the potential for increased investment opportunities as the economy recovers.
- The corporate lending sector has relied on debt/EBITDA as the principal measure of leverage. **Many companies will suffer significant falls in EBITDA in 2020** while increasing borrowing, resulting in covenant breaches and leverage levels beyond historical norms. In the last few months, some companies have sought to avoid covenant defaults by using adjusted "EBITDAC"[4] levels. Over the next year, the ability of companies to raise equity and substantiate EBITDA forecasts after the pandemic will become a key determinant of their ability to borrow and investors' appetite to lend.
- We expect to see a **reversal of the former easing of credit trends**. While lenders may have to accept higher leverage in the near term, they are likely to obtain stronger credit protection in the form of covenants and security.

Such trends will create opportunities for new investors.

4. Earning before interest, tax, depreciation, amortisation and coronavirus.

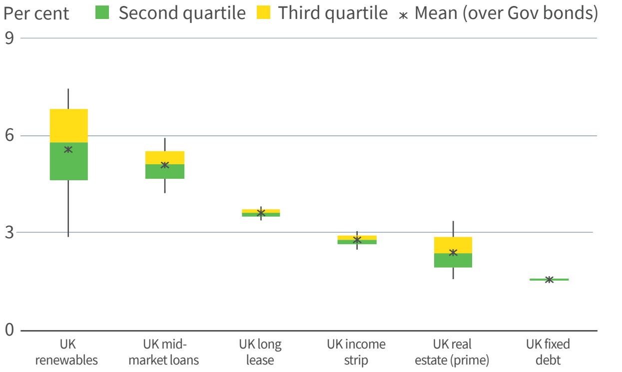
Private loans positioning in a portfolio

1) Through the cycle, private debt is attractive but timing the cycle matters

Our Real Assets House View (published in February 2020)[5] compared the risk and return profiles of different real assets sectors. We considered the expected return and the dispersion of potential outcomes (represented by the height of the bars in the graph below). This analysis compared asset classes on a fully diversified basis and considered expected default rates for private debt through the cycle. Our central economic scenario was for rates to increase over time. In that environment, we found private debt[6] as having the most attractive risk-adjusted return within the real asset universe.

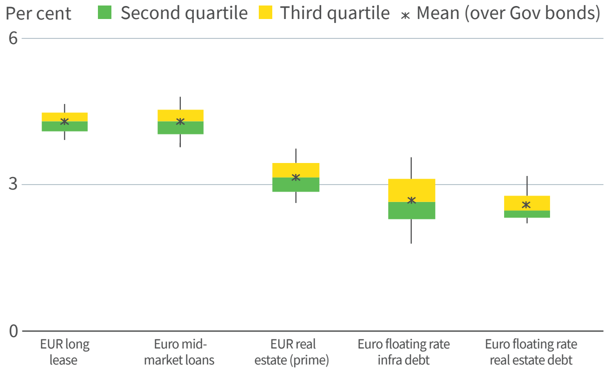
However, the point of entry into the asset class is important in capturing the disconnect between public and private markets. For example, Preqin data suggests private debt funds launched during the global financial crisis outperformed funds launched two years before by taking advantage of reduced asset prices.

Figure 6. **Income return over risk free rate: UK assets**



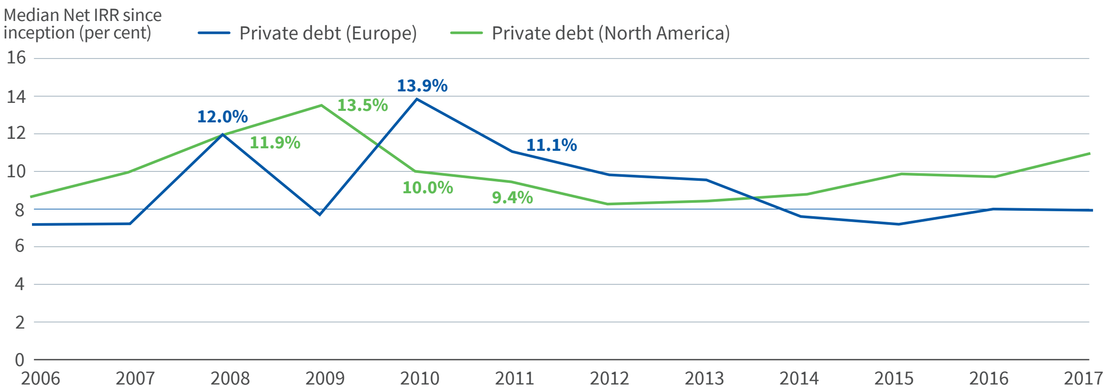
Source: Aviva Investors, as at January 2020. See Appendix for further information on the methodology used.

Figure 7. **Income return over risk free rate: Euro assets**



Source: Aviva Investors, as at January 2020. See Appendix for further information on the methodology used.

Figure 8. **Europe vs. North America-focused private debt: Median net IRRs by vintage year**



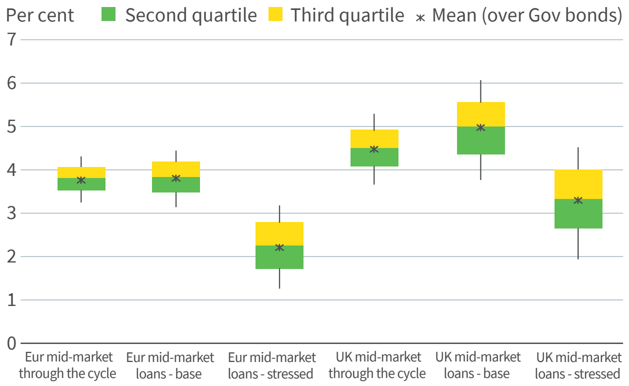
Source: Preqin as at 2020

To reflect the changed macroeconomic conditions, we have updated our private corporate debt "through the cycle" model to reflect increased default risk for the next few years and the higher margins potentially available. Corporate defaults tend to be a lagging indicator of recessions and the economic impact on corporate debt is, as yet, uncertain. While the contraction in GDP is unprecedented, so too is the level of central bank and government support. Our crisis scenario replicates the worst recession of the past 50 years, as detailed in the appendix.

In this illustrative scenario, the increased default risk reduces income for the asset class by approximately 1.5 per cent for mid-market loans and by 80 basis points for the higher rated (BB) private placements. While the overall asset class return would potentially reduce in this scenario, **investors currently deploying capital could derive superior returns by selecting resilient assets at attractive pricing.**

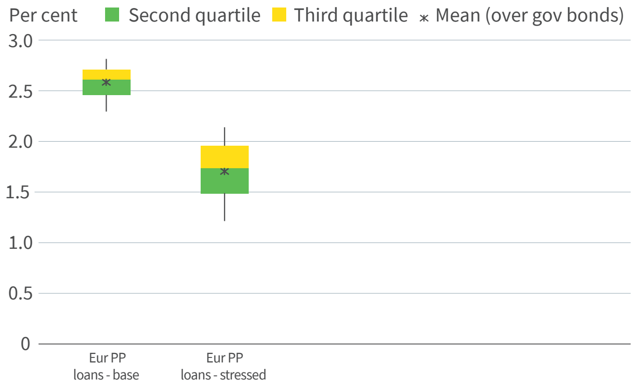
5. Real Asset House View, Aviva Investors, February 2020
6. In this analysis, we modelled a portfolio of 50% BB and 50% B rated loans

Figure 9. **Income return: loans**



Source: Aviva Investors, as at July 2020

Figure 10. **Income return: Euro PP**



Source: Aviva Investors, as at July 2020

2) Benefits of private loans over public aternatives

Private loans differ from publicly-listed bonds. The market is more opaque, and does not benefit from the mandatory disclosure required on public markets. Most loans are unrated, and investors must assess risk in the absence of an external view. This opacity, while shunned by many investors, also comes with greater opportunities to generate outperformance. The depth of due diligence (including the ability to probe management over longer periods than a bond roadshow) and level of understanding of the borrower can make a significant difference in performance. The skill in structuring terms appropriate to the type of borrowers is also vital, particularly for bilateral or club deals where lenders have more influence.

For investors with appetite for non-investment grade credit and a tolerance for illiquidity, private loans also offer benefits compared to public bonds.

- Increased recovery in case of defaults

Historically, according to Moody's, public corporate bonds experience lower recovery values after default compared to private loans. Loans are more often secured, and the covenants enable lenders to detect and rectify credit issues at an earlier stage.

The increased loss-given default for public corporate bonds not only can reduce the mean income return but also increases the dispersion of returns, as shown below. Based on our assumptions, lower recovery levels can depress returns by between 40 basis points in a through the cycle scenario and 100bp in a stressed scenario[7] for the same level of default.

- Euribor floor

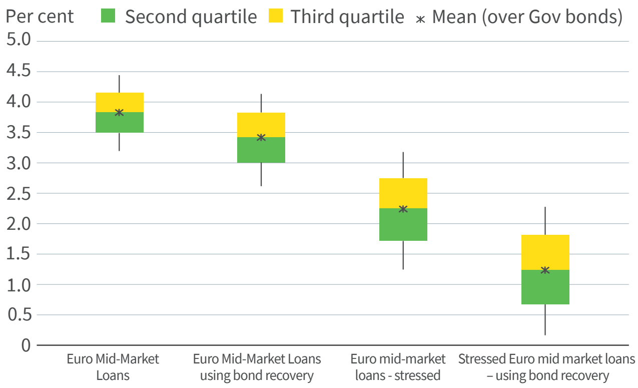
Furthermore, most euro-denominated loans have a zero per cent floor on Euribor. They are therefore set to benefit from interest rate increases, while also being somewhat protected from downside risk.

The positive contribution of Euribor floor to the portfolio return somewhat offsets the credit cost, as shown below.

- Different capital treatment

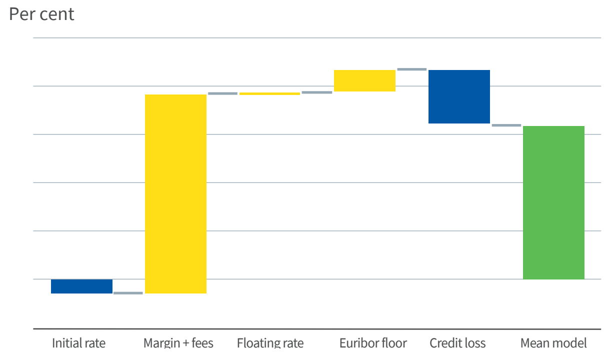
For insurance companies subject to Solvency II regulations, unrated loans benefit from more favourable capital treatment than non-investment grade bonds, reflecting the lower volatility of the asset class in terms of market value.

Figure 11. **Income return over risk-free rate: impact of loss given default**



Source: Aviva Investors, as at July 2020

Figure 12. **The impact of Euribor floor**



Source: Aviva Investors, as at July 2020

7. See appendix 1 for recovery assumptions in base and stress case for loans and bonds

Key considerations for portfolio construction

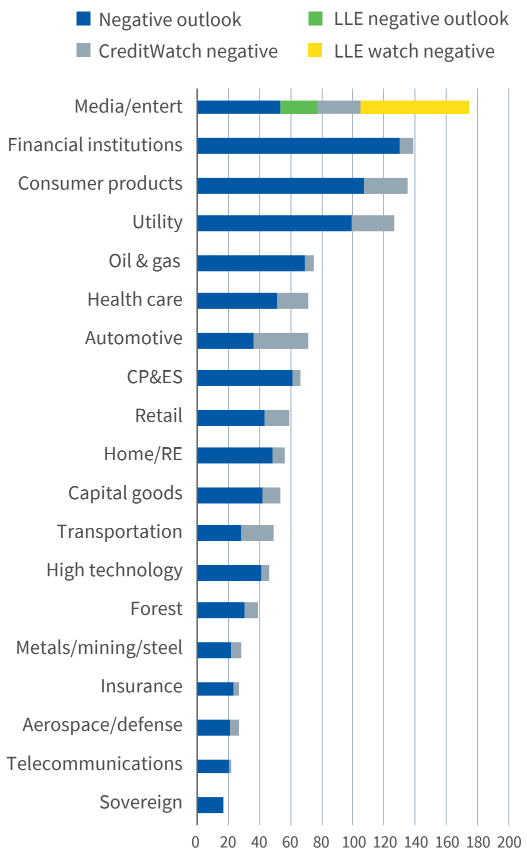
In our crisis scenario, the expected return for private corporate debt is still expected to be positive on a fully diversified basis, despite the higher risk of default. However, portfolios are not fully diversified: debt funds generally hold ten to 40 loans rather than thousands. **Portfolio construction is therefore key to protecting against the impact of defaults and capturing the expected increase in illiquidity premium between private and public markets.**

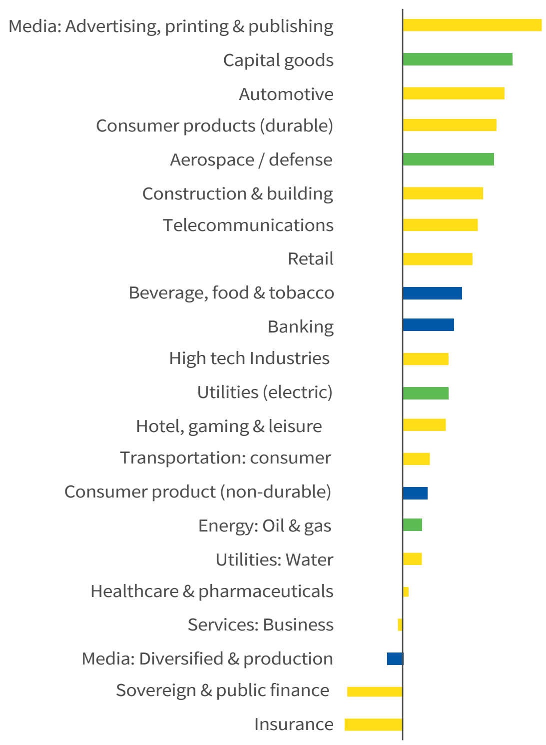
1) Sector diversification can be beneficial but individual asset underwriting even more so

Careful portfolio construction can maximise diversification, while also identifying assets that perform better than the broader sector. Although the current crisis was caused by a health rather than economic trigger, many of the more exposed sectors such as autos, retail, consumer transport and construction (in amber below) have always been cyclical. Yet some traditionally cyclical sectors, such as technology and telecoms, are proving resilient today. It is important to understand the fundamental risks of each sector rather than rely on historic correlation data when building diversified portfolios.

Focusing on resilient sectors is important, yet even within each sector the differences between winners and losers can also be significant. Market leaders in niche markets are more likely to retain value through the cycle. Unlike equities or publicly-traded bonds, it is more difficult to generate profit in a loan to offset losses elsewhere. As such, portfolio diversification, while beneficial, is comparatively less important than robust credit underwriting of each individual loan.

Figure 13. **Covid sector impact**





Source: S&P Global: Downgrade potential rises to all-time high on sharp, deep economic slowdown, May 2020

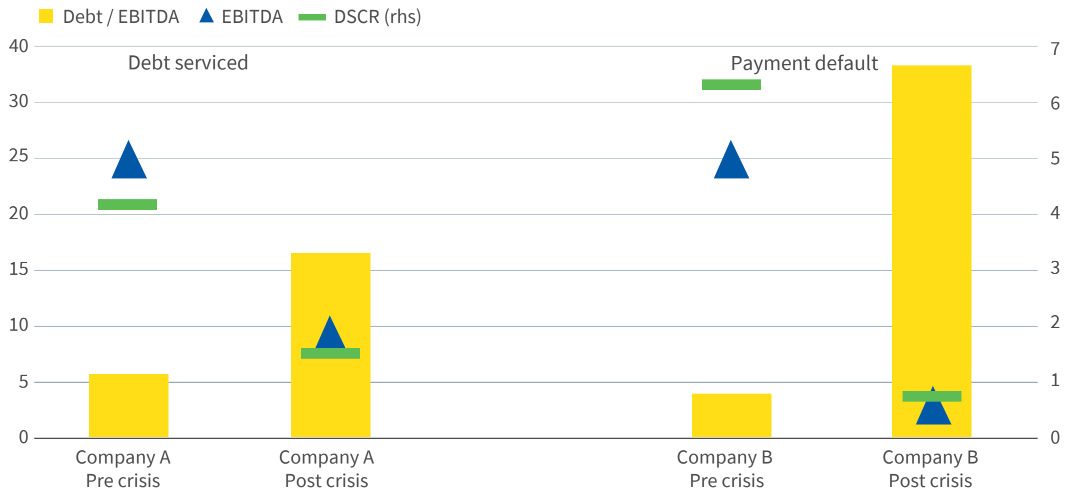
Source: Moody's Corporate Default Study 2020, OECD data, Aviva Investors

2) Resilience and sustainability more important than leverage

The industry has traditionally assessed risk based on leverage metrics such as debt/EBITDA. Such headline numbers should be treated with caution. For example, if we compare company A in a resilient sector with senior debt at six times debt/EBITDA and the more cyclically-oriented company B with a more modest leverage of four times, the stable company could experience a ten per cent fall in turnover and still service its debt comfortably, while the less leveraged company would default on its debt if it experienced a 20 per cent fall in turnover.[8] This illustrative example demonstrates that focusing on operating cash flow is fundamental to build resilient portfolios.

In addition, companies with strong environmental, social and governance (ESG) credentials have shown resilience. The recent crisis has highlighted the differing management attitudes to ESG factors such as employee health and community impact. Demonstrating strong ESG values will therefore be a significant differentiator for companies looking to access finance from banks and institutional investors. As such, incorporating ESG factors into the investment due diligence process will help ensure that borrowers can deliver sustainable performance. The green or sustainable loan market, while still in its infancy, can also offer investors seeking positive impact, an alternative to green bonds.

Figure 14. **Impact of cyclicality: comparing resilient and volatile credits**



Source: Preqin, June 2020

3) Covenants and seniority

As shown above, the return on a loan portfolio is very sensitive not only to the probability of default but, critically, to the recovery value following a default. In turn, the seniority of loans, the security afforded to creditors and the specific covenants attached all contribute to maximising recovery values.

Besides financial covenants, clauses such as negative pledge or restriction-on-disposal are more commonly available in private loans than public bonds. Negotiating a security and covenant package appropriate to the size and nature of the business financed is a key part of asset underwriting.

Conclusion: Portfolio construction is key to resilient investment outcomes

Private corporate debt offers an attractive and diverse alternative to bonds. The non-investment grade sector is likely to see a significant rise in defaults, which will bring greater differentiation between strategies. In this environment, performance will be more differentiated between managers, as credit underwriting and structuring capabilities will come to the fore. In more challenging credit conditions, new investors have the potential to generate superior returns by selecting sustainable business models.

8. For illustration, we have assumed both have 25% EBITDA margin, 60% fixed cost and pay 4% interest rate.

Appendix 1: Assumptions used in our models

The portfolio models in section two of this report have been modelled with the following central assumptions. The return distribution shows the distribution of return where the interest rate, the level of default and recovery values have been independently varied using a Monte Carlo simulation.

	Upfront fee	Margin	Maturity	Amort	Rating	Comment	Fixed/Floating
£ MM	2.5%	500 Bps	7	Bullet	B	No Floor	Floating
Euro PP	0%	300 bps	7	Bullet	BB	No Euribor floor	Fixed
Euro MM	1%	400 bps	7	Bullet	B	Euribor floor at 0%	Floating

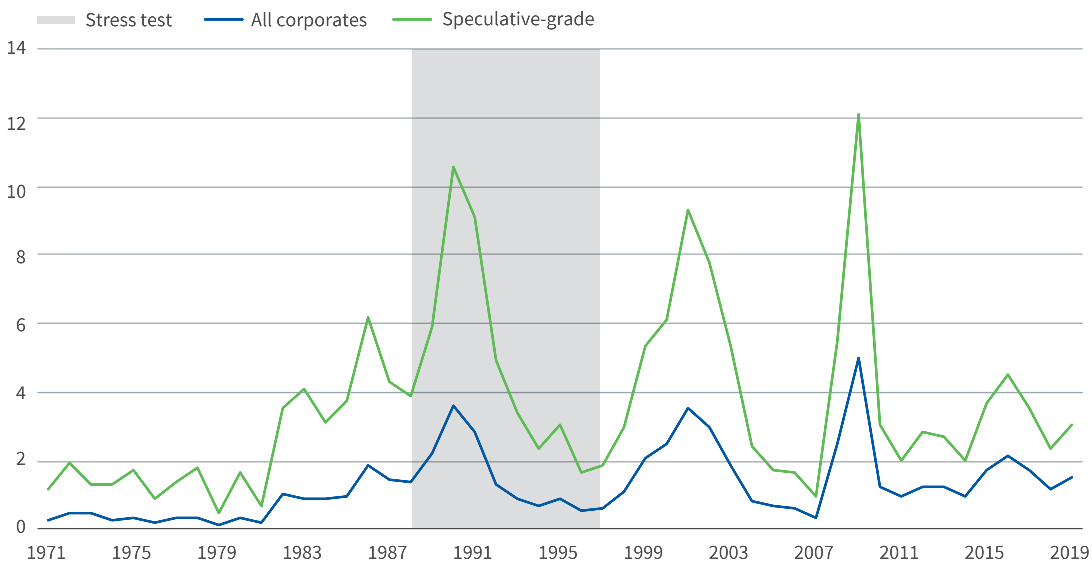
Default and recovery

We used the Moody's Corporate Default Study to model the cumulative default rate. For the "through the cycle analysis", we used the historic average through the full data set.

We have modelled defaults in a "stress scenario" based on the 1990's recession. Today's crisis is very different in many respects to what we saw back then:

- Harsher economic downturn
- Massive monetary and fiscal stimuli, including guaranteed loans and job retention schemes
- Greater differentiation by sector as this crisis is triggered by healthcare rather than economic triggers

Corporate default rate



Source: Moody's Investors Service, Corporate Default Study, 2020. For illustrative purposes only

We nevertheless selected this period because this was the period with greatest cumulative default over one and three years for non-investment grade credits in our data set.[9] For recoveries, we have likewise explored expectations based on the Moody's Corporate Default Study, summarised below:

	Moody's Corporate Default data set			Aviva Investors Model Assumptions	
Recovery post default	Average ultimate recovery	Average recovery based on trading price	Minimum recovery based on sale price	Base case	Stress case
Senior loans	80%	66%	53%	65%	50%
Senior secured bonds	80%	55%	33%	50%	30%
Senior unsecured bonds	80%	38%	21%		

Key Risks

The value of an investment and any income from it can go down as well as up and can fluctuate in response to changes in currency exchange rates. Investors may not get back the original amount invested.

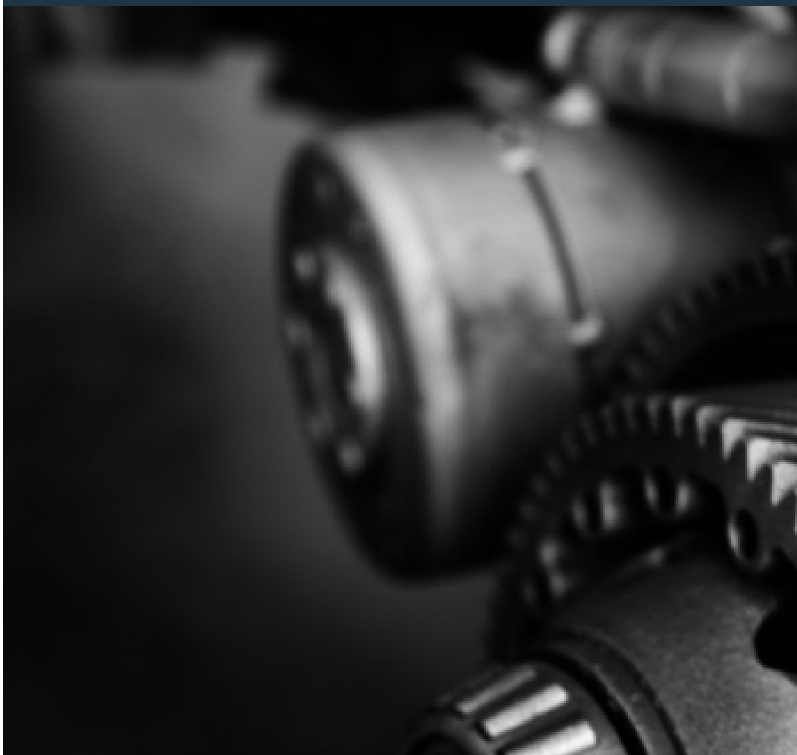
Where invested in illiquid private assets, investors may not be able to redeem any units in the fund when they want because illiquid private assets may not always be readily saleable. If this is the case we may defer a request to redeem units.

9. Moody's Annual Default Study 2020

Contact us

Aviva Investors
St Helen's, 1 Undershaft
London EC3P 3DQ
+44 (0)20 7809 6000

www.avivainvestors.com



Important Information

118779 - 20082020