LEVERAGED FINANCE

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Executive summary

The expansion of the leveraged finance market over the past few years has come along with a significant easing of credit standards. This easing has been especially marked in the leveraged loan segment, where a material increase in borrowers' indebtedness and a relaxation of loan maintenance covenants are observed.

The weaknesses accumulated over the past few years and the inherent risks of leveraged finance led to a sharp fall in this market when the COVID-19 pandemic reached Europe. As the pandemic and the ensuing economic lockdown impair leveraged borrowers' capacities to repay their debts, some banks may suffer losses related to the increase in credit risk and from their mark-to-market positions. Banks may also face drawdowns on the revolving credit facilities granted to leveraged borrowers and may be left holding leveraged loans that they intended to securitise or sell (hung deals) if investors' appetite vanishes.

For a sample of large EU/EEA banks, exposures to leveraged finance represent on average a relatively small proportion of their total assets (2.5%). Nonetheless, for some large and highly interconnected banks, they account for a non-negligible share of their total assets and capital levels. The bulk of the exposures are in the form of leveraged loans. Exposures to high yield bonds and collateralised loan obligations are comparatively small. Although they are difficult to quantify, anecdotal evidence suggests indirect exposures to leveraged finance are not negligible.



Introduction

The 'leveraged finance' segment involves lending to corporate borrowers with high levels of debt, low credit ratings or high spreads. It comprises both leveraged loans and high-yield bonds (HYBs). In contrast to HYBs, which are mainly unsecured and more often characterised by a fixed interest rate, leveraged loans are usually secured with a first lien against the borrower's assets¹ and characterised by a floating interest rate. Accordingly, HYBs generally rank junior to leveraged loans.

Although there is no common definition for leveraged loans, regulators² and data providers classify a loan as 'leveraged' if some of these conditions are met:

- high indebtedness of the borrowing firm (e.g. debt to earnings before interest, taxes, depreciation and amortisation (EBITDA) ratio of four times (4x) or higher);
- below investment grade credit rating for the loan (or borrower) (i.e. below BBB);
- loan purpose to finance an acquisition (e.g. leveraged buyouts);
- presence of a private equity sponsor (e.g. financing of borrowers owned by financial sponsors);
- high loan spread at issuance.

Thus, despite the decrease in the yield of leveraged finance over the past few years, this segment still provides banks and other investors with opportunities to gain exposure to higher yields in a low interest rate environment. In addition, since leveraged lending is usually associated with syndicated loans, originating institutions obtain significant fees for arranging these facilities and distributing them to other banks or investors.



Figure 1: Yield to maturity at issue of euro-denominated term leveraged loans

Source: S&P Global Market Intelligence

¹ In case of borrower's default, the leveraged lender would be the first to be paid with the assets used as collateral of the leveraged loan.

² In May 2017 the European Central Bank published its Guidance on Leveraged Transactions which outlines its regulatory definition of a leveraged loan. It is applicable to all significant institutions supervised by the ECB. As regards the US, in March 2013, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation issued the Interagency Guidance on Leveraged Lending.



On the demand side, leveraged finance borrowers usually resort to this type of financing to support transactions related to mergers and acquisitions or to back the recapitalisation of a company. Borrowers also use leveraged finance for general purposes such as financing particular projects or refinancing existing debts.

Investors can also gain an exposure to leveraged finance through collateralised loan obligations (CLOs), i.e. securitisation vehicles whose underlying assets are mainly leveraged loans. Apart from the fees related to the origination, management and issuance of CLOs, there are two main factors motivating the issuance. On one hand, leveraged loans originators use CLOs as a funding source for their portfolios. On the other, a CLO issuer might aim to capture the excess spread between a portfolio of leveraged loans and the debt issued by the vehicle.

This note is divided into three sections. The first one describes the main characteristics of the leveraged finance market. After that, it provides a summary of the data collected by the EBA in cooperation with competent authorities on the exposures of EU/EEA banks to this market. Finally, the last section contains the main conclusions.



1. Overview of the leveraged finance landscape

Although regulators, analysts and data providers use different criteria and thresholds to define leveraged finance, all of them find similar trends in this market. Since the Global Financial Crisis (GFC), leveraged finance, comprising HYBs and leveraged loans, has approximately doubled in size in both the US and the EU.

Investors in the leveraged loan and CLO markets are spread across the whole financial system. However, global banks (mainly Japanese and US based) remain exposed to over half of the overall market, with exposures mostly in the form of retained revolving credit facilities and investment in highly rated CLO tranches. An increasing role is also played by non-bank investors, who hold participations typically from the originate-to-distribute business lines of banks (syndication of loans and CLOs).



Figure 2: Indicative estimate of global leveraged loans and CLO holdings

Source: Bank of England, Financial Stability Report, December 2019 (SMAs: Separate Management Accounts)

1.1 Leveraged loans

The significant uptake in leveraged loan issuance levels over the past few years has been coupled with increasing borrower indebtedness and weakening credit and lender protection. Nonetheless, prolonged highly accommodative monetary policy and the search for yield have fostered the growth of this market.



Depending on the definition, geographical scope and type of transactions considered, the estimated size of the leveraged loan market varies significantly. The International Monetary Fund (IMF) estimates that the outstanding leveraged loans amount to USD 5tn (EUR 4.5tn)³. On the other side, the Financial Stability Board (FSB)⁴ and the Bank of England (BoE) estimate that the size of the global leveraged loan market is as high as USD 3.2tn (EUR 2.9tn)⁵, which is still more than the USD 1.5tn (EUR 1.4tn) quoted by market analysts.

The sizeable difference corresponds to the type of lending accounted for and is a first sign of the complexities related to the assessment of this market. For example, the analysts' figure relates only to the largest and most liquid institutional loans and rises to USD 3.2tn when including smaller and less liquid loans (USD 0.4tn) as well as amortising leveraged loans (USD 0.4tn) and revolving credit facilities (USD 0.9tn). Revolving credit facilities are often retained by banks, since there is limited appetite from other investors in asset classes producing uncertain revenues.



Figure 3: Outstanding leveraged loans (in USD bn)

According to Bloomberg data, US leveraged loan issuance reached EUR 919.2bn in 2019 (USD 1,115.5bn in 2018) while European issuances were EUR 162.3bn (EUR 161.1bn in 2018). These figures are, nonetheless, lower than the record high of 2017 (EUR 221.4bn for Europe and EUR 1,356.4bn for US). In the first half of 2020, after a start of the year with substantial activity in primary markets, the COVID-19 outbreak froze leveraged loan issuance. US issuances were EUR 403.9bn while European ones amounted to EUR 66.8bn.

³ International Monetary Fund, <u>Global Financial Stability Report 2020</u>, April 2020

⁴ Financial Stability Board, <u>Vulnerabilities associated with leveraged loans and collateralised loan obligations</u>, 19 December 2019

⁵ Bank of England, <u>Financial Stability Report</u>, December 2019.





Figure 4: Leveraged loan issuance volumes (left axis) and number of deals (right axis) from 1999 to 1H2020

The FSB notes that 'covenant-lite' loans, i.e. loans with very light financial maintenance covenants⁶, have become a market standard. Although the absence of covenants lowers the risk of technical defaults – i.e. those that occur when the lender violates a provision of the loan agreement but continues to serve its debt – it also curtails banks' ability to force borrowers to take early corrective measures, so it hampers the monitoring role of financing institutions.

In fact, in most cases, breaches of covenants do not lead to a default but rather to a renegotiation of the contract terms. When there are numerous investors, this renegotiation might entail material coordination costs. Therefore, authors such as Becker and Ivashina (2016)⁷ argue that the widening of the investor base over the past few years may have also supported the growth of covenant-lite loans as a means to mitigate such costs.

The FSB also highlights that borrowers' leverage ratios (expressed as multiples of debt to EBITDA) have risen significantly over the past few years. According to the FSB, newly originated leveraged loans with debt to EBITDA ratios above 6x are becoming increasingly common and the average credit quality of borrowers has decreased. As a result, a higher proportion of leveraged loans are now rated single-B or below. This trend has been accelerated by the recent rating downgrades that some borrowers have suffered due to the economic consequences of COVID-19.

⁶ Maintenance covenants are clauses that prevent borrowers from taking certain actions which may negatively impact their ability to honour their debts.

 ⁷ Becker and Ivashina, <u>Covenant-light contracts and creditor coordination</u>, Sveriges Riksbank Working Paper Series, No.
 32, 2016.

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Figure 5: Share of US leveraged loans rated B- and below in the S&P/LSTA Loan Index

In addition, future synergies such as cost savings and operational improvements, though uncertain, are often considered when calculating the debt to EBITDA ratios (EBITDA adjustments). In this regard, S&P Global Ratings observes that, for a sample of 32 leveraged loans originated in 2016, actual leverage ratios in 2017 and 2018 were, respectively, 3.1x and 3.3x higher than projected⁸.

S&P Global Market Intelligence shows that European issuances of leveraged loans reflect global trends of increasing leverage level and weaker lender protection, with light documentation and covenant-lite practices since the GFC.



Figure 6: Annual pro forma debt to EBITDA ratios of sponsored European leveraged loans (left) and share of covenant-lite European leveraged loans (right)

Despite the increase in risk metrics, default rates have not shown strong signs of deterioration until very recent dates. Indeed, since 2015, the default ratio of the S&P Loan Syndications and Trading Association (LSTA) Loan Index, the reference index for US leveraged loans, has moved around 2% whereas the S&P European Leveraged Loan Index (ELLI) stayed at 0% for several months during

Source: S&P Global Market Intelligence. YTD data until May 2020.

⁸ S&P Global Ratings, <u>When The Cycle Turns: The Continued Attack Of The EBITDA Add-Back</u>, 19 September 2019.



2019. However, the ELLI distress ratio, which measures the percentage of loans in the index trading below 80, has recently risen to levels not seen since 2011.

Figure 7: Default rates in the latest 12 months for US (S&P/LSTA Loan Index) and European (S&P ELLI) leveraged loans (left) and ELLI distress ratio (right)



Sources: Morgan Stanley (left) and S&P Global Market Intelligence (right)

This low rate of defaults amidst deteriorated credit quality could be explained by two main factors. On one hand, the lack of maintenance covenants might be delaying default recognition. On the other, since many leveraged loans present bullet structures⁹, the maturity profile of outstanding loans also needs to be considered. According to S&P data, with relatively few loans maturing in 2019-2021, the increase in defaults might be limited. In contrast, in 2022-2026, yearly bullet repayments of USD 150-300bn (EUR 135-270bn) will take place only in the US.





Source: IMF, Global Financial Stability Report, April 2020

Nonetheless, the COVID outbreak and the subsequent economic contraction were wreaking havoc in secondary markets as concerns about borrowers' solvency rose and spreads widened. In this regard, the ELLI price declines as of end-March 2020 might mean that the market is pricing in a sharp increase in default rates.

⁹ As opposed to amortising structures, in bullet structures the entire principal value is paid all at once on the maturity date.





Figure 9: S&P ELLI and LSTA Loan Index changes in price since 2006 (left) and in 2020 (right)

1.2 High-yield Bonds

Banks are often involved in the arrangement of HYBs but they do not necessarily hold significant exposures. According to S&P Global Market Intelligence¹⁰, after growing rapidly over the past 10-15 years, the outstanding amount of HYBs in the US accounts for roughly USD 1.2tn (EUR 1.1tn), 15% of the overall corporate investment grade bond (IGB) market. The European HYB market is around EUR 430bn whereas the outstanding size of the IGB market stands at EUR 2.7tn, according to Refinitiv¹¹. The IMF, however, estimates the global size of the HYB market as USD 2.5tn (EUR 2.3tn).





Source: IMF, Global Financial Stability Report, April 2020

According to Bloomberg, US HYB issuance came in at EUR 274.7bn in 2019 (EUR 162.4bn in 2018) while European issuances were EUR 119bn (EUR 88.6bn in 2018). This figure is, nonetheless, lower than the record high of 2017 (EUR 138.2bn). In 2020, activity has been lively, especially in the US,

¹⁰ <u>S&P Global Market Intelligence, High Yield Bond Primer, 2019</u>.

¹¹ <u>https://uk.reuters.com/article/uk-europe-bonds-highyield-analysis/demand-for-junk-bonds-grows-and-so-do-liquidity-worries-idUKKCN1V217C</u>



as corporates issued significant volumes to get liquidity in response to the COVID-19 crisis. In the first half of 2020, US issuance reached EUR 187.3bn while European issuances amounted to EUR 52.3bn.





In terms of credit risk, in recent years, the proportion of BB+ bonds among all HYBs has decreased. In addition, since late 2017, leverage levels have risen although a slight fall was observed by end-2019. The deterioration in credit quality took place amidst a favourable macroeconomic environment as investors' risk appetite allowed lower rated issuers to tap the market.





Source: AFME

Source: Bloomberg Table Leagues and deals





Figure 13: European high-yield issuer net leverage



As regards default rates, J.P. Morgan notes the 12-month trailing European high-yield default rates rose slightly in 2019 to 1.8%. Like leveraged loans, the distressed ratios have recently risen to 2011 levels.





Source: J.P. Morgan

HYB prices reflect this stress situation. Even after some recovery in the last days of March, during the first quarter of 2020 HYB spreads widened by more than 400bp. The widening was even higher for US HYB, arguably because of a higher proportion of oil and gas companies in the US index. Nonetheless, HYB indices might hide some of the actual deterioration of the market as investment-grade corporate bonds that fall into high-yield category as a consequence of rating downgrades ('fallen angels') are incorporated and default issuances are taken out.



Figure 15: Evolution of iTraxx Crossover (Europe) and CDX High Yield (US) since 2012 (left) and in 2020 (right)



Source: Bloomberg

1.3 CLO markets

The reopening of the securitisation channel in the US has been a key factor explaining the growth of the leveraged loan market. A significant portion of leveraged loans is securitised through CLOs. Thus, not surprisingly, CLO issuance has risen in parallel with leveraged lending.

The BoE estimates that CLOs hold roughly 25% of all outstanding leveraged loans. According to the FSB, the size of the CLO market is as high as USD 740bn (EUR 670bn) of which around USD 600bn (EUR 550bn) are US CLOs and USD 140bn (EUR 130bn) is European issuances.



Figure 16: Outstanding CLO volumes in Europe and the US (in USD bn)

Source: IMF, Global Financial Stability Report, April 2020

As regards issuance volumes, according to Bloomberg, after a peak in 2018, they decreased slightly in 2019 due to a lower issuance in the US. In fact, in the EU, issuance volumes have been on an upward trend since 2015 and were close to EUR 30bn in 2019. Similarly to leveraged loans and HYBs, after a strong start of the year, in March 2020, primary market activity ground to a halt, leaving new European issuance volumes at EUR 9.9bn and US issuance at EUR 35.7bn in the first half of 2020.





Figure 17: CLO issuance volumes (left axis) and number of deals (right axis) from 2016 to 1H2020

Source: Bloomberg Table Leagues and deals

According to the FSB, CLOs' collateral purchases are biased towards single-B loans. This may imply that the underlying leveraged loans securitised in CLOs are of lower quality than that of the leveraged loan market as a whole. Moreover, most CLOs present contractual clauses that limit the weight of loans rated below B- (usually up to 7.5%). Any excess is valued at the lower of the recovery value and the market value of the CCC loan, instead of at par, for the purposes of the over-collateralisation tests. Thus, a potential wave of downgrades might trigger a diversion of interest and principal payments to the most senior tranches and, more importantly, a fire sale to prevent such effects.



Figure 18: Historical percentage of CCC loans in US and EU CLO portfolios

In addition, the complexity of CLO structures might lead to risks connected to an imprecise modelling of default correlation among leveraged loans in a CLO portfolio. Even though within a CLO the concentration in a specific sector is limited, CLOs in the aggregate might be exposed to credit concentration risk as a result of exposures to the same borrowers or loans to the same sector.

As regards liquidity in CLO markets, it seems temporarily sustained by strong investor demand, mainly from non-bank financial intermediaries. Hence, should investors' risk appetite suddenly

Source: Morgan Stanley



change, the overall market liquidity could suffer. Investors subject to mark-to-market rules are especially vulnerable to liquidity risk.

Yet, like leveraged loans, CLOs present low default ratios. However, the transition ratio, which measures the difference between positive and negative changes in credit ratings, reflects a continuous deterioration since 2012, and more recently a sharp decrease has been observed in the price of CLOs.





Figure 20: Evolution of the median CLO price





Given the relaxation of leveraged loans' credit standards over the past few years, the BoE considers that, in a stress situation similar to the financial crisis, CLOs' losses would be substantially higher (14% hypothetically, versus 9% during the financial crisis)¹². However, the BoE also explains that, thanks to the increased level of subordination of senior CLO tranches in new structures compared with pre-crisis CLOs, the average holder of investment-grade tranches would not incur losses in the event of a stress period similar to the GFC. Nonetheless, the BoE acknowledges that, even though credit losses would be negligible, CLOs might experience sharp price swings that could result in significant mark-to-market losses.

¹² Bank of England, Financial Stability Report, July 2019.







Sources: Bank of England (left) and Scope Ratings (right)

With regard to banks' exposures to CLOs, there is some evidence that it is focused on the most senior tranches, based on data for US CLOs.



Figure 22: Breakdown by type of investor of equity, mezzanine and AAA-rated tranches of US CLOs

Source: Natixis

¹³ The BoE's analysis is based on a small sample of representative CLOs issued in 2006 and 2018.



2. EU banking sector exposures to leveraged finance

Some competent authorities such as the BoE and the ECB already have dedicated templates to request information on leveraged finance exposures that are used by supervisory teams of the biggest banks on an ad hoc basis. The EBA has also asked the Norwegian, Danish and Swedish competent authorities to collect information on leveraged finance exposures from the main banks in their jurisdictions as a one-off exercise for the preparation of this note.

By aggregating data from these national supervisors with the data already collected by the BoE and the ECB, the EBA has compiled data on leveraged finance from 31 large EU/EEA banks (five of them from the UK). This data reveal an outstanding exposure to leveraged finance of more than EUR 500bn (EUR 400bn without UK banks) as of June 2019¹⁴. The bulk of these exposures are in the form of leveraged loans, including drawn and undrawn credit facilities. By contrast, exposures to HYBs and CLOs are comparatively small.

Exposures to leveraged finance account, on average, for around 2.5% of total assets and 50% of common equity tier 1 (CET1) and their share of total debt and loans advances to non-financial corporations (NFCs) is 11.5% (10.5% excluding UK banks). Although they might look relatively small, it is noteworthy that they are concentrated in a few large and highly interconnected banks for which they account for a non-negligible share of their total assets and capital levels.

As regards asset quality, the non-performing loan (NPL) ratio of leveraged loans stood at 3.5%, slightly above the overall NPL ratio of 3% for EU banks as of June 2019. Nevertheless, this ratio is significantly below the corresponding one for NFC exposures (5.6%) but materially above the NPL ratio for large corporates (2.1%).

	Excl. UK banks	Incl. UK banks
Leveraged loans hold book	382,871	522,234
Of which non-performing	13,877	N/A
NPL ratio	3.6%	N/A
HYB exposures	8,428 ª	N/A
CLO exposures	18,640 ª	23,281 ^b
Total leveraged finance exposures	409,939	545,515
As a % of CET1	49.1%	50.2%
As a % of total assets	2.5%	2.4%
As a % of NFC exposures	10.5%	11.5%

Figure 23: Leveraged finance exposures (in EUR mn unless otherwise stated) as of June 2019

Source: Finanstilsynet Norge, Finansinspektionen, Finanstilsynet Danmark, Bank of England and European Central Bank. a) Data for 22 banks. b) Data for 27 banks.

¹⁴ Data for five banks is as of December 2018 and for four banks as of December 2019.



3. Conclusions

The leveraged loan market has experienced a significant easing of credit standards over the past few years. In comparison with the years prior to the financial crisis, some risks have shifted from the banking system to non-bank financial intermediaries, with the latter being very often subject to lighter regulation. Therefore, as COVID-19 and economic lockdown impair leveraged borrowers' capacities to repay their debts, some banks might be significantly affected not only through their direct exposures but also via second-round and spillover effects.

From the analysis above, two main conclusions can be drawn. On one hand, for some large and highly interconnected banks leveraged finance exposures represent a non-negligible share of their total assets and capital levels. On the other, significant gaps in data availability for supervisors about origination of and exposures to leveraged finance exist and should be bridged.

3.1 Riskiness of banks' leveraged finance exposures

The relaxation of lending standards on leveraged finance has clearly increased the riskiness of these exposures. The banks with the highest direct exposures to leveraged finance are also very likely to present material indirect exposures as a result of credit and funding facilities granted to other investors in this market. For this reason, it is important that banks' management boards have a complete picture of their institution's exposures to leveraged finance¹⁵.

As regards asset quality, as of June 2019, the leveraged loan NPL ratio (3.6%) was higher than the corresponding ratio for large corporates (2.1%). However, since leveraged loan exposures are riskier than average large corporate exposures, this difference is not surprising. The NPL ratio for leveraged loans was much lower than those of other risky exposures such as commercial real estate (8.1%), consumer credit (5.6%) or SME lending (8.1%).

For the time being, default ratios have also remained very low due in part to relatively low maturing volumes. However, the generalisation of covenant-lite loans might be delaying default recognition and hindering the capacity of banks to request remedy measures of borrowers at an early stage. Therefore, in the current economic downturn caused by the COVID-19 outbreak, default rates could be higher and recoveries lower. In addition to covenant-lite practices, other common practices such as EBITDA adjustments as well as the increasing leverage may also result in higher severity of losses in the event of default. Furthermore, even if the macroeconomic deterioration does not result in a significant wave of defaults, banks may suffer abrupt losses on their mark-to-market positions.

The economic downturn could also increase the actual exposure of banks to leveraged finance. Although, at the moment of origination, the loan might present a debt to EBITDA ratio below 4x, a balance sheet deterioration of the borrower might drive some financial metrics of the firm to levels where the loan would qualify as a leveraged loan. Similarly, rating downgrades of investment-grade corporate bonds could drag them to the high yield category (fallen angels).

¹⁵ Some authorities have addressed related risks through micro and macroprudential measures.



In relation to liquidity risk, banks may face material drawdowns on the revolving credit facilities granted to leveraged borrowers. Banks may also be left holding leveraged loans that they intended to securitise or sell (hung deals) if investor interest, especially from CLOs, vanishes. This will not only increase their overall exposures but also affect their liquidity buffers as the inflows from the proceeds related to the sale are cancelled. Finally, it is noteworthy that liquidity risk is also a potential concern for non-banks investors.

3.2 Lack of common definition and data gaps

Only a few competent authorities collect data on leveraged finance exposures. They do it mainly through their supervisory teams. Although their templates are very comprehensive and are a first step in the right direction, they might be insufficient to capture all the relevant risks in leveraged finance and to establish a detailed picture of the risk level of these exposures.

When collecting data on leveraged finance, supervisors usually find there is no common definition. In addition, although detailed information (e.g. breakdowns by transaction type, covenant type, leverage level, etc.) is collected on leveraged loans arranged during the relevant period (e.g. a quarter), not all the supervisors collect data at such a level of detail for outstanding exposures.

In some cases, further general information on the templates currently used, such as credit quality, maturity breakdown, generated revenues or the risk weight of the exposures, is not available. More specifically, some relevant information such as the presence of sponsors - i.e. private equity firms that owned a leveraged firm - is also missing.

Besides sponsors, banks might be directly or indirectly exposed to leveraged loan investors such as asset managers or CLOs to which they provide credit facilities or prime brokerage services or to which they have legal or reputational ties. These exposures, although relevant, are also difficult to reflect in a template.



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