

Collateral Thinking

Corporate Loan Primer: Understanding the evolving credit ecosystem

Primer

Bank of America
Merrill Lynch



23 September 2019

Loans are a \$5tn asset class

The loan market in today's lexicon refers to the broadly syndicated market. However, despite its \$1.2tn size, it does not form the entirety of the corporate loan asset class. The loan asset class is a \$5tn universe, and also includes other loan categories such as Bank loans, Financial Company loans and Private Credit loans. In this primer we focus on this larger loan universe, understand its reach compared to other forms of corporate debt, and discuss the size and relative value between the various loan categories. The overlaps between these categories are many, creating an intricate web of fund flows within the loan ecosystem, which we disentangle.

Growth of debt markets and nonbank lending

US businesses have more bond debt (\$5.5tn) than loan debt (\$4.7tn) outstanding driven by the secular decrease in interest rates. Bonds outstanding as a percentage of GDP are at record levels today, whereas loan growth has been more cyclical, currently at levels usually reached at cycle tops. Within the loan asset class, bank loans still represent the dominant form of loan financing for businesses, however it is the nonbank loans that have captured most of the growth with respect to GDP over the last 50 years. We find that the competition from nonbanks, and the ensuing disruption to banks is highest in the syndication and origination businesses, with the least proportional impact on loan ownership. We calculate that the amount of loans outstanding that have passed through nonbank channels is ~\$700bn, or 15% of the loan asset class.

Direct Lending

We think the size of US private credit is ~\$300bn, and represents the dollar value of loans outstanding on US company balance sheets from private credit platforms. The rise of this asset class is due to a confluence of factors ranging from regulatory changes, growth of PE backed activity, a burgeoning middle market, and the general acceptance of alternative investments amid a dearth of yield. We estimate that the disruption from direct lenders represents <15% of bank syndication business and >50% of FinCo lending business. As such, direct lending is disintermediating both traditional bank and nonbank lending business models by taking market share from both large corp and small corp ends of the spectrum, with more pronounced impact on the latter.

Where the risks lie

Direct lending presents lower credit risk but higher liquidity risk compared to institutional loans. It also provides the benefit of diversification and availability of dry powder, but inherent risk has been increasing due competition for deals and retail exposure. As the credit cycle draws to an end, the dispersion of performance amongst direct lenders will be high, and more experienced managers are likely to outperform. While direct lending represents the fastest growing asset class today, it is the institutional loan space that is the weakest link within the loan universe. The asset class has sustained the most increase in amount outstanding as well as leverage levels through this credit cycle, and thus faces the most downside risk when the cycle turns.

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PART I: THE LOAN ECOSYSTEM

The loan market in today's lexicology generally refers to the broadly syndicated market. This market piques investor interest because it is the easiest to buy into, offers sizeable yield and has nearly doubled through this credit cycle. However, despite its \$1.2tn size, it does not form the entirety of the corporate loan asset class.

The loan asset class is truly a \$5tn universe, and besides broadly syndicated loans also includes other loan categories such as Bank loans, Financial Company loans and Private Credit loans. In this primer we focus on this larger loan universe with the goal of understanding its reach compared to other forms of corporate debt and discussing the size and relative value between the loan subcategories. Within this context, we put a special emphasis on understanding the Private Credit market, and the possible disruption caused by its growth.

The primer is organized as follows: in part I, we start with a bird's eye view of the debt market structure and the flow of capital through the loan asset class, where we briefly discuss all parties involved, including the providers and receivers of capital, the various loan sub categories, and financial intermediaries. Then in part II, we go into the size and growth of the debt markets, and discuss in detail the various loan subcategories. Part III is focused on Private Credit, the players, trends, and disruption caused by its growth. We finish with the health of the bank and nonbank markets including credit risk and default pressures in part IV.

Market Structure

The corporate debt market in US is financed through bonds and loans with a varying degree of preference for each depending on the size and the leverage of the company in question. US businesses today have more bond debt (\$5.5tn) than loan debt (\$4.7tn), driven by the growth in the IG bond market under a low interest rate regime. Bonds outstanding as a percentage of GDP are at record levels today, doubling to 28% of GDP over the last 30 years. Loan growth, on the other hand, has been more cyclical as it is correlated to libor and hence business cycles. The current figure is close to 25% of GDP, a level usually reached at cycle tops.

In this report, we focus on the private loan portion of business debt outstanding (\$4.2tn) and its four loan subcategories (Bank, Institutional, Financial Company and Private Credit). As the loan asset class has matured, differentiated platforms have developed within it to cater to the vast panorama of American businesses. These subcategories have transformed into their own independent asset classes over time and have gained mainstream investor acceptance.

The overlaps between these loan asset classes are many, creating an intricate web of flow of loan funds, from capital providers to capital users. After detangling many of these webs, we have created a simple chart to put everything in perspective. Below in Chart 1 we show the structure of the American nonfinancial business debt market, with the broad distribution of loan asset classes providing capital, and the broad distribution of the companies using that capital.

The loan asset class is truly a \$5tn universe, and besides broadly syndicated loans also includes Bank loans, Financial Company loans and Private Credit loans.

Chart 1: Structure of the corporate debt market



Source: BofA Merrill Lynch Global Research

Flow of capital through the loan asset class

Next we try to visualize the flow of capital through the loan ecosystem (Chart 2). Funds emanate from the ultimate providers of capital (blue boxes), make their way through various loan asset classes (orange boxes) and financial intermediaries, and find their way to American businesses (green boxes). Note that 'Direct Lending' here is used as a blanket term for all Private Credit strategies funding American businesses. Below we give a brief description of each entity involved in this ecosystem. Most of these market players and the interactions between them are covered in more qualitative detail in the following parts of the primer.

Ultimate providers of capital

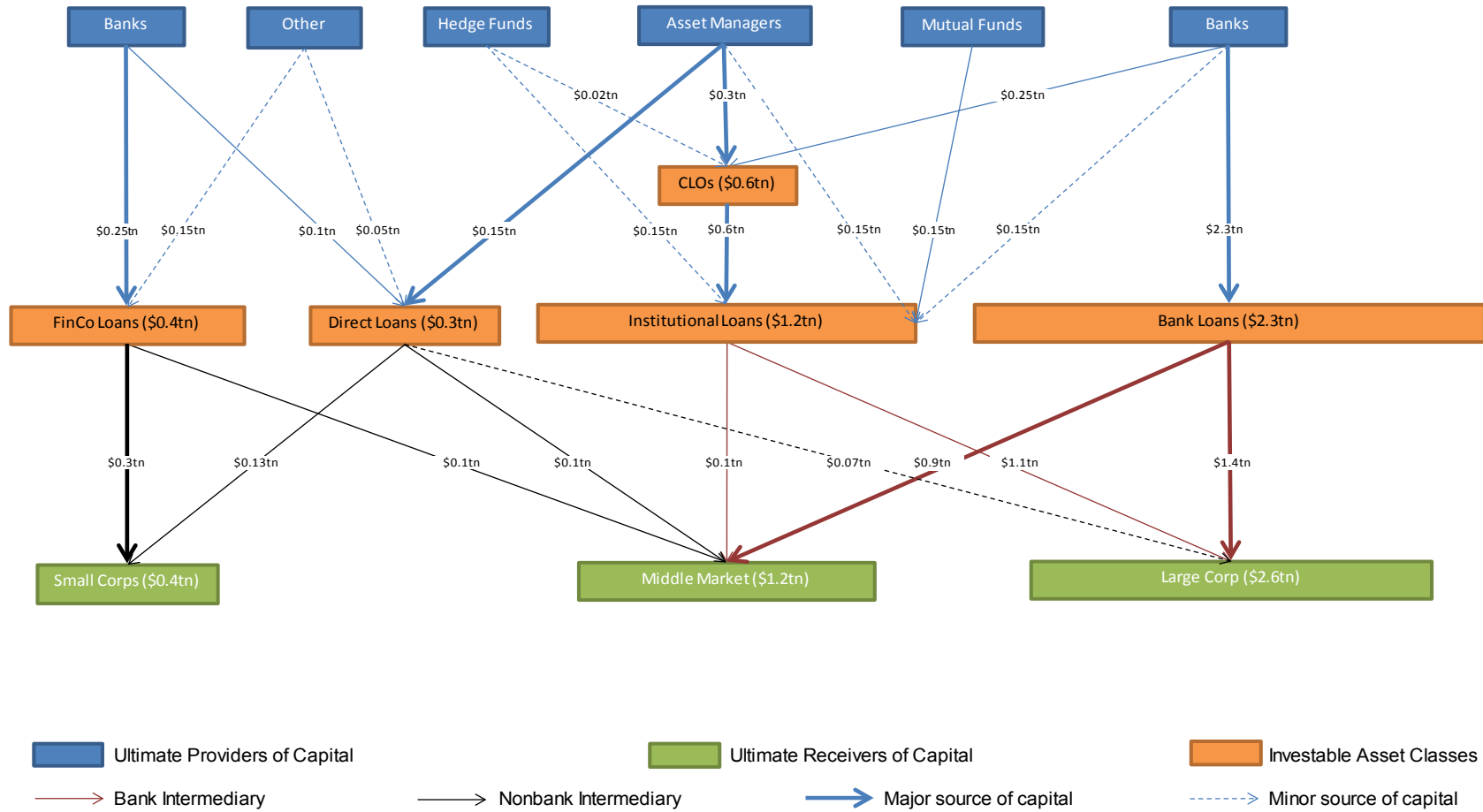
The ultimate providers of capital range from banks, to real money institutions like pension funds and insurance companies (asset managers), and also leveraged institutions like hedge funds and high yield funds. We categorize them into depository institutions (banks) and other financial institutions (nonbanks).

Depository institutions

Banks play the most important role as lenders in the flow of loan capital, contributing a total of \$2.7tn used to buy loans and CLOs directly. Additionally, they also have secondary exposures through leverage to institutions such as Direct Lenders and Financial Companies (FinCos), which we estimate adds up to another \$350bn. They are the only institutions that touch all investible loan asset classes. In terms of extending balance sheet to American companies, banks generally do so to less risky companies in the large and middle markets, and they are beginning to increase efforts in the lower middle market to small corp space. Their highest loan exposure comes through the \$2.3tn market of bank loans, which are low-risk bilateral loans made to large and middle market firms. The next biggest exposure is to CLOs, where they are one of the largest holders of the AAA tranche (\$250bn)¹. Banks also indirectly hold a small amount of syndicated loans (~\$150bn) for their clients through various market vehicles.

¹ This figure includes holdings by Asian banks which represent a prominent share of bank AAA demand

Chart 2: Flow of funds through the loan ecosystem



Source: BofA Merrill Lynch Global Research

Banks are also vital to the functioning of the leveraged lending space, where their capital is used to provide leverage to institutions that invest in higher risk companies. Most banks today are trying to increase their secondary exposure to middle market companies by lending to Direct Lenders. They do so at conservative attachment points, and by structuring revolvers such that they feed into SPVs that hold collateral on behalf of the funds. We estimate exposure here is close to \$100bn, and expect it to grow further. Banks are also the largest source of funding for FinCos which lend to small businesses. Here they provide leverage at as much as 70% LTV, though this bucket also includes middle market BDCs which comparatively have more equity. Finally, banks warehouse a small amount of new CLOs (not depicted in chart) before their pricing. We estimate this market to be between \$20-\$30bn. Overall, bank exposure to loans has decreased over the years and currently remains manageable.

Nonbanks

The rest of the capital supply, or about \$1.2tn, comes from nonbank investors. Real money managers (asset managers) buy a limited amount of loans directly (\$150bn), and funnel most of their money through CLOs and Direct Lenders instead. They are the largest investors in each of these loan asset classes, with about ~\$300bn and \$150bn invested in them respectively. Retail investors participate in the market by way of Loan mutual funds (\$150bn) and middle market BDCs (\$90bn) which for the purpose of the loan ecosystem fall under FinCos. Hedge Funds largely participate in only the institutional loan market, lending to large companies (\$150bn). Looking at these investor dynamics, we are seeing a structural shift in corporate risk over time from bank balance sheets to nonbank balance sheets.

Banks contribute over \$3tn to the loan ecosystem. Nonbanks put in another \$1.2tn.

Investable asset classes

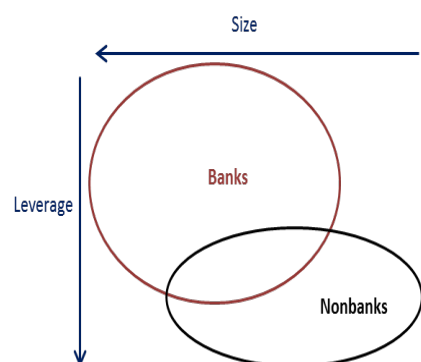
The capital flows through the four loan asset classes: Bank, Institutional, Direct and FinCos, along with the CLO asset class which securitizes institutional loans. Looking at observable and inferred ratings, bank loans are largely considered IG given their lower yields. Institutional loans (\$1.2tn), Direct Loans (\$300bn), and FinCo loans (\$400bn), together are considered “leveraged loans” because they are loans being made to below investment grade borrowers across all markets. Separately managed accounts or SMAs are also notable vehicles in the space. But these are more of a method of managing money than a separate asset class, and therefore don’t form a separate entity in our flow of funds. SMAs are employed by existing CLO, mutual fund and direct lending managers to offer a customized and flexible portfolio construction for their key clients. We just recognize that a portion of the money with loan managers will be in the form of SMAs in their respective spaces.

Financial intermediaries

These consist of bank and nonbank intermediaries that provide origination and syndication services. Bank C&I loans to large corps (\$1.4tn) are all originated (and funded) by the banks. Nonbanks aren’t involved much in this space due to the lower fees and yields on such debt. Bank loans to middle market corps (\$900bn) is partly where the competition between bank and nonbank lenders exists, to the extent the corporate borrower is more levered. When it comes to originating and lending to small corps, that’s currently in the hands of nonbanks, though banks are trying to gain market share. When it comes to syndication, both banks and nonbanks compete for the upper middle

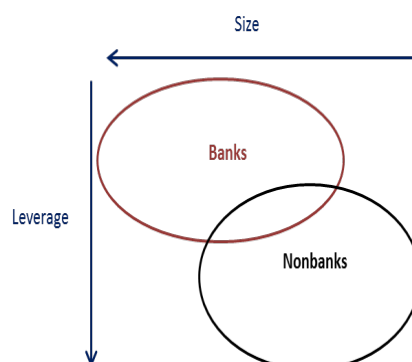
market space for deals, though banks still maintain a wide lead in the large corp space as nonbanks do in the middle market.

Chart 3: Loan Origination



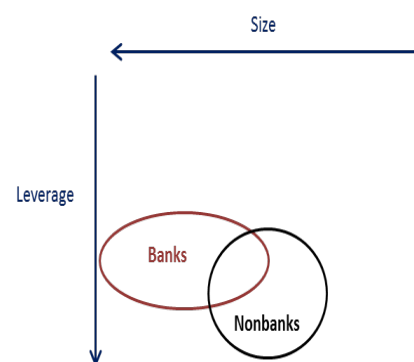
Source: BofA Merrill Lynch Global Research

Chart 4: Loan Ownership



Source: BofA Merrill Lynch Global Research

Chart 5: Loan Syndication



Source: BofA Merrill Lynch Global Research

The above venn diagrams show the interactions between banks and nonbanks along three of their core functions, origination, ownership and syndication of loans. Here we can see that the competition between banks and nonbanks is the least in the context of loan ownership. The competition from nonbanks, and the ensuing disruption to banks is higher in origination, and the most proportional impact is on syndication.

Today, the total amount of loans outstanding that have passed through nonbank channels is ~\$700bn, or 15% of the \$4.2tn private loan asset class, most of which is used to finance small and middle market corps. This part of the loan market completely circumvents the mainstream banking system and is sometimes referred to as “shadow banking”. Most of these loans are originated by Private Equity sponsors, who then choose direct lenders over banks to place bilateral and sometimes club deals. In the case of very small businesses, the loans are made by online and peer-to-peer lenders based on self-inquiry.

The competition from nonbanks, and the ensuing disruption to banks is highest in syndication followed by origination, with the least proportional impact on ownership.

Ultimate receivers of capital

Large corps

Loans are a major source of funding for large American corporations. These companies get their largest amount of funding from bank C&I loans (\$1.4tn). We estimate this by dividing the bank loan market into funds provided by the largest commercial banks (77% of \$2.3tn bank loans = \$1.8tn), and assuming that 75% of these funds go towards financing large corporations. This assumption is based on the balance sheet information of several large commercial banks that provide the distribution between their large vs middle market commercial lending books, which we then extrapolate to the other large banks. The institutional loan market provides another \$1.1tn of funding, which together with ~\$70bn from direct lenders, puts the total size of the large corp market at \$2.6tn.

Note that large corp doesn't equate to IG corps. Many large sized companies are below-IG rated and have to tap the syndicated loan market to get loan financing. We classify companies as large/middle/small corp based on their annual Ebitda amount. We consider companies with >\$75mn of Ebitda as large corp, Ebitda between \$25mn-\$75mn as

middle market, and Ebitda <\$25mn as small corp. In addition to the \$2.6tn in loan debt, large companies also hold almost all of the outstanding \$5.3tn in bond debt, bringing the total size of the large corp debt market to ~\$7.9tn.

Middle-market corps

Unlike large corps, loans provide one of the only sources of funding for middle market corps. Their largest pool of capital comes also from bank loans (\$900bn). Again, we estimate this by summing funds from large commercial banks, which deploy the remaining 25% of their bank loans into middle market (\$400bn), and the smaller regional banks (remaining 23% of bank C&I loans = \$500bn) which practically deploy all of their funds into the middle market.

In addition, institutional, direct and FinCo loans are also becoming increasingly relevant to this market. Some upper middle market companies prefer to tap the institutional loan market instead of direct lending platforms for various reasons, cheaper funding being one of them (\$100bn). Funds from other sources such as BDCs (\$90bn) and direct loans (\$100bn) also go towards financing the middle market. Combined, we estimate the that current size of middle market loan debt is ~\$1.2tn.

Small corps

Small businesses primarily get funded by Financial Companies (\$300bn) and now increasingly by Direct Lenders (\$130bn). This is the smallest section of American corporate debt market, and we estimate its size to be \$400bn.

The amount of loans outstanding that have passed through nonbank channels is ~\$700bn, or 15% of the \$4.2tn private loan asset class.

Snapshot of current metrics

In total, loan debt across all American businesses grosses to \$2.6tn (large) + \$1.2tn (mid) + \$0.4tn (small) = \$4.2tn. This matches the private sector loan data from the Fed's flow of Fund data of American nonfinancial businesses that we discuss in part II of this primer. Below is a summary of important metrics across the four loan asset classes that we discuss in detail through the various sections of the primer.

Table 1: Summary of important metrics across loan asset classes

	Bank	Institutional	FinCo	Direct
Size (\$bn)	2300	1200	400	300
% GDP	11.3%	5.8%	1.9%	1.3%
Yield	3.9%	7.2%	10.2%*	8.0%
LTM Par Default Rate	0.8%	1.3%	3.8%*	1.2%
Growth yoy	7.4%	5.7%	2.5%	9.0%
CAGR ('00-'18)	4%	14%	-1%	16%
Leverage		7.0x		5.7x

Source: BofA Merrill Lynch Global Research

* BDC data used as a proxy

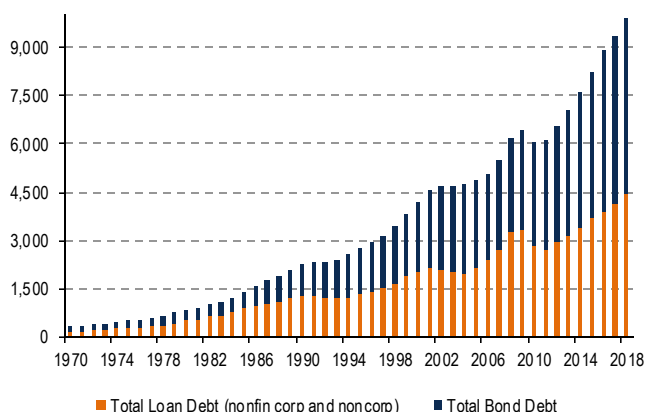
PART II: SIZE AND GROWTH OF DEBT MARKETS

Size of the nonfinancial business debt sector

To determine the size and scope of the American business sector, we look at data from the Fed Flow of Funds. This is the largest overarching dataset that we know of, contains data from private issuers, and is granular enough to portray the evolution of various asset classes. For the entirety of this report, we focus on the domestic nonfinancial sector of the flow of funds, which contains nonfinancial corporates as well as noncorporates, which are small businesses set up as partnerships, limited liability companies, and sole proprietorships. The data for the nonfinancial business sector comes from the tax returns filed with the Internal Revenue Service, along with surveys of Finance companies run by the Fed, and sources such as TIC and FFIEC.

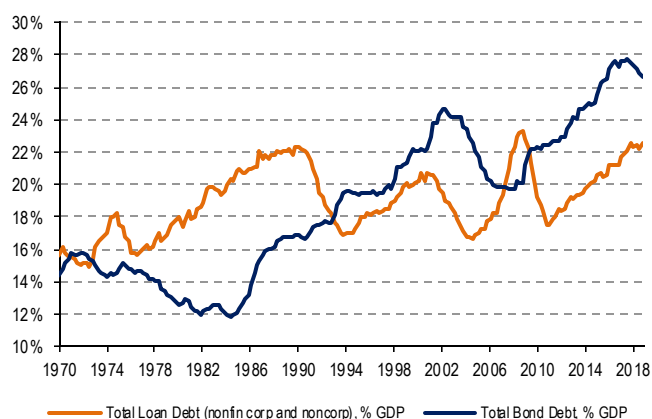
The below charts show the evolution of bonds and loan liabilities in the nonfinancial business sector in absolute dollars as well as in %GDP. Total loan debt consists of all non-mortgage loan liabilities, while total bond debt excludes all CP and Government debt.

Chart 6: Nonfinancial business debt, \$bns



Source: Fed flow of funds, Prequin

Chart 7: Nonfinancial business debt, %GDP



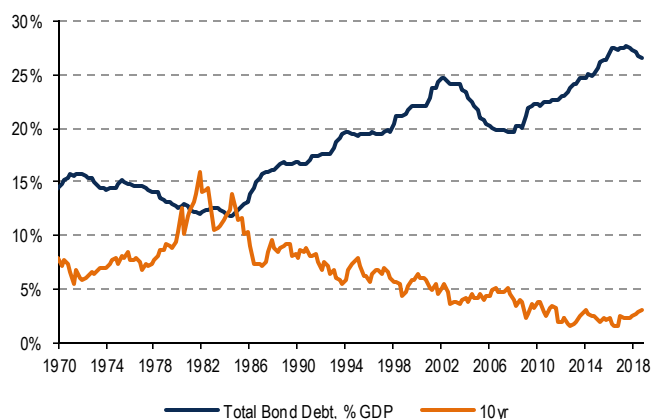
Source: Fed flow of funds, Prequin

Chart 6 shows how nonfinancial businesses carry more bond debt than loan debt. Today, loan instruments fund \$4.7tn of debt needs of the nonfinancial sector, whereas bonds cater to another \$5.5tn. The discrepancy in growth becomes more compelling normalizing for GDP. Bonds have shown secular growth since 1985 (Chart 7) and are at record levels today, doubling to 28% of GDP over the last 30 years. Loan growth, on the other hand, has been more cyclical, historically gyrating within a range of 15% to 25% of GDP.

The growth in bonds has been a result of the systematic decrease in interest rates due to long term structural changes, enticing more fixed rate corporate borrowing. The rate at which the US government could borrow for a 10yr period peaked in the early 80s at levels close to 15%, and has since followed a one-way trajectory to under 2% today, fueling the appetite for bonds (Chart 8). Loan growth, on the other hand, is correlated to libor and hence business cycles (Chart 9). Here, current levels match prior peaks that are generally reached late in the business cycle.

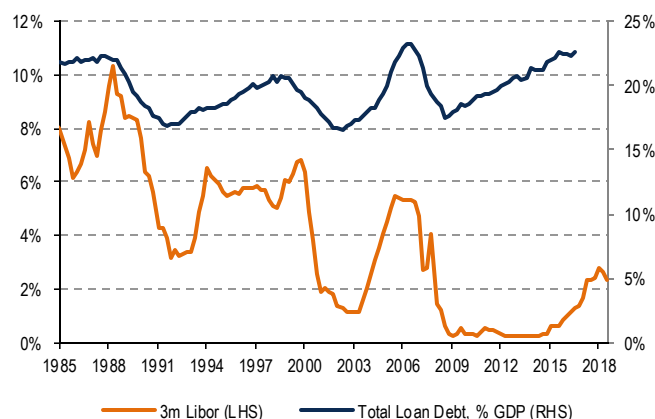
Bonds are at record levels today, doubling to 28% of GDP over the last 30 years. Loan growth has been more cyclical, historically gyrating within a range of 15%-25% of GDP, with current levels matching prior peaks reached late in business cycles.

Chart 8: Growth in bond debt is correlated to structural shift in rates



Source: Replace this text

Chart 9: Loan debt has remained cyclical, correlated to libor

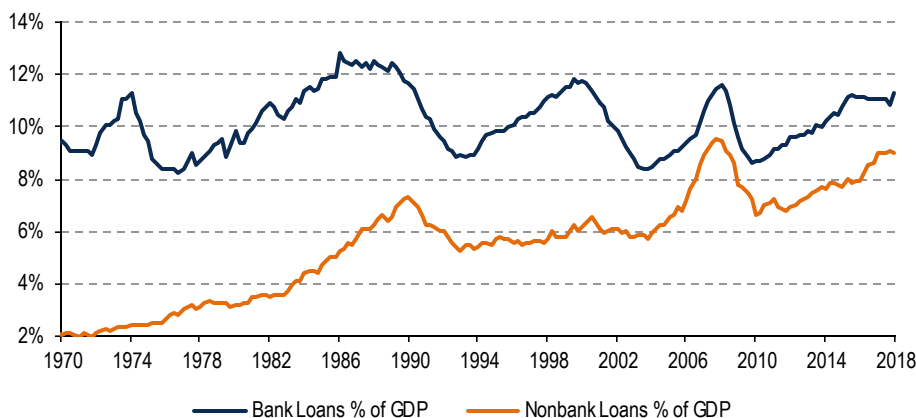


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Who finances the \$5tn loan market?

Of the \$4.7tn loans on business balance sheets, \$500bn are loans either made by the US Govt, or loans to the farming sector. We focus on the remaining \$4.2tn private to private sector loans, and how they are funded. We identify four broad categories of funding based on who owns the ultimate risk: Bank loans which are loans on bank balance sheets, Institutional loans which are held by entities such as CLOs and mutual funds, Finance Company (FinCo) loans which are loans sourced from sales and commercial credit companies, and Private Credit loans which sit on the books of alternative credit managers (we refer to this sector as Direct Lending). These broad categories of loans today are individual asset classes in their own right. Collectively, we refer to all loans outside of bank balance sheets (institutional, direct and FinCo) as nonbank loans. We discuss bank and nonbank loans below.

Chart 10: Bank vs nonbank loans, %GDP



Source: Fed flow of funds, Preqin

Bank Loans

Banks are the biggest provider of loans to nonfinancial nonfarm businesses. These are bilateral loans usually extended to large companies, and middle market companies. Loans are usually made in the form of revolvers, and Term Loan As, which are amortizing term loans. Bank loan growth is cyclical, has typically ranged between 8% and 12% of GDP, and is tied to the business cycle. When the underlying economy is healthy, banks' willingness to lend increases, and vice versa. This segment is what drives the cyclical nature of the broader loan market as well. While bank loans have enjoyed

another good run this credit cycle, they reached their cyclical peaks in 2016, and have remained stagnant since, growing at the rate of the economy over the past few years. The current size of this market is \$2.3tn.

Nonbank Loans

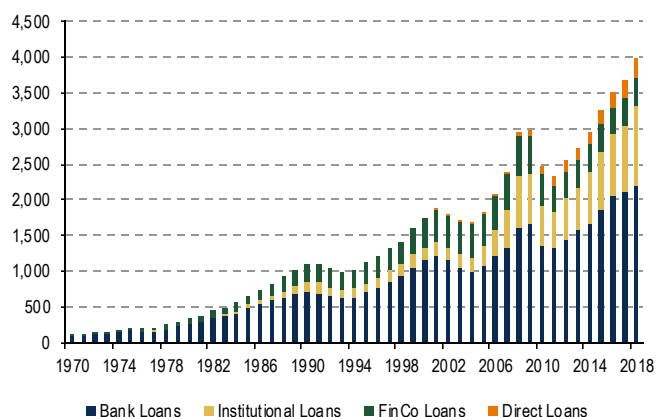
All other loans (institutional, direct and FinCo) are collectively referred to as nonbank loans because they sit outside of bank balance sheets. These have gained traction as banks have been forced out of some middle market and higher levered deals. While bank loans still represent the dominant form of loan financing for businesses, it is the nonbank loans that have captured most of the growth with respect to GDP over the last 50 years as seen in Chart 10. Nonbank loan share of GDP has increased from 2% to 9% over the last 50 years, with the most ground being covered in the 1980s.

The first growth spurt happened in the 1980s with a wave of foreign institutional investors and domestic finance companies. The next wave between 2004 and 2007 was primarily a result of rapidly increasing US institutional buyers of syndicated loans, mainly CLOs. The third and the most recent wave has been on the back of more incoming foreign capital, and growth in direct loans. Nonbank lending has remained flat relative to GDP since mid-2017.

While bank loans represent the dominant form of loan financing for businesses, it is the nonbank loans that have captured most of the growth with respect to GDP over the last 50 years.

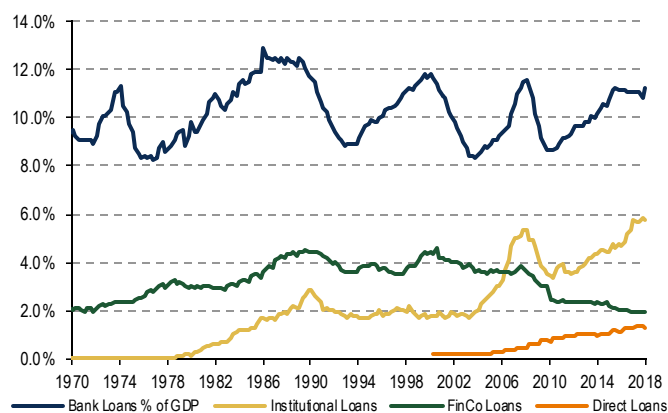
Below we show the breakdown of nonbank loans and their evolution as sources of funding vs bank loans.

Chart 11: Growth of loan asset classes, \$bns



Source: Fed flow of funds, Preqin

Chart 12: Growth of loan asset classes, %GDP



Source: Fed flow of funds, Preqin

Institutional Loans

Within the nonbank space, broadly syndicated or institutional loans have sustained the most meaningful growth, doubling from 3% to 6% of GDP in this credit cycle. These loans are extended to larger, more levered companies that have the size and the clout to tap the syndicated markets, but do not meet the leverage criteria to receive bank loans. Loans here are usually in the form of Term Loan Bs, which are bullet loans, much like bonds. The current size of this market is \$1.2tn.

- a) The first wave of institutional loan growth happened in the mid 1980s during the LBO boom, as investors gravitated towards a strong US economy in the aftermath of the upheaval of certain foreign markets earlier in the decade. In addition, an ongoing push for free trade, standardization in market practices,

and increased flow of cross border information helped layer in structural changes to the underlying economic environment, facilitating international investment, which naturally found its way to the US at the time.

- b) The second wave of growth in 2003-2007 was fueled by the emergence of derivative structures such as CDOs and CLOs, which repackaged loans into waterfall structures, providing structural leverage to the market, and boosting demand for loans.
- c) The last wave, which started in 2013, came as a result of increasing demand from retail investors, and doubled their representation in the loan market over 2013 from \$80bn (12% of market) to \$170bn (25% of market). While that fizzled out in 2014, CLOs once again fueled demand for loans post the passage of risk retention rules in 2016. At the same time, issuers taking advantage of lower interest costs and bond-like covenant packages increasingly issued loans instead of bonds.

Finance Company Loans

Loans from Finance Companies, or FinCo loans, are the default funding mechanism for the rest of American nonfinancial businesses, which consists of small and medium sized enterprises (SMEs) that cannot access bank or syndicated loans. These institutions have been around since the early 1900s, catering to the funding needs of SMEs. While a significant proportion of finance companies are targeted towards providing consumer personal loans, for our purpose, we only look at ones extending business loans. This consists of sales finance companies which provide unsecured short term loans to creditworthy business borrowers for specific needs, and commercial finance companies that serve broader funding needs such as purchase of equipment.

This category of loans saw major growth in amount outstanding in the 1990s, propelled by a healthy economy, and was the second most important source of loan funding for businesses after bank loans up until 2006, which is when institutional loans took over. Lenders in this category consist of small business loan providers, online lenders, and SBA lenders. Loans consist of small, bilateral deals in the form of business lines of credit, microloans, credit cards, and merchant cash advances. This loan segment has actually shrunk in this credit cycle, representing 4% of GDP pre-2009, and 2% today. This is likely because the brimming supply of institutional capital in recent years has enabled an increasing number of middle-market and first time borrowers to tap the syndicated and direct lending markets instead of going to smaller scale credit providers. The current size of this market is \$400bn.

Direct Loans

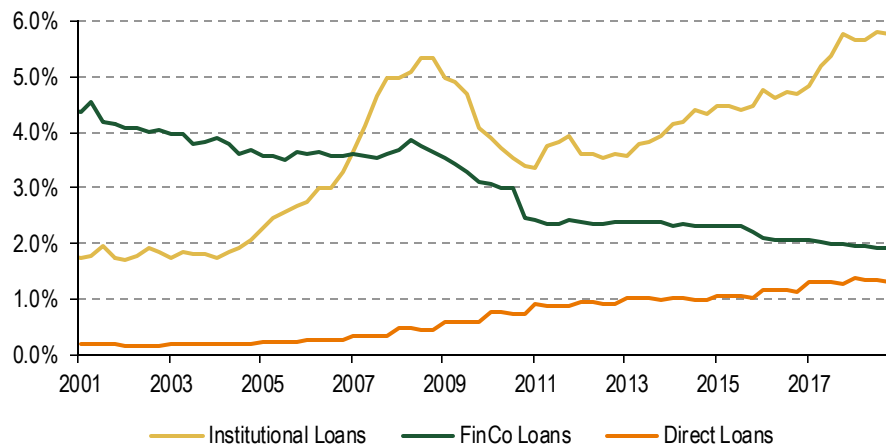
More recently, a new source of capital has surfaced in the form of direct lending. These alternative investment platforms are differentiated from all other funding sources because they provide longer term capital at higher yields and are tailored to suit borrower needs. While this market has existed since 2001, most of its growth has happened in the aftermath of the global financial crisis which reduced the lending footprint of traditional banks, creating gaps to be filled. Since this is a market of small, nuanced, mostly bilateral and small club deals, the loans here have a lot more variety. We see TLAs, 1st liens, 2nd liens, mezzanine, unitranche and even PIK loans. The current size of invested private credit capital is \$300bn in US strategies, and \$470bn globally (note we do not consider uncalled capital towards market size as it doesn't appear under corporate liabilities).

Institutional loans have sustained the most meaningful growth within the nonbank space, doubling from 3% to 6% of GDP in this credit cycle.

Growth in nonbank lending

In Chart 13, we plot all three asset classes within nonbank loans- institutional, FinCo and direct, over the last two credit cycles. Not all types of loans have shown growth. While institutional and direct lending has grown relative to GDP, FinCo lending has subsided. Overall, nonbank lending growth has remained static to GDP for the past 2 years, though individual trajectories have been quite different.

Chart 13: Nonbank loans, %GDP



Source: Fed flow of funds, Preqin

From the above chart, we note the following:

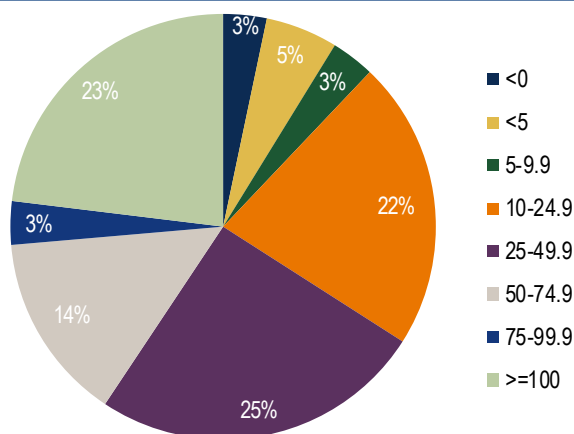
- As a percentage of GDP, American nonfinancial businesses today are actually borrowing less from direct lending platforms and finance companies combined. These two forms of lending together formed 4-5% of GDP in the last credit cycle, whereas they form 3% of GDP today. This is because loans extended by finance companies (FinCos) to businesses have declined at a faster pace than loans extended by direct lenders have increased.
- Since both direct and FinCo loans are largely targeted towards SMEs (corporations with annual Ebitda <\$75mn), it is reasonable to assume that given the decline in FinCo lending, the former is taking away market share from the latter. In the last credit cycle there were no large lending platforms which could provide capital to SMEs. These companies would then go to regional banks and FinCo lenders for their funding needs. With the emergence of large direct lending platforms, SMEs have a highly competitive and specialized alternative for funding, which has increased the popularity of this method of financing amongst issuers. Chart 14 and Chart 15 show how direct lending managers are lending more aggressively to small corps: pre 2013 26% of all deals were done with large companies having Ebitda >\$75mn, while 31% of the deals were focused on small companies having Ebitda <\$25mn. Since 2013, these percentages have noticeably shifted with lenders doing 21% in the large corp space and 47% in the small corp space.
- Direct lenders are also taking away some market share from banks. With more availability of institutional capital, and investors' increasing focus on alternative platforms, direct lenders now have deeper pockets than ever before. Which means direct lending is now becoming a viable funding source for larger companies² that have previously tapped the institutional, and to a lesser extent, the bank loan market. According to LPC, banks' share of middle market

² We define large corporations as companies having annual Ebitda >\$75mn, medium sized companies as having annual Ebitda between \$25mn and \$75mn, and small companies having annual Ebitda <\$25mn.

sponsored finance has dropped from 60% in 2013 to 20% on average today, indicating that they have been relinquishing market share.

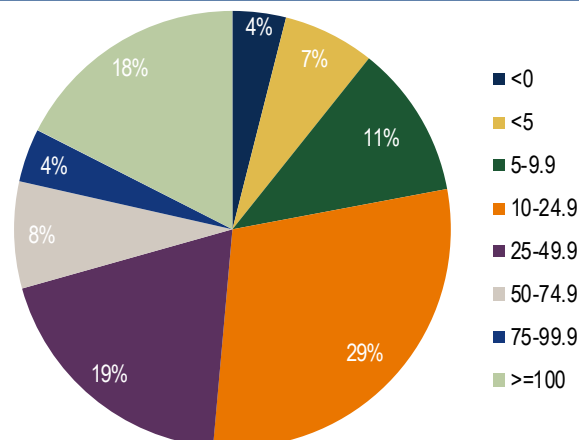
- d) The disruption of banking business due to direct lending is occurring on both ends of the spectrum to variable degrees. While direct lending's impact is clearly visible on the FinCo market, its impact on bank or institutional loans isn't apparent. The former is immune due to its relative size and a focus on a different set of target companies, and the latter has been shielded by the same growth in institutional capital that sparked the rise of direct lending to begin with.

Chart 14: Distribution of deals by annual Ebitda, \$mn (2006-2012)



Source: Preqin

Chart 15: Distribution of deals by annual Ebitda, \$mn (2013-2019)



Source: Preqin

As such, contrary to popular belief, direct lending is disintermediating *both* traditional bank and nonbank lending business models by taking market share from both large corp *and* small corp ends of the spectrum, *with more pronounced impact on the latter*. We discuss this in more detail in the next part of this primer which focuses on the Private Credit/Direct Lending asset class.

Direct lending is disintermediating both traditional bank and nonbank lending business models by taking market share from both large corp and small corp ends of the spectrum, with more pronounced impact on the latter.

PART III: PRIVATE CREDIT

Private credit as an asset class has grown from <\$50bn in 2000 to ~\$800bn in global committed capital today. What started out as alternative investments for family offices and other retail investors has now gained mainstream institutional acceptance. Most sophisticated investors today have a regular allocation to the asset class in their portfolios. The majority of committed capital is in the form of direct lending strategies, though there exist other strategies such as distressed, special situations, infrastructure and real estate which investors can gain exposure to via private credit. Traditionally, loans have been made to middle market corporates. However, these platforms are now gaining market share within the large cap and small cap corporate lending markets. North America remains the biggest market, followed by UK, and now activity is increasing in Europe and Asia. The presence of multiple strategies means that funds are able to lend across the capital structure of the company.

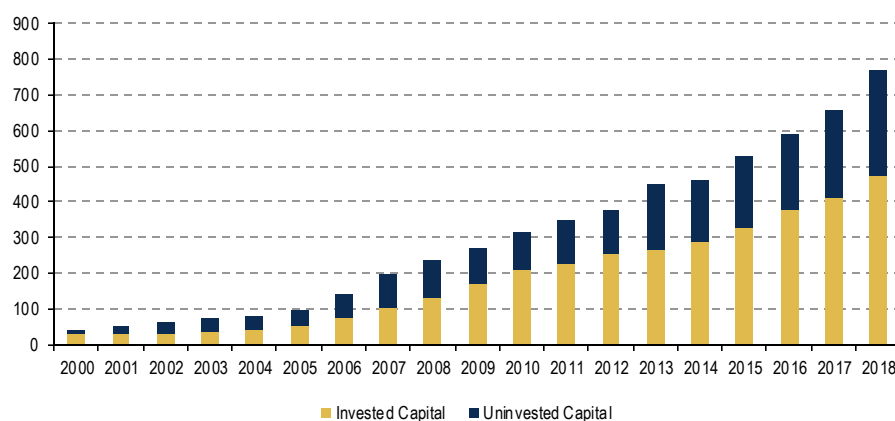
There is a lot of discussion around the size of the private credit asset class, and we see numbers ranging anywhere up to \$900bn. As opposed to the first three types of loans (Bank, Institutional, FinCo), where the Fed is able to accurately identify them on corporate balance sheets, debt extended by private credit managers is not broken into any discernable category in the Fed flow of funds data due to the lack of regulatory filing requirements for such lenders. As a result, this debt shows up on corporate balance sheets as “unidentified miscellaneous liabilities” pooled with other unrelated liabilities. Instead, we gather this information from the asset side of the market ie how much private credit capital, according to the managers of that capital, has been invested in businesses.

How big is the market, really?

To assess this information from the asset side, we rely on Preqin, which quotes the current private credit AUM to be ~\$800bn. However, we think that the real dollar value of loans from private credit managers to US businesses is close to \$300bn.

The first point to note is that not all of the quoted AUM is invested money. Almost \$300bn of it is in the form of dry powder, defined as committed but uninvested (uncalled) capital as seen in Chart 16. We think a true “market size” should only reflect the actual invested funds, as opposed to funds that are committed but not loaned out. This amounts to \$470bn globally, as seen in the below chart.

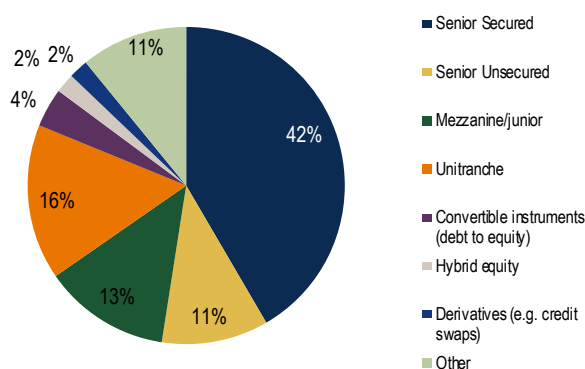
Chart 16: Invested capital vs dry powder in private credit, \$bns



Source: Preqin

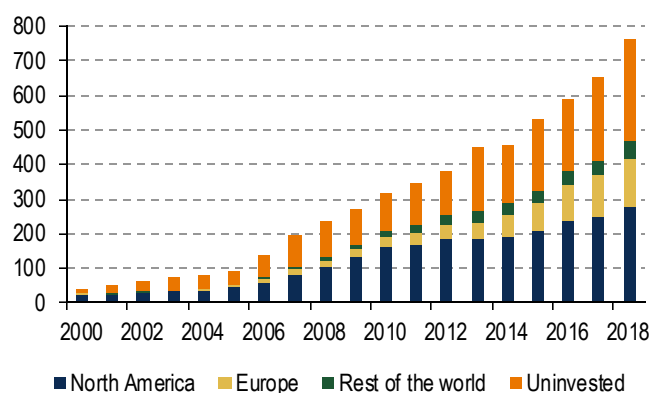
Second, even within the invested amount, capital is distributed across geographies (Chart 18) and mandates (Chart 17). Some bigger capital structures may see debt in the form of bonds and equity, but the bulk of the funds within private credit are still placed as loans.

Chart 17: Private Credit funds the whole capital structure



Source: AIMA

Chart 18: Distribution of Private Credit capital across geographies



Source: Preqin

For our purpose, we only consider capital invested in US strategies, and assume that all the debt is placed in the form of loans for simplicity, which then suggests that the amount of loans currently extended to US businesses by private credit managers is about \$300bn. This represents the current size of loan liabilities outstanding on business balance sheets that is owed to private credit managers, and thus in our view forms the actual size of the US private credit market. Henceforth, we use the term “Direct Lending” generically for loans across all strategies that are being extended by private credit managers, to complement the other three loan asset classes discussed above.

We think the actual size of US private credit is ~\$300bn, and represents the dollar value of private credit loans outstanding on balance sheets of US businesses.

What has fueled the emergence of Direct Lending?

Growing from <\$50bn in 2000 to ~\$800bn in global AUM represents a CAGR of 16%. Fueling demand is the obvious appeal of higher returns, but even outside of that, the asset class presents investors several other benefits. Direct lending is often used as a diversification tool due to its historically low correlation to other asset classes. The enhancement of returns is not all incremental credit risk (investment is on a secured basis), but also incremental liquidity risk (the asset class doesn’t trade in the secondary), both of which are mitigated by managers of these platforms by conducting deep credit analysis and investing through closed end funds.

There are also many macro factors that have contributed to the formation of large, competitive direct lending platforms, which we discuss below. Most them are structural in nature, ie these are long term shifts in the underlying economy. Only the last factor, middle-market growth, has a cyclical nature, and is likely to reverse course in the next downturn.

- Reduced ability of banks to provide funding
- Dearth of global yield leading to mainstream acceptance of higher yielding alternative strategies
- More companies choosing to stay private
- Robust middle market growth

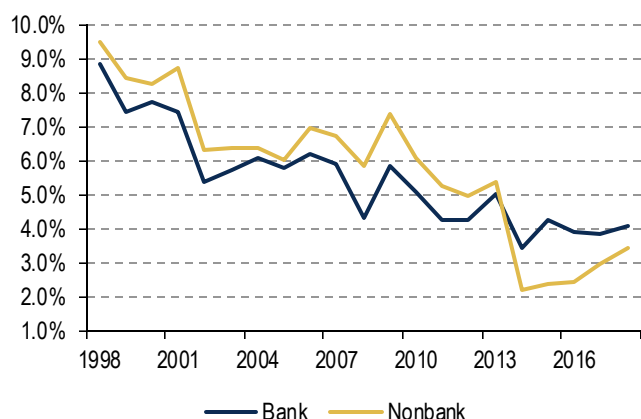
Reduced ability of banks to provide funding

The regulatory landscape has shifted against the banks over the last two decades. The bank consolidation wave of the 90s had an effect of contracting the post-merger combined balance sheets, thereby reducing banks' ability to extend funding on an aggregate basis. Then in the aftermath of the Global Financial Crisis, a series of regulatory overhauls - Dodd Frank (2010), Leveraged lending guidelines (2013), Basel III (2014) - hit the banking sector, curbing many of its functions.

The advent of risk-weighted capital requirements altered the investment profitability dynamics for banks. The traditional bank model of buy-and-hold gave way to originate-and-sell, which led to the separation of loan origination (banks) and investment (nonbanks). Increased capital requirements, reduced risk appetite, and balance sheet deleveraging also meant that banks' ability to provide financing to leveraged companies was inherently reduced. Not surprisingly, banks' share of the institutional loan market, has been decreasing over time (Chart 20).

In addition to that, nonbanks benefit from having a lower cost of capital than banks (Chart 19), and are able to generate higher returns. As such, most of the growth in loans has gone on nonbank balance sheets, and in particular within institutional and direct loans.

Chart 19: Bank vs nonbank cost of capital



Source: NYU Stern

Chart 20: Banks' share of institutional loan market



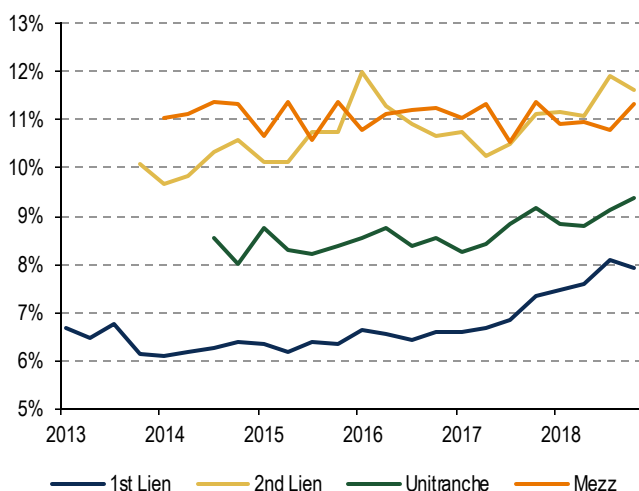
Source: Fed flow of funds, LCD

As banks have withdrawn from the levered funding space, institutional investors such as CLOs and mutual funds have stepped in to fill the funding gap to large corporations, while direct lenders and BDCs have scooped up the middle market. The inability of banks to extend balance sheet in levered deals has also compromised their ability to originate them, thereby upending long-term corporate relationships in banking businesses.

Dearth of global yield

The adoption of unconventional policies by Central Banks around the world has suppressed yields in this credit cycle. The stock of negative yielding assets, a relatively new phenomenon, has been increasing rapidly, and is currently at \$14tn (Chart 22). Sovereign bonds generating sub-zero returns in many developed nations has pushed international capital into the US looking for alternative strategies. As a result, direct lending with average yields of 8-12% (Chart 21) has become a popular refuge. The asset class has quickly become a mainstream investment mandate for many prominent real money managers around the world, rerouting flows from other asset classes towards direct lending.

Chart 21: Cross capital structure yields in the middle market



Source: LPC

Chart 22: Stock of negative yielding assets, \$tn



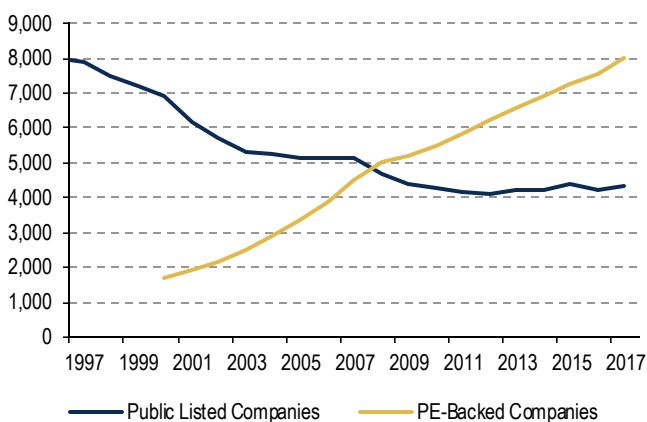
Source: Bloomberg

More companies choosing to stay private

An increasing number of companies going private, or choosing to stay as such, means there is a greater need for private capital both in terms of equity and debt. Chart 23 shows how the number of public companies has halved between 1997 and 2017, while the number of PE backed companies has doubled. PE-backed companies have systematically outnumbered public companies through this entire credit cycle. The real number of private companies is actually even larger once we add in non-sponsored private companies as well. Interestingly, the emergence of direct lending as a mainstream asset class occurred around the same time when the number of PE-backed companies first accelerated past public companies.

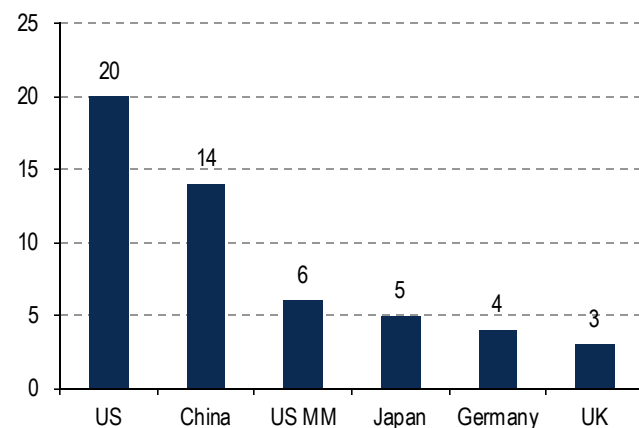
PE-backed companies often have more complex needs which traditional banks are unable to satisfy. Direct lenders can offer greater leverage capacity, flexible deal terms, and now have deeper pockets, making them more favorable to sponsors as lending partners than traditional banks. Some large platforms also provide various types of financing options, making them a one-stop shop for a company's financing needs.

Chart 23: Number of private vs public companies



Source: Pitchbook, WDI, WFE

Chart 24: 2018 Nominal GDP, \$tn



Source: : National Center for the Middle Market's Middle Market Indicator, Statista, BEA

Robust middle market growth

Additionally, a burgeoning US middle market (MM) has also helped funnel growth in financing through direct lending. Despite direct lenders' forays into larger sized

companies, middle-market space remains their sweet spot, and a rapidly expanding middle-market in the US, along with its increasing reach outside small lenders, has elevated the importance of their services. According to the National Center for the Middle Market, of the 6mn registered firms in the US, only 200,000 belong to the US middle market (3%), yet they provide 38% of the employment (48mn of 128mn). The health of US middle market companies has remained strong with an 8.5% yoy revenue growth rate as of 2Q19. Today, MM businesses represent one-third of private sector GDP worth \$6 trillion, making this portion of the market the 3rd largest economy after US and China (Chart 24).

It's not just lending

Not only are private lenders funding deals syndicated by banks (some 2nd liens get taken down by large direct lenders even before hitting the syndication desk), they are also rapidly building vast origination platforms and capital market businesses to provide a multitude of services to their clients, circumventing banks altogether. They are increasingly competing for the role of lead arranger, and syndicating some larger deals that cannot be fulfilled by their capital alone. They are succeeding in this effort because of their deep relationships within their area or industry of expertise, and partly also because they are not asking for cross-selling of other services to the borrowers, an important driver of banks' relationships with corporates. In fact, this aspect of the disruption from direct lenders is the main source of banks' opportunity cost today. We discuss this below.

The advent of risk-weighted capital requirements has altered the investment profitability dynamics for banks pushing them out of the leveraged lending space. Additionally, PE-backed companies have complex needs which traditional banks are unable to satisfy. This, in combination with dearth of yield and growth in the US middle market, has led to a boom in direct lending.

Impact of Direct Lending

As we mentioned earlier, direct lending is disintermediating *both* traditional bank and nonbank lending business models by taking market share from both large corp *and* small corp ends of the spectrum, *with more pronounced impact on the latter*.

Bank Impact

Banks originate (investment banking), own (commercial credit) and syndicate (capital markets) loans for medium and large sized companies. Direct lending, with its traditional middle-market focus, and an increasing reach into large corp financing, is impacting all three bank businesses, but to varying extents. In the arena of balance sheet lending, not all of direct lending activities translates into lost revenues for banks. Some institutional mandates such as distressed, mezzanine, and special situations have historically not been fulfilled by banks anyway, as banks neither hold or syndicate these types of loans. Even in the context of regular way lending to corporates, target companies differ materially between bank and direct lenders. Banks target companies that are better rated, and have lower leverage than companies that are targeted by Direct Lenders. This is because a string of market events and regulations has curbed the ability of banks to own riskier loans, thereby minimizing their share of loans out to the leveraged corp market, as discussed earlier. Instead, banks have focused on originating and syndicating loans to levered issuers, thereby aiding the rise of the Institutional loan market over time. Comparatively, direct lenders are not governed by the same regulations, which allows them to target more levered structures and thus aim for higher yields.

Given that banks already have limited ability to hold leveraged loans, the more realistic disruption from direct lenders comes in the form of loss of origination and syndication fees of such loans. Currently there is ~\$190bn in outstanding debt from direct lending managers to large and medium sized corps, and potentially another \$120bn in dry powder. Assuming all of the large corp and half of the middle market loan business would have gone to the banks instead, the total opportunity cost for banks amounts to fees lost on \$200bn of services³. For context, the \$200bn in cumulatively lost bank business represents <15% of the outstanding institutional loan market.

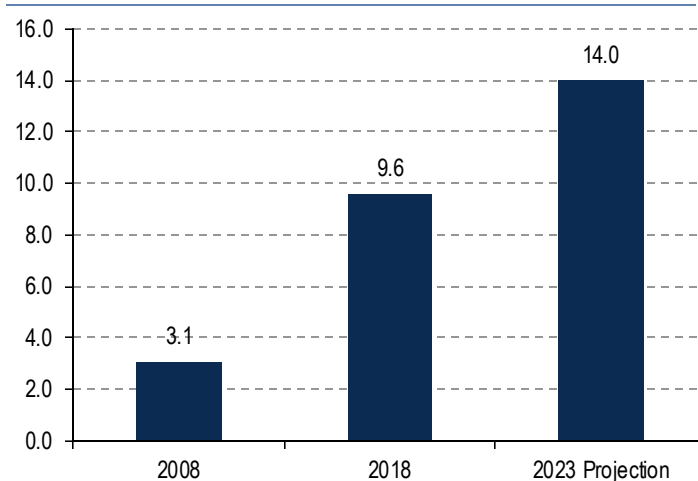
FinCo Impact

Contrary to large corps, direct lenders' increasing market share in the small corp space is squarely at the cost of FinCo business, as both lenders compete to make loans to SMEs across a wide risk spectrum. Here, the disintermediation has been proportionally more pronounced. About 75%, or \$390bn of all of direct lending capital is targeted towards SMEs. Assuming all of the small corp and half of the middle market loans would have gone to the FinCos in the absence of direct lending, the opportunity cost here is represented by lost interest origination *and* interest fee on \$280bn worth of loans. In the context of a market that is only about \$400bn big today, that's proportionally a heavy impact from direct lending.

Other Implications

The success of direct lending means that the transfer of corporate risk from banks to nonbanks is a structural change, and is going to continue its trajectory. Ultimate providers of capital will essentially remain the same but will increasingly reroute their funds from traditional asset management platforms to alternative asset management platforms. This speaks to the broader trend in the investment economy which is rise of alternative assets, direct lending being just one of them. The stock of alternative assets has grown rapidly over the last decade from \$3.1tn in 2008 to \$9.6tn today. Preqin projects it to reach \$14tn by 2023 which will represent a CAGR of 8%. The two behemoths in this category: private equity and hedge funds represent \$3.6tn each, though PE capital is expected to grow at a faster pace, partially driving the expected growth in private debt or direct lending.

Chart 25: Rise of alternative assets



Source: Preqin

Chart 26: Individual components of alternative assets' growth

Projected Increase in Assets		
2018		2023
	Natural Resources	
\$0.2tn	→	\$0.8tn
	Private Debt	
\$0.8tn	→	\$1.4tn
	Infrastructure	
\$0.5tn	→	\$1.0tn
	Private Equity	
\$3.6tn	→	\$4.9tn
	Real Estate	
\$0.9tn	→	\$1.2tn
	Hedge Fund	
\$3.6tn	→	\$4.7tn
	Total	
\$9.6tn	→	\$14.0tn

Source: Preqin

³ This refers to the loss of origination and arranging fees that banks would have earned through their banking and syndication business.

Given that banks already have limited ability to hold leveraged loans, the more realistic disruption from direct lenders comes from loss of origination and syndication fees. Even so, impact on bank syndication represents <15% of its business, whereas impact on FinCos represents >50% of their business.

The good and the bad of Direct Lending

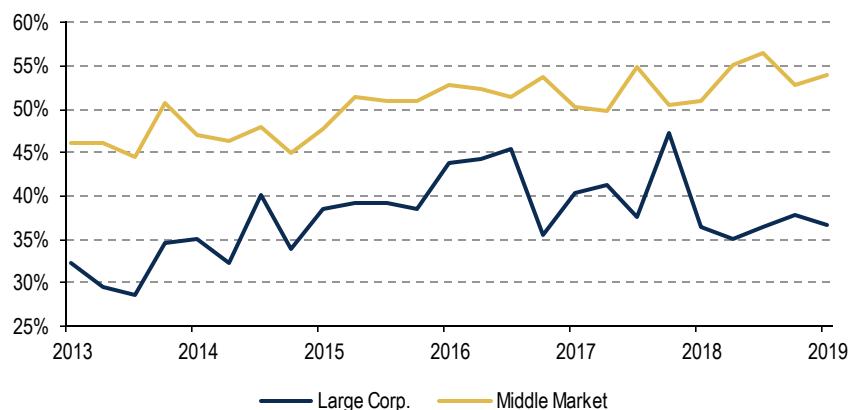
There is a spectrum of opinions associated with the direct lending sector today, depending on who is being asked. It is impossible to have a blanket opinion about the asset class due to the expected high dispersion of returns amongst direct lending managers through a downturn. Below we list some of the pros and cons of this asset class and think that managers who are able to capitalize on the former, while minimizing the latter, will outperform. First the advantages:

Lower Credit Risk

We believe credit risk is marginally lower in direct lending portfolios than some of their syndicated loan counterparts because:

- I. Direct Lenders cater to mostly the middle market space, which has comparatively lower leverage levels vs large corps (Chart 46).
- II. Seasoned direct lenders have deep credit analysis skills, industry expertise as well as relationships to navigate tough market environments.
- III. Creditors in direct lending deals have more subordination as private equity checks form a larger part of the capital structure in the middle market than in the large corp space (Chart 27).
- IV. The risk of combative PE behavior is lower in middle market deals due to the presence of a small number of stakeholders, in most cases limited to just three (the company, debt and equity provider). In some cases, the debt and equity providers are within the same company, offering a greater likelihood of economic and strategic alignment amongst parties.
- V. The number and the quality of covenants in middle market deals are better than in the large corp space.

Chart 27: Total equity contribution



Source: LPC

Higher Diversification

Direct lending as a platform provides investee and investor diversification. The ability of managers to focus on different geographies and mandates provides diversification of portfolio companies. At the same time, the ability of managers to invest across the whole capital structure, and thus appeal to various yield bogeys, provides diversification in types of investors buying into the funds. Higher diversification is naturally preferable because it reduces correlation, whether it is amongst portfolio company performance or investor behavior, thereby providing a stabilizing effect on returns.

Availability of dry powder

Direct lending funds also benefit from the availability of large amounts of capital on the sidelines whether in PE or PD format. This is reassuring for companies and investors alike, as it means capital can be sourced in situations where it makes economic sense, and the viability of the company is not challenged due to scarcity of capital alone. This is not an advantage that syndicated markets have, as companies unable to refinance their debt can quickly end up in default when capital markets shut down in risk off periods.

At the same time, yields in the middle market space are higher, implicitly underscoring that investors are taking on more risk. Below we highlight some of the risks involved the asset class.

Higher liquidity risk

One of the biggest sources of risk comes from the lack of a secondary market for these investments. Once a debt-equity provider pair sign up to a transaction, it is usually for an extended amount of time. There are chances that the economics of the company may change during its partnership with private capital providers. However, these investments cannot be offloaded, and the only options that stakeholders really have are either to turn the company around by routing more capital and expertise towards it, or let it default. This is primarily the reason why direct lenders command a higher premium than institutional investors- because of the high liquidity risk.

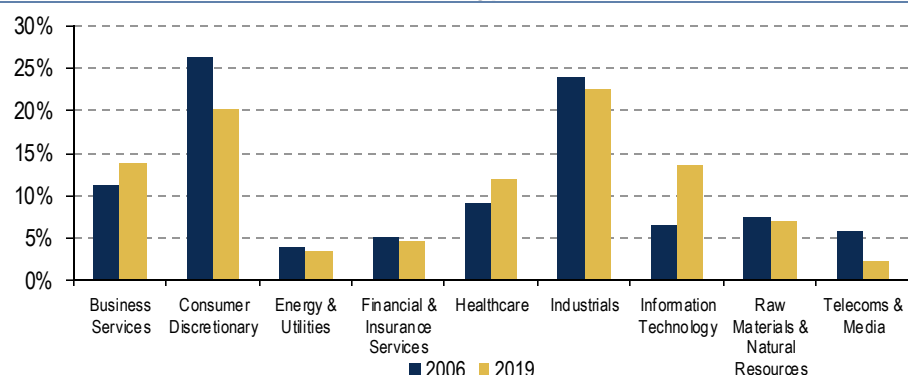
Competition for deals

Though leverage in the middle market is lower than large corps, it has been converging towards the latter. Specifically in the 2016-2018 period, leverage in the middle market built up sharply due to intense competition amongst nonbank lenders for deals- a direct result of large amounts of capital entering this asset class. This inevitably would have manifested itself in terms of excessive risk taking amongst managers that have more capital than deal flow, and don't screen conservatively enough. Another reason why it is likely that future performance in this space will be bifurcated with winners and losers as the cycle turns.

Industry concentration

Direct lender portfolio companies tend to be heavy in Consumer Discretionary and Industrials with approximately 20%-25% in each sector. Additionally, the IT sector unsurprisingly has shown the most growth given its preponderance amongst broadly syndicated loans as well. Together the three of these sectors represent 55% of direct lending portfolios today presenting some sector concentration risk. Comparatively, the top three sectors in institutional loan space accounts for 40% of loans outstanding.

Chart 28: Sector concentration within direct lending portfolios

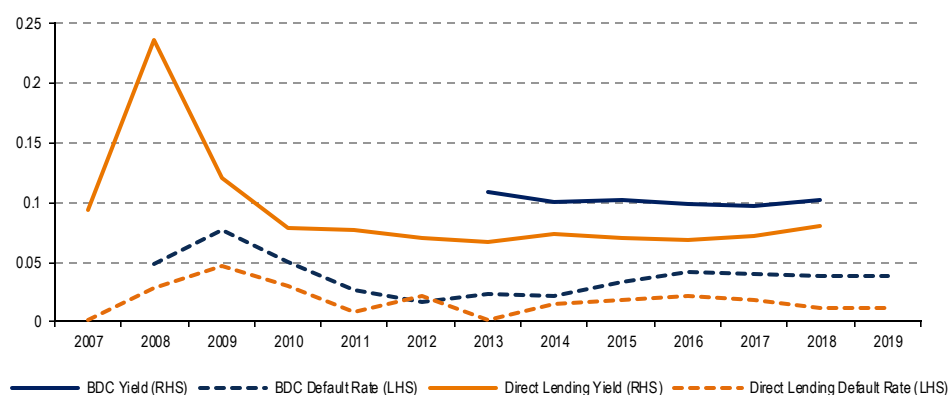


Source: Preqin

Retail exposure through BDCs

Another potential weak point to us is the retail exposure to middle market through BDCs, which have garnered investor interest due to their attractive yields. Today, BDCs account for ~\$90bn of middle market corporate loans. The issue with this type of capital is that it is levered, mark to market, and subject to the vagaries of the retail community. BDCs have also seen the same surge of available investment capital that their peers in the direct lending world have. Except that these vehicles are more levered, and have more incremental expenses. While current leverage levels are under 1x, expectations are that they will migrate to 1.5x over time, with a recent rule relaxation allowing these vehicles to take on 2:1 leverage instead of the current 1:1 cap. These vehicles offer the highest yield (and risk) amongst middle market investments (Chart 29), and if this market was to come under pressure, direct lending funds will not be able to fully isolate themselves.

Chart 29: BDCs offer higher yields than direct lending funds



Source: LPC

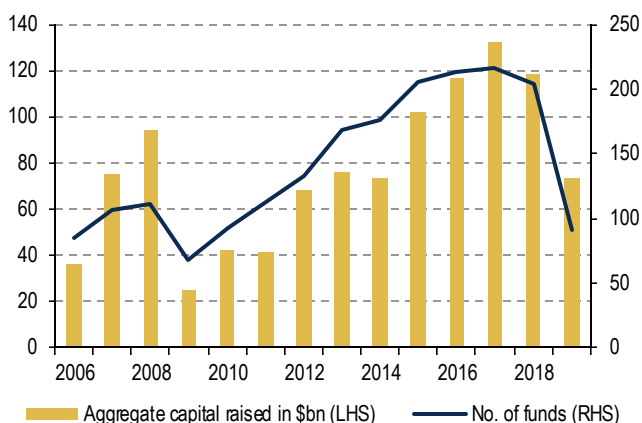
Direct lending presents lower credit risk but higher liquidity risk compared to institutional loans. It also provides the benefit of diversification and availability of dry powder, but inherent risk has been increasing due competition for deals and retail exposure.

Trends in Direct Lending

Fundraising

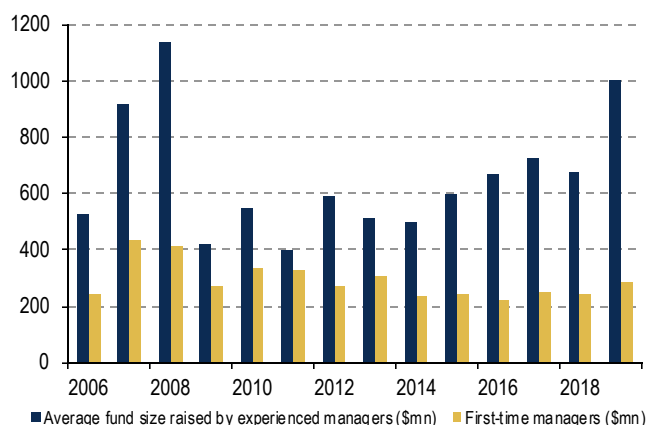
Direct lending fund raising has seen significant growth in this credit cycle, though it is off its peak (Chart 30). After a record \$130bn raised in 2017, fundraising slowed down to \$120bn in 2018, and is at \$73.9bn 2019 YTD, which translates to \$99bn annualized. As the broad industry has gained recognition, managers have benefited to various degrees. While dozens of first-time fund managers have entered the industry in the last few years, investors continue to favor proven track records. Chart 31 shows the average fund size raised by experienced vs first-time managers. Experienced managers have consistently raised more money per fund (and in total), and the discrepancy between the two groups is increasing, a fair trend at this stage of the credit cycle. First-time managers accounted for ~16% of aggregate capital in 2006 vs 7% 2019 YTD. In terms number of funds, first-time managers accounted for 31% in 2016 vs 25% this year.

Chart 30: Annual global private credit fund raising



Source: Preqin

Chart 31: Average fund size by manager experience, \$mn

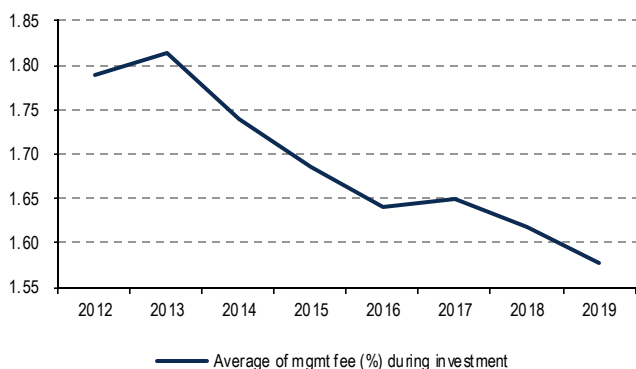


Source: Preqin

Fee structure

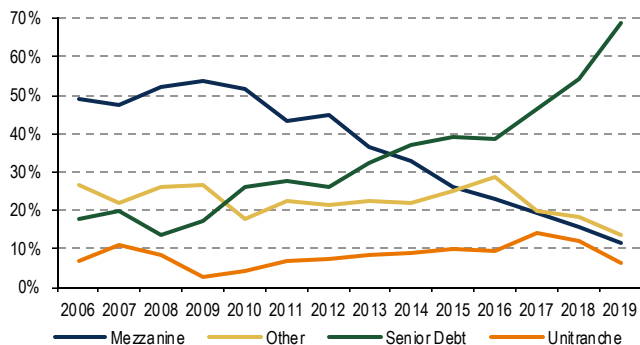
With increasing competition in the industry, management fees have naturally compressed (Chart 32). Anecdotally, experienced managers are able to command higher fees in return for deep industry expertise and understanding of credit risk. Whereas new managers with limited track record can only distinguish themselves through competitive pricing structures weighing on the industry as a whole.

Chart 32: Management fees have come under pressure



Source: Preqin

Chart 33: Distribution of deals across capital structure



Source: Preqin

Capital Structure

Managers prefer senior lending strategies

With the current cycle in its late stages, private credit managers remain cautious by migrating up in the capital structure. Since 2006, the distribution between senior debt and mezzanine financing within the industry has shifted considerably (Chart 33). In 2006, senior debt financing represented less than 20% of deals done, while mezzanine financing represented nearly half. This year senior debt has represented 70% vs mezzanine has remained confined to ~11% of deals.

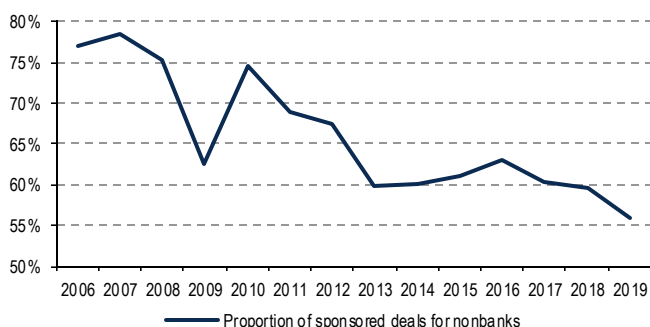
Managers want to be the sole lender

Managers also increasingly prefer to be the sole lender in a deal. Today, the proportion of nonbank deals with a sole lender is ~80% (Chart 35: Proportion of sole-lender deals, %), which means the number of involved parties is limited to three, sometimes two in case of non-sponsored deals. This is an increase from ~70% levels before 2016. This trend is another sign of the evolution of the direct lending market, where lenders are increasingly in a position to finance deals by themselves given their deeper pockets.

Managers are earning repeat business

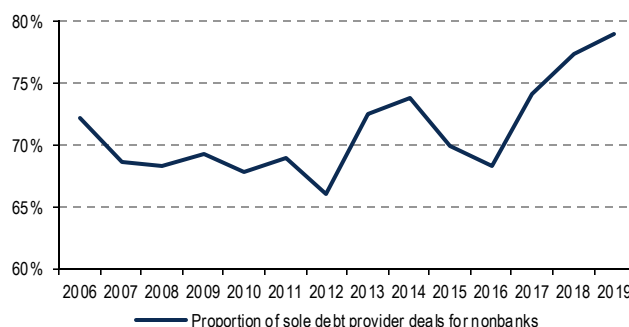
Sponsors are an important source for direct lending deal flow (56% for nonbank lenders). However, private credit managers today are less reliant on sponsored-deals as they get repeat business from the relationships they build with the borrowers. We're also increasingly seeing deals in structures where private equity and debt hold only a minority ownership, in "growth capital" strategies with a lend-as-you-go mandate (Chart 34: Proportion of sponsored deals, %).

Chart 34: Proportion of sponsored deals, %



Source: Preqin

Chart 35: Proportion of sole-lender deals, %

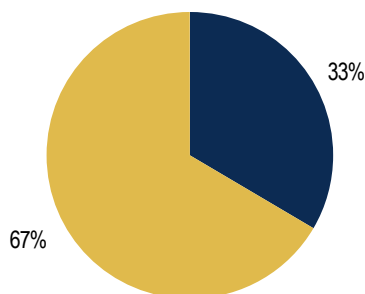


Source: Preqin

Borrower fundamentals

Experienced direct lending managers show a higher leverage tolerance with a greater proportion of their deals having enterprise multiples above 8x compared to inexperienced managers. Considering this, the fund raising advantage they have over new managers further demonstrates how much investors value managers' access to relationships, risk management capabilities, technology/infrastructure, as well as industry knowledge. Overall 62% of the deals in our direct lending sample have an EV multiple >8x. Dividing this sample between portfolios of experienced (5 yrs or more) and new managers, we find that 67% of experienced manager portfolio has an EV multiple >8x, while the comparable level is 53% for new managers.

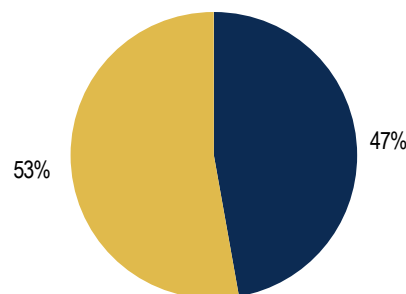
Chart 36: Experienced manager EV multiple deal distribution



■ Experienced managers: EV multiple ≤ 8 ■ EV multiple > 8

Source: Preqin

Chart 37: Inexperienced manager EV multiple deal distribution



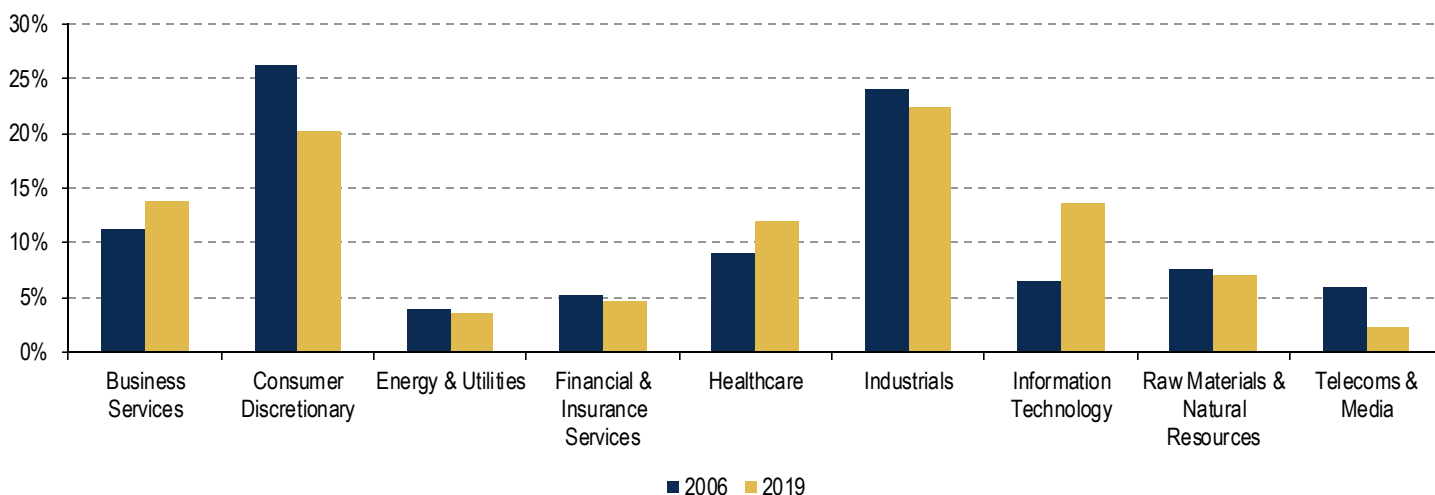
■ Inexperienced managers: EV multiple ≤ 8 ■ EV multiple > 8

Source: Preqin

Choice of portfolio company industry

A higher proportion of deals are invested in acyclical sectors today vs 2006. For example, consumer discretionary represents 6% less while healthcare represents 3% more today. Technology has seen its growth double to 14% of deals which is not surprising given its growth in the syndicated loan market, and the fact that this industry serves as a sponsor favorite due to its high recurring cash flows.

Chart 38: Industry distribution



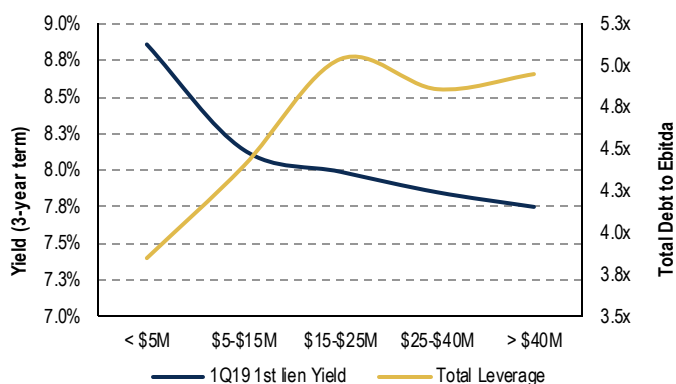
■ 2006 ■ 2019

Source: Preqin

Choice of portfolio company size

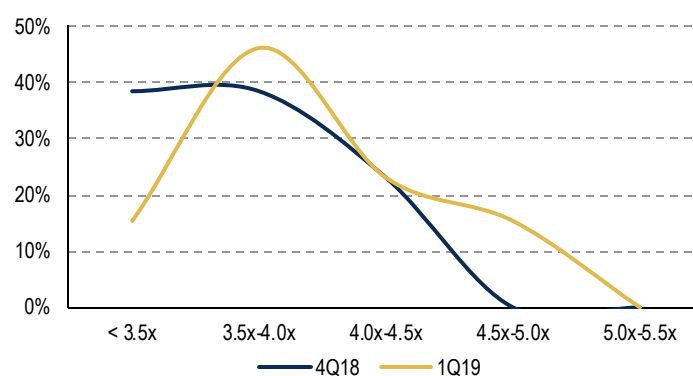
There is more incentive for direct lenders to do small company deals because that's where they get "more bang for their buck". Each dollar spent towards funding smaller firms is less levered and brings more yield (Chart 39). The biggest challenge with smaller companies is that they are also more exposed to sudden changes in the economy which can easily disrupt their business models. However, a case can be made that with direct lenders as backups, they have more capital security as all parties have vested interest in the survival and success of the company. As such we think that direct lenders will continue to disrupt small issuer space at a rapid pace taking away more market share from Finance Companies.

Chart 39: 1L yields vs total leverage by annual issuer Ebitda: 1Q19



Source: LPC

Chart 40: 1L leverage tolerance on MM deals at banks



Source: LPC

Banks are fighting back

As we discussed earlier, direct lending is also disrupting the large corp space, though to a lesser extent than small corps. Even so, banks are fighting back. They have been increasing their leverage tolerance towards middle market deals (Chart 40) in order to remain competitive. Additionally, large banks are also increasing their mandates within the lower middle market and small business space.

Eventually, as the credit cycle draws to an end, the dispersion of performance amongst direct lenders will be high. Given their extensive credit knowledge and deep relationships, it will be the bigger and more experienced managers that will outperform. We are already seeing some signs of this outperformance in terms of the equity checks and deal choice that experienced platforms have. While there exist “good” reasons to invest in direct lending, the spectacular growth herein is bound to have manifested itself in terms of excessive risk taking amongst some managers. We prefer experienced managers with larger platforms and low target company hit rates.

About the trends dataset

Our deal dataset is sourced from Preqin, where we have analyzed information from more than 15,000 completed direct lending deals since 2000, split between banks and nonbanks 1:3. For most of the deal-level analyses, we focus on the 75% of deals that are intermediated by nonbanks, other than analyses directly comparing banks vs nonbanks. For some datasets where we are limited by the private nature of financials, such as while analyzing trends related to Ebitda and EV, our calculations are based on a smaller set of <500 deals. We also utilize manager and fund level datasets wherever necessary. While we understand the restrictions of less sample size in certain cases, we nevertheless think that our conclusions can be extended to the broader direct lending asset class.

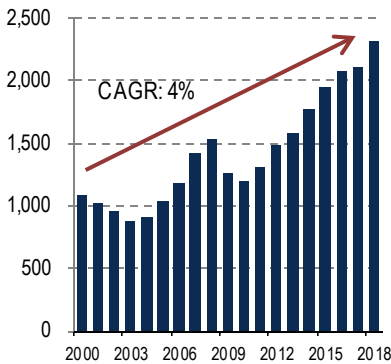
Eventually, as the credit cycle draws to an end, the dispersion of performance amongst direct lenders will be high. Given their extensive credit knowledge and deep relationships, it is likely the bigger and more experienced managers that should outperform.

PART IV: HEALTH OF THE LOAN MARKET

Growth of loan asset classes

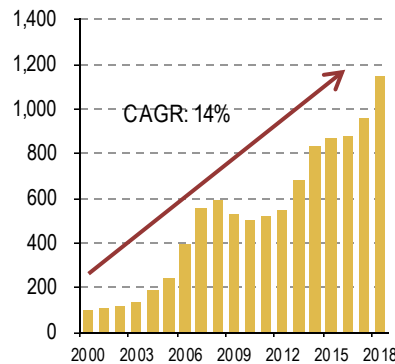
In terms of AUM, the loan asset class with the highest growth is direct lending, followed by institutional loans and bank loans. Direct lending AUM has grown at the rate of 16% on an annual basis since 2000 (marginally lower when considering only invested dollars), while institutional loans aren't far behind at 14%. Not surprisingly, investors are concerned about the health of both these markets given their level of investor interest. Below we touch on some of the important aspects such as ratings, defaults and general risks surrounding each asset class. We don't discuss FinCo loans here due to its small size and negative growth.

Chart 41: Growth in bank loan AUM, \$bns



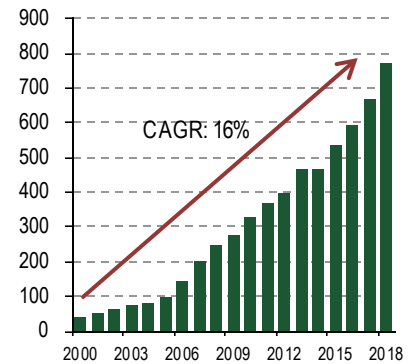
Source: BofA Merrill Lynch Global Research

Chart 42: Growth in institutional loan AUM, \$bns



Source: BofA Merrill Lynch Global Research, LCD

Chart 43: Growth in direct lending AUM, \$bns

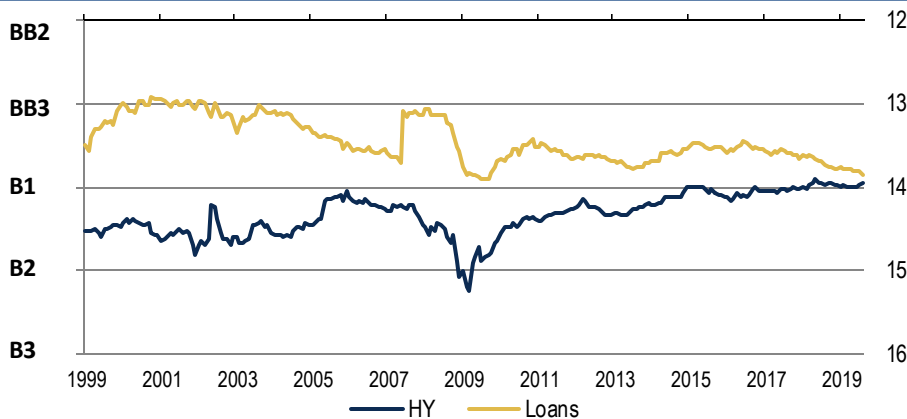


Source: BofA Merrill Lynch Global Research, Prequin

Credit quality and yields

Within the loan space, we are witnessing rating decompression, ie further rating divergence between high and low quality assets. The asset class associated with the lowest credit risk – C&I bank loans is getting safer, lending credence to banks' withdrawal from the leveraged loan space. Just the opposite, ratings within the institutional loan market have been on a secular decline since the early 1990s (Chart 44). This has been a function of increasing presence of smaller lower quality loan-only issuers in the loan index. On the other hand, entry of higher quality fallen angels into HY from the IG universe, has improved its credit quality, leading to a secular convergence between loans and bonds as asset classes.

Chart 44: Wtd avg rating of loan and bond indices

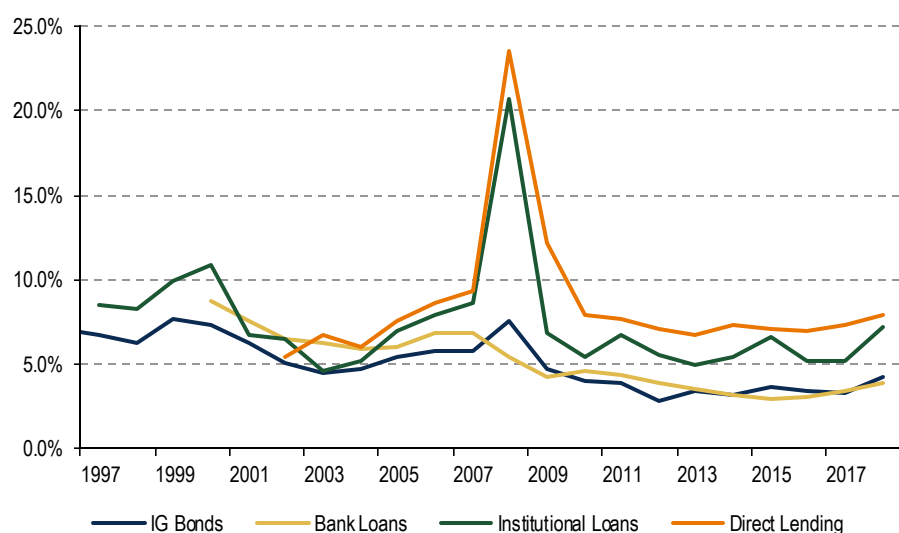


Source: S&P LCD

Besides credit quality, loans and bonds are also converging in terms of documentation. Loan asset class has already lost most of its financial covenants as evidenced by the high proportion of covlites. The bigger issue is the deterioration seen in some of the incurrence covenants. The strong demand for loans over the last few years has resulted in a decreasing amount and coverage of collateral via covenants, making loans more bond-like. Weaker protections dilute the claim of a secured investor either by the ability of the company to issue new pari-pasu debt at the secured level, or its ability to make restricted payments reducing the value of the asset. All leading to lower recoveries when the cycle finally turns. The covenants in the direct lending space are also deteriorating but not at the rate of institutional loans.

Due to the private nature of direct lending, and hence the lack of public ratings, the only way to understand its relative riskiness is to compare the asset class' yields and leverage vs other asset classes. The figure below shows the relative evolution of yields amongst different loan subgroups, tallied against IG bonds representing the yield floor within the credit space.

Chart 45: Yields across sectors



Source: LCD, LPC

Bank C&I loan yields today are a lot closer to IG bonds than they are to their sister loan asset classes. Furthermore, the yield on bank loans has declined at a faster pace than even IG bonds- starting out in the zip code of nonbank loans in the last credit cycle, realizing a sharp drop during the financial crisis, and ending up meaningfully away from them today, another clear indication of banks' decreasing ability to undertake balance sheet risk post the great recession. In summary, the credit risk attached to bank loans today is meaningfully lower relative to nonbank loans, as well as their own history.

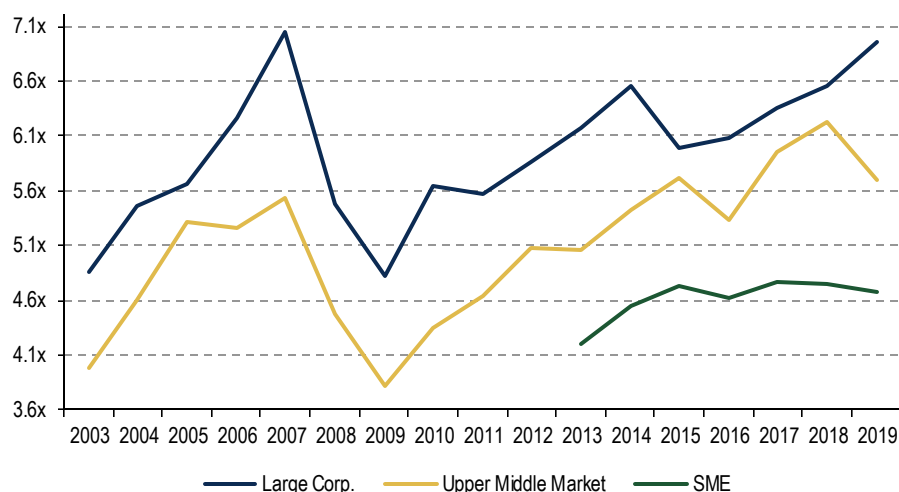
Comparatively, institutional and direct loans provide the highest yield. In fact, direct loans have widened their compensation over institutional loans in this credit cycle by failing to tighten to the same extent as institutional loans. Note that this higher compensation is more a function of liquidity risk than credit risk as delinquency rates in direct lending are lower than institutional loans.

Within the loan space, we are witnessing further rating divergence between high and low quality assets.

Leverage and default pressures

Chart 46 shows how leverage amongst companies that borrow through the institutional loan space (large corps) compares to those that borrow via direct lending platforms (SME). Our true SME data runs back only until 2013, before which we show the leverage of the upper middle market. These are loans still on balance sheets of direct lenders but made to larger middle market companies through bank origination and syndication platforms. From this chart we see that leverage in the SME space is systematically lower than in the large corp space, another reason why default rates amongst direct lenders also tend to be lower.

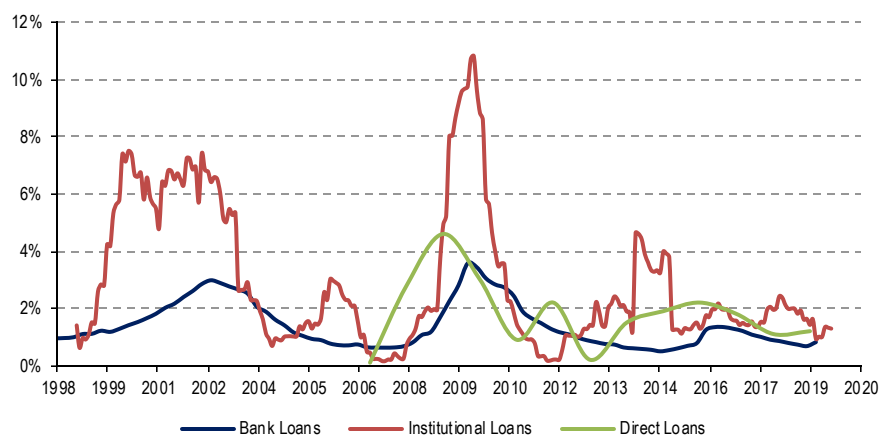
Chart 46: Annual LBO leverage by market segment



Source: LPC

The lower number of stakeholders involved in a deal also tends to ease default pressures in a stressed situation. 80% of the deals done by direct lenders has them as the only creditor in the deal. Additionally, in choosing partners to work with, direct lenders are always trying to minimize information asymmetry, an important driver of quick, unanimous resolutions of distressed situations, often done out of court.

Chart 47: LTM par default rates

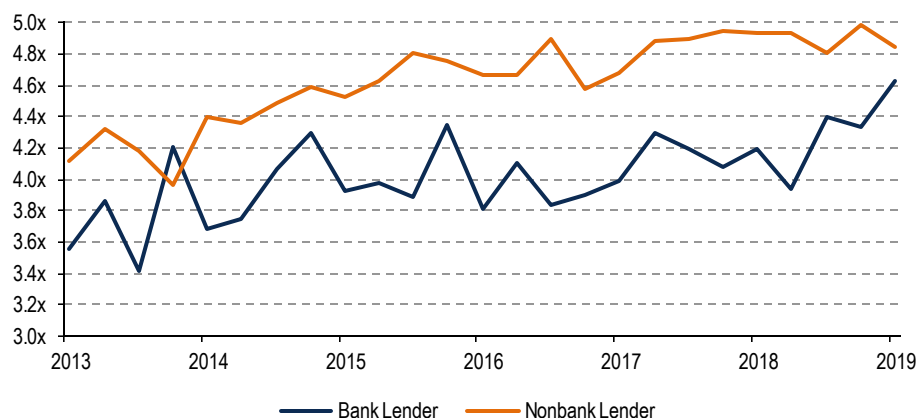


Source: LCD, LPC, Fitch Ratings

When taken in combination, overall leverage of nonbank portfolio companies is meaningfully higher than those of bank portfolio companies, driven by the institutional

loan market (Chart 48), though bank leverage has crept up in the last few years. The higher leverage has been a result of the intense competition amongst nonbank lenders for deals, reflecting on the large amounts of capital entering this asset class. We have discussed how we expect bifurcated performance amid direct lenders due to the rapid pace of growth there.

Chart 48: Portfolio company leverage



Source: LPC

While direct lending represents the fastest growing asset class today, it is the institutional loan space that is the weakest link within the loan universe. The asset class represents the highest leverage levels and amount outstanding within nonbank loans. It is also the space which has the highest number of lenders per deal, while concurrently, covenants that protect their interests have deteriorated the most. These companies are also heavily dependent on broad capital markets, exposing them to more volatility and liquidity risk vs other more private asset classes. Participants here are taking the most incremental risk and thus faces the most downside when the cycle turns.

Given institutional loans represent the highest leverage levels as well as amount outstanding within nonbank loans, participants here are taking on the most incremental risk, and thus face the most downside when the cycle turns.

PART V: CONCLUSION

The goal of this primer has been to give our readers a holistic view of the loan asset class, deep dive into some obscure areas, as well as clarify misconceptions along the way. The salient points we want our readers to take away from this report are:

1. Corporate bond debt outstanding is larger, and has grown at a faster rate than loan debt through this credit cycle
2. The bulk of the loan asset class is tied in C&I loans made to relatively safe companies
3. Bank exposure to loans has increased in quality and decreased in size due to post crisis regulation, and remains manageable
4. About 15% of the funds in the loan asset class flow through the “shadow banking” channels
5. Direct lending is the smallest source of loan capital to US companies, with \$300bn invested, but is the fastest growing
6. Direct lending is making inroads into both large corp and small corp markets, with a more pronounced impact on the latter
7. Experienced direct lenders are likely to outperform in the downturn despite their tilt towards more levered portfolio companies
8. Institutional loans continue to exhibit the highest leverage and default rates within the loan space, and face the most downside risk in the loan universe

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