CHAPTER 1

Description and History of the Leveraged Finance Markets

To set the stage for analyzing corporate debt, let's start with a history of the leveraged finance asset class (this chapter) and credit cycles (Chapter 2).

FINANCING A COMPANY: WHY USE DEBT?

Debt financing is as old as human society, although it has enjoyed varying levels of acceptance over the centuries. To choose one of many famous historical references to debt, Shakespeare's play *Hamlet* includes the well-known quote, "Neither a borrower nor a lender be." If all companies heeded this advice, there would be no debt markets and thus no need for this book. While Shakespeare was a brilliant playwright, a few courses in corporate finance might have changed his one-sided view of debt.

The concept of borrowing and lending dates back to 3000 BC in ancient Mesopotamia. Farmers borrowed seeds and would pay back what they owed with a share of their crops when the spring harvest came. The Code of Hammurabi, an ancient legal text, shares some of the conditions of the loans at the time: if the harvest was ruined by poor weather, the debt was void. But if a farmer failed to pay his debt for any other reason, he was forced to work for three years to settle it. While today we borrow and lend money instead of seeds and crops, debt continues to be a backbone of the modern economy, with most companies using a combination of debt and equity to finance their assets and operations. Therefore, an analyst must understand the pros and cons of each source of financing.

The primary benefit of debt financing to the issuer is that, unlike equity, it does not require giving up an ownership stake in the business. An added bonus is that interest payments are tax-deductible, whereas stock dividends are not.[1]

The downside of debt is that it entails contractual interest and principal payments, whereas equity is permanent capital that never has to be repaid by the company. If a company cannot meet the cash burden of these payments, it might have to file for bankruptcy. Fundamentally, the trade-off between giving up ownership (equity financing) and increasing the probability of financial distress (debt financing) is at the core of a company's financing decisions and informs the optimal mix of debt and equity.

[1] In 2017, the Tax Cuts and Jobs Act (the Act) reduced some of the tax benefits of debt financing. Before the Act, companies were unrestricted in the amount of interest they could deduct. After the Act, companies were limited to deducting up to 30% of their 12-month EBITDA. After 2021, the cap became 30% of EBIT.

WHAT IS LEVERAGED CREDIT?

Simply put, the leveraged credit market is composed of corporate bonds and loans with a below investment grade credit rating. Leveraged credit is also referred to as high yield (HY), sub-investment grade, speculative grade, or junk. As discussed in the book's introduction, corporate debt is broadly categorized into three risk categories, summarized in Figure 1.1.

Category	Risk of Default
Investment grade (IG)	Low
Non-investment grade	Moderate to high
Distressed debt	High or already in default

FIGURE 1.1 Risk Categories of Corporate Debt

Whether a company's debt falls into the investment grade or high yield rating category depends on the credit ratings agencies' views of its probability of default. Credit rating agencies came into existence more than a century ago[i] to provide a third-party evaluation of credit quality for a range of entities, from companies to sovereigns to municipalities. The most well-known and utilized rating agencies are Moody's, Standard and Poor's (S&P), and more recently Fitch. As shown in Figure 1.2, the rating agencies have "letter grades" for credit quality; a company is viewed as investment grade if it has a rating of Aaa to Baa3 from Moody's or a rating of AAA to BBB- from S&P/Fitch.

Bond Rating Scale

	MOODY'S	STANDARD & POOR'S	FITCH
	Aaa	AAA	AAA
	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
	A1	A+	A+
Investment Grade	A2	A	A
	A3	A-	A-
	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
	B1	B+	B+
	B2	B	B
Non-Investment Grade	B3	B-	B-
	Caa	CCC	CCC
	Ca	CC	CC
	C	C	C
		D	D

FIGURE 1.2 Bond Rating Scale

With any investment, the higher the risk, the higher the return required by an investor. This book focuses on investing in the leveraged finance (non-investment grade/high yield) and distressed debt markets, where the greatest risk and opportunity for return exist.

The non-investment grade market is further divided into three sub-markets, shown in Figure 1.3 and discussed in greater detail later in this chapter.

- High yield bonds (HY)
- Broadly syndicated loans (BSL)[a]
- Private credit or direct loans

[a]BSLs are also referred to as leveraged loans, bank loans, bank debt, or simply loans. This book will use these terms interchangeably.

FIGURE 1.3 Leveraged Credit Sub-Markets

GROWTH IN THE LEVERAGED CREDIT MARKET

The non-investment grade debt markets have grown by roughly 7x over the last 20 years (Figure 1.4). There are several reasons for this growth, including growing acceptance of more-levered companies in the public equity markets, the growth of private equity (an asset class requiring leverage to achieve target returns), and investor demand for a higher rate of return to counterbalance the long-term trend of lower Treasury rates since the 1980s. This growth continues to drive increasing demand for well-trained credit analysts.

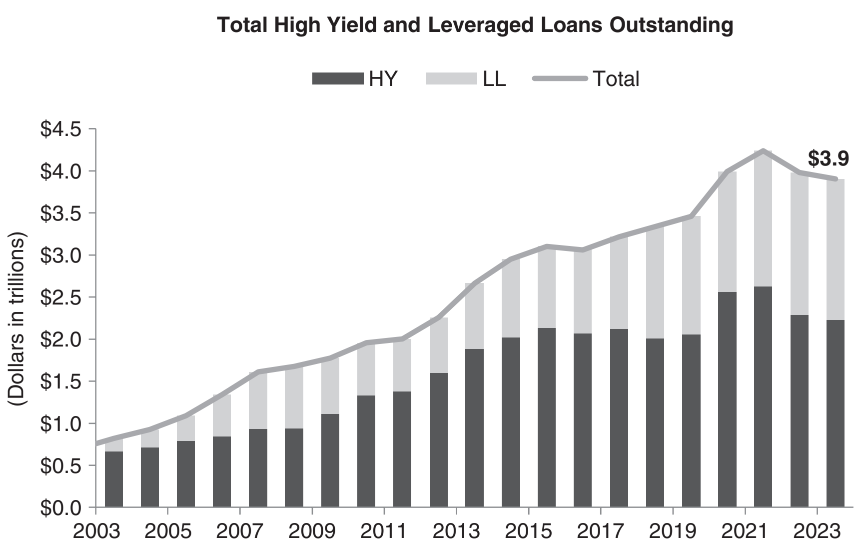

FIGURE 1.4 Total High Yield and Leveraged Loan Market Size
Sources: Bank of America Merrill Lynch (high yield data), LCD (leveraged loan data), Silver Point Capital (graph)

THE HIGH YIELD BOND MARKET

As shown in Figure 1.5, bonds and loans with a high yield rating have a significantly higher probability of default than investment grade bonds. They are commonly referred to as "junk," or more forgivingly as "speculative grade" or "non-investment grade." Their higher risk means that these bonds must provide higher yields to investors.

Global Corporate Average Cumulative Default Rates (1981–2021)										
	Percent of Credits That Defaulted									
(%)	Time Horizon (Years)									
Rating	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Investment-Grade	0.08	0.23	0.40	0.61	0.83	1.05	1.26	1.45	1.63	1.81
Speculative-Grade	3.60	6.97	9.86	12.23	14.16	15.75	17.06	18.16	19.14	20.04
All rated	1.50	2.93	4.17	5.22	6.10	6.83	7.45	7.97	8.43	8.86

FIGURE 1.5 Global Corporate Average Cumulative Default Rates (1981–2021)
Sources: S&P Global Ratings Research and S&P Global Market Intelligence's CreditPro®

In the 1970s, the non-investment grade bond market was predominately comprised of "fallen angels," formerly investment grade–rated companies downgraded to high yield at some point after they were issued due to financial underperformance. Since fallen angel bonds were such a small part of the corporate bond market, the so-called "bulge bracket" investment banking firms did not focus on trading them.

Michael Milken of Drexel Burnham Lambert established himself as the go-to trader in the non-investment grade secondary bond market. After dominating the secondary trading market, he realized the fastest way to grow his business was to open up the new issue market to non-investment grade companies (essentially expanding the market beyond fallen angels and creating an entirely new asset class). The opportunity was tremendous as, at the time, only 6 percent of the roughly 11,000 public companies in the US qualified for investment grade ratings.[ii] All Milken had to do was convince investors to buy new bonds issued by non-investment grade–rated companies.

Milken's vision was validated in 1983 when Drexel brought a $1.1 billion junk bond deal to market for MCI Communications, one of the largest telecommunication companies at the time, to fund the company's buildout of its fiber optic infrastructure. From 1977 to 1989, the capitalization of the high yield market grew to $189 billion.[iii]

By the mid-to-late 80s, Milken's junk bond business was generating more than half of Drexel's profit.[iv] In 1986 alone, Milken personally earned a staggering $550 million compensation package.[v]

In the early days of the new issue (or primary) junk bond market, proceeds were used to fund business operations. However, by the mid-1980s, junk bonds were increasingly used to fund leveraged buyouts (LBOs) of public companies, a structure discussed in detail in Chapter 4, giving rise to the private equity (PE) industry. PE firms targeted some companies that had no interest in being sold. This became known as a hostile takeover, and the firms and individuals behind these types of takeovers were referred to as "corporate raiders."[2]

Carl Icahn and Ron Perelman are two famous corporate raiders. The 1987 Oliver Stone movie *Wall Street* featured a main character named Gordon Gekko, who was loosely based on a composite of Carl Icahn and disgraced arbitrageur Ivan Boesky. Today, hostile takeovers and corporate raiders are rare; however, activist investors are the modern version, taking meaningful stakes in public companies to force changes in management strategy and/or balance sheet structure. Carl Icahn, 87 years old in 2023, is a name that can still send shivers down a management team's spine when he takes a stake in their company.

The first, but by no means last, high yield bubble popped in the late 80s and early 90s. The 1989 LBO of RJR Nabisco by private equity firm KKR is widely considered the peak of this cycle. A must-read for those interested in learning more about the first LBO heyday is *Barbarians at the Gate* by Bryan Burrough and John Helyar.

However, the bubble began to deflate in 1986, when federal authorities started investigating insider trading allegations against one of Milken's clients, corporate raider Ivan Boesky, nicknamed "Ivan the Terrible" for his ruthless takeover strategies. Later that year, federal prosecutor Rudy Giuliani led an aggressive prosecution of Milken, charging him with racketeering, insider trading, and securities fraud. Giuliani, who would later become the mayor of New York City, a presidential candidate, and a personal lawyer and adviser for President Donald Trump, invoked the Racketeer Influenced and Corrupt Organization Act of 1970 (RICO) to pressure Milken into pleading guilty. Historically, RICO had been used to pursue organized crime and mobsters, not white-collar criminals. In April 1990, Milken pleaded guilty to only regulatory violations after Giuliani indicted his brother and sent the FBI to interrogate his 92-year-old grandfather.[vi] Many believed the case against Milken was weak and politically motivated and that he only pleaded guilty to protect family members. The government dropped all charges against his brother as part of his plea bargain. The judge sentenced Milken to 10 years in prison, later reduced to two years.

Milken's contribution to the financial world was substantial. Put simply, the market of Milken's making ushered in a new era of financing for corporate America. Figure 1.6 summarizes the positive impacts of the high yield / junk bond market. A must read for those interested in learning more about Milken is *Witness to a Prosecution: The Myth of Michael Milken* by Richard Sandler.

- Created a new source of capital for the huge universe of companies without investment grade ratings.
- Fueled economic growth and job creation by enabling companies to invest in growth initiatives.
- Provided investors, including endowment and pension funds, with higher-yielding investment opportunities.
- Provided a catalyst for corporate governance improvements by facilitating takeovers of undermanaged companies.

FIGURE 1.6 Benefits of the High Yield Market

[2]While there were occasional takeovers and corporate raiders before the inception of the high yield bond market, its development, brought the hostile takeover concept into the mainstream of corporate finance.

While the financial community remembers him for his career on Wall Street, Milken's reputation with the broader public is for both philanthropic and financial innovation. More than just a major donor, he substantially changed the medical research process to make it more efficient and effective. In 2020, Milken received a presidential pardon.

Subsequently to the junk bond market's first bubble and burst, there have been several credit cycles, which are discussed in detail in the following chapter. The early history of high yield bonds is instructive, as it created the foundation for a volatile market fueled by strong risk appetite and excessive leverage (in the boom) followed by extreme risk aversion and balance sheet restructuring (in the bust). As you will learn in this book, the hallmark volatility of the junk bond market provides interesting investment opportunities.

THE BROADLY SYNDICATED LOAN MARKET

While the high yield bond market's origin is filled with riveting tales, the loan market's inception is less exciting. Like their junk bond counterparts, leveraged loans are non-investment grade rated. Loans began as a sleepy asset class dominated by banks with a focus on capital preservation as compared to investment management firms with a focus on total returns. Historically, leveraged loans were underwritten by commercial banks with the intention of holding them to maturity or refinancing.

There are three significant differences between high yield bonds and leveraged loans. First, loans are less liquid, meaning they are more difficult to buy and sell. In fact, unlike high yield bonds,[3] leveraged loans can only be purchased by qualified institutional buyers (QIBs), making them inaccessible to individual investors and smaller institutional investors outside of fund structures. Second, leveraged loans are generally secured and therefore sit higher in the company's capital structure. This security lowers the risk of leveraged loans relative to high yield bonds; if a loan defaults, its investors typically receive much higher recoveries than unsecured bond investors. Third, bonds are classified as "securities," while loans are not. This has implications for the applicability of securities laws, such as rules relating to insider trading. As of 2023, a legal challenge pending before the Second Circuit Court of Appeals is seeking to classify loans as securities.[vii] Chapter 12 provides more detail about these and other structural differences between leveraged loans and high yield bonds.

In the 1990s, Goldman Sachs and other investment banks started to make markets in (that is, trade) leveraged loans, facilitating the development of a secondary trading market. An LBO funded with a $1 billion leveraged loan might be held by

[3]High yield bonds are increasingly being issued as 144A securities, making them off-limits to individual investors as well; however, before 2010, most HY bonds were "registered" and available to all investors (individual as well as institutional) for purchase.

10 large lenders. Initially, if one of the lenders wanted to reduce its exposure, it was dependent on a bid from another holder. The buildout of trading desks opened the asset class to non-bank investors, including pension funds and hedge funds. It also allowed original lenders to sell out of problematic loans, which gave rise to the distressed debt market.

The evolution of a bank's economic model from holding a loan on its balance sheet and earning the resulting interest to charging fees for arranging loans and selling the risk to others led to the development of the broadly syndicated loan (BSL) market.

As the BSL market emerged, the leveraged loan market expanded further with the development of structured or asset-backed products called collateralized loan obligations (CLOs). A CLO manager purchases and bundles together 100 or more leveraged loans. To fund the purchases of these loans, the CLO manager raises money from outside investors in different risk tranches. The CLO market came into its own in the run-up to the Global Financial Crisis (GFC) of 2008. While it shut down for a period of time after the GFC, today the CLO market is larger than ever.

As shown in Figure 1.7, the creation of a collateralized loan obligation has the following steps:

1. The CLO manager raises capital from investors. Each investor chooses a risk tranche that meets its individual risk and return expectations. Like corporate debt, the CLO tranches obtain credit ratings from the rating agencies. The Aaa/AAA debt tranche provides the lowest risk of impairment and the lowest return. On the other end of the spectrum, the equity tranche (sometimes referred to as "last out" or "first loss") has the highest risk of losing money and therefore the highest potential return. This "tranching" of risk into various ratings categories is used in virtually all asset-backed transactions (MBS, CMBS, ABS, etc.) and serves to broaden the pool of investors and thus the amount of capital available to underwrite the asset class underlying the structure. Put differently, many investors cannot buy leveraged loans because of their non-investment grade ratings, but virtually all investors are able to invest in the AAA-rated securities that compose most of a CLO.
2. The CLO manager uses the funds raised by selling different risk tranches to invest in non-investment grade new loan issues and/or attractive secondary loan offerings.
3. The interest and principal from purchased loans is used to pay interest and principal to the CLO investors. The cash flows go first to servicing the interest and principal of the senior tranche (Aaa/AAA), then to the next tranche (Aa2/AA), until, by a prearranged final maturity date, all the tranches are repaid. Any residual proceeds are paid to the equity tranche. Given this waterfall, losses from defaults on any loans purchased by the CLO manager are absorbed first by the equity, then by the lowest rated tranche. This continues up to the Aaa/AAA tranche—which, again, has very low risk of loss.

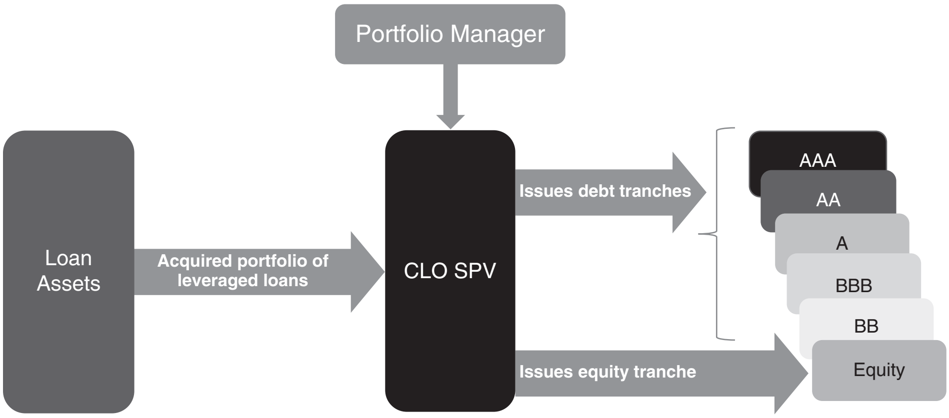

FIGURE 1.7 CLO Transaction Summary

CLOs by no means invented the magic of securitization, but they enjoy its benefits. The typical CLO is spread across 100 or more corporate loan issues with an average rating well below investment grade (e.g., low-BB). Yet 80 percent of a typical CLO's liabilities are rated AAA. How can this be? Two reasons: first, diversification across many issuers greatly reduces risk. And second, the 20 percent of the structure below the AAA piece, referred to as credit enhancement, acts as an absorber of loss. Think of this as putting 20 percent down on your mortgage—if you sell the house for 80 percent of what you bought it for, the bank does just fine, but you have lost your down payment.

The importance of CLOs to the leveraged loan market cannot be overstated. CLO structures own roughly two-thirds of leveraged loans today. The health, or lack thereof, of the CLO market (or "the CLO bid") is a major consideration for PE sponsors when they are evaluating the all-in financing rate for an LBO.

THE PRIVATE CREDIT OR DIRECT LOAN MARKET

The most recent significant development in the leveraged credit market is the massive growth of private credit, including direct loans, as an alternative to the BSL market. Increasingly, non-bank lenders such as private loan funds and business development companies (BDCs) underwrite these loans. In the aftermath of the GFC, bank regulations intensified, leading to increased capital charges associated with banks engaging in non-investment grade lending. Simply put, non-investment grade lending became less profitable for banks. As banks stepped back from leveraged lending, loans "institutionalized," that is, became their own asset class, managed by non-bank investment firms with dedicated teams of analysts and portfolio managers. Figure 1.8 shows the growth in private credit over the last decade.

There are now hundreds of private credit funds, ranging in size from under \$100 million to mega funds with over \$50 billion in assets. I know principals at three of these mega private credit firms quite well—Ares Management Corporation

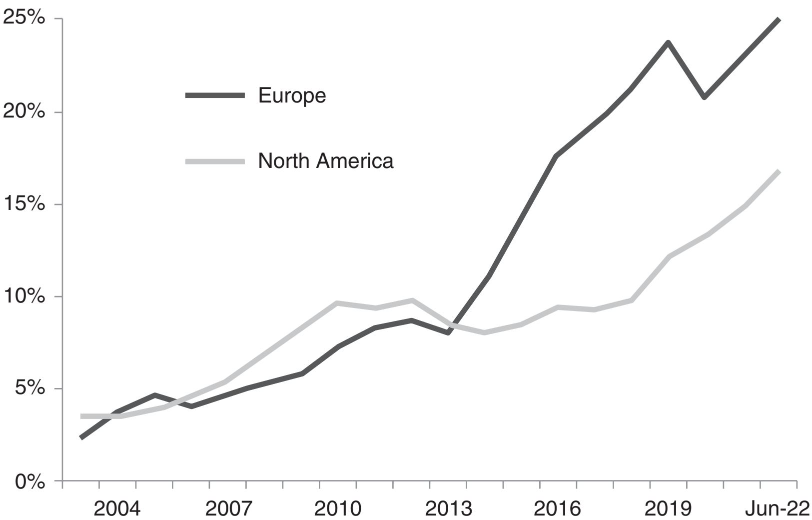

FIGURE 1.8 Private Credit as a Share of Leveraged Finance
Source: Courtesy J.P. Morgan Chase & Co., Copyright 2023

(~$380 billion in assets), HPS Investment Partners (~$100 billion in assets), and Sixth Street Partners (over $70 billion in assets).[4]

I went to Columbia Business School with Mitch Goldstein, co-head of credit at Ares; worked with Michael Patterson, governing partner of HPS, when he was part of our team at Silver Point; and started my career with Alan Waxman, CEO and co-founder of Sixth Street, on Goldman's bank loan trading desk. They are three of the smartest and hardest-working people I know, and each has taken tremendous advantage of the shift in leveraged credit origination from traditional banks to investment funds. All three believe that significant growth opportunity exists for the private credit market, as direct lenders continue to take share from traditional banks. This share shift is driven by many factors, including private credit's ability to provide speed and certainty of closing.

These industry veterans foresee increasing demand from institutional investors for private credit driven by three key attributes of the asset class:

1. Senior secured debt has provided excellent risk-adjusted returns through various market cycles.
2. The floating-rate structure of private credit insulates investors from increasing interest rates.
3. Well-structured senior secured debt has historically fared better than most asset classes in a recession.

In addition to replacing some of the BSL market, private credit has also stolen share from the high yield bond market. This new breed of investors is willing to go

[4]Asset values are approximate as of 2023.

deeper into a company's capital structure—that is, take more risk—which has given rise to a unitranche structure, which can fund the entire debt component of an LBO, eliminating the need for high yield bonds in many LBOs. In his book *Private Debt*, investment advisor Steve Nesbitt estimates the size of the private direct loan market at $1.0 trillion as of March 31, 2022, up from $400 billion in 2019. In addition, he believes direct loans will continue to replace BSLs and high yield bonds. In response to demand from institutional investors for direct lending exposure, Nesbitt's firm, Cliffwater, created the first benchmark designed to evaluate the relative performance of US direct lending managers. The Cliffwater Direct Lending Index, or CDLI, is an asset-weighted index of over 8,000 directly originated middle-market loans totaling $223 billion as of March 31, 2022.[viii]

CHAPTER CONCLUSION

The growth in high yield bonds and leveraged loans since their inception in the 1980s is likely to continue, as companies and investors alike have become increasingly comfortable with leveraged capital structures. More recently, the growth of private credit as an asset class has super-charged career opportunities for those trained to analyze corporate credit. The next chapter introduces the concept of the credit cycle, which is characterized by the waxing and waning of company access to and investors' interest in the leveraged credit markets.

NOTES

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viii. For more information on the CDLI, see https://www.cliffwaterdirectlendingindex.com/.