JANUARY 2023

A GIANT IN THE SHADOWS

SUBPRIME CORPORATE DEBT
Americans for Financial Reform Education Fund (AFREF) is a nonpartisan, nonprofit coalition of more than 200 civil rights, community-based, consumer, labor, small business, investor, faith-based, civic groups, and individual experts.

We fight for a fair and just financial system that contributes to shared prosperity for all families and communities. www.ourfinancialsecurity.org
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A GIANT IN THE SHADOWS: SUBPRIME CORPORATE DEBT

INTRODUCTION

Subprime corporate debt, once a niche market to finance extremely speculative industries and hostile corporate takeovers, has in the last two decades become a vast but lightly regulated market with many participants to the tune of at least $5 trillion. The total market for subprime corporate debt is about $5 trillion[1] and is used to finance very speculative or highly indebted companies either in the form of a loan (“leveraged loans”) or non-investment grade bonds (“junk bonds”) and includes corporate loans sold into securitizations called Collateralized Loan Obligations (CLOs) as well as loans extended privately by non-banks that are completely unregulated. Years of growth, evolution, and financial engineering have spawned a complex, highly fragmented, and under-regulated market.

Major players in the US financial system are at the heart of this risky market. Private equity firms – including Blackstone, KKR, Apollo, Carlyle Group, Ares, and many others – rely heavily on subprime corporate debt to finance their leveraged buyouts of companies. After a successful takeover, private equity firms hire investment banks – such as Goldman Sachs, Morgan Stanley, or Bank of America – to sell the underlying debt to hedge funds and insurance companies, or to package them into securitizations known as Collateralized Loan Obligations (CLOs) which are in turn purchased by banks, mutual funds, insurance companies, and hedge funds. Unlike bank lending, leveraged lending is lightly regulated and largely invisible to most market participants and regulators, hence the phrase “shadow banking.” More recently, private equity firms have also begun extending loans themselves, referred to as “direct lending” or “private credit.” No bank or other regulated entity is included in this type of debt financing, making it almost completely invisible to regulators and the public and difficult to definitively size or assess; however, analysts estimate that the direct lending market is larger than $1 trillion.

The rise in high-risk, opaque subprime corporate debt has far-reaching consequences. Non-bank financial institutions such as hedge funds and private equity firms now account for a significant share of financial sector activity, despite enjoying far lighter regulatory and reporting requirements compared to banks and mutual funds – posing a systemic risk to financial stability. Perhaps still more concerning is that over the last few decades, the growth of subprime corporate debt has enabled the widespread transfer of wealth from workers and communities to a small group of financiers. It benefits private equity and hedge funds at the expense of businesses in the real economy, undermining their long-term health and resilience while exacerbating broader income and wealth inequality.
The health and economic crises of the COVID-19 pandemic might have been expected to pause the growth of subprime corporate credit and fix many of the broken lending practices, but the opposite occurred: the Federal Reserve’s unprecedented backstop of corporate credit markets in 2020 had the effect of protecting shadow bankers, saving the subprime corporate debt market from risks that had long been bubbling up. If anything, during the pandemic, the issuance of corporate debt reached new records.

The rapid growth of corporate debt alone is not necessarily bad, but data shows that much of that debt is not necessarily being used productively for capital investments and hiring but rather to finance the takeover of companies by private equity or for shareholders to extract dividends from a company. As interest rates are now moving higher from the all-time lows they reached during the past decade when much of this new debt was added, companies now face additional challenges about how to repay this debt, and whether it means diverting even more money away from long-term investments including in research and development or increased productivity, and from wages, benefits, and workforce development. This paper outlines the risks and urgent policy challenges posed by the growth of subprime corporate debt. The next section provides a brief history and overview of the key debt instruments and financial players involved.

The key risks are then analyzed in detail, followed by a discussion of how COVID-19 exacerbated many of the most pressing issues. The paper closes with policy recommendations; now that subprime corporate markets have grown so large and risky, their regulation and oversight must urgently be modernized. As long as the private equity industry can continue to take over companies with debt that it is not jointly responsible to repay, the consequences of those greater debt burdens will be borne by the employees of companies, the local communities which they inhabit, and the public, which has repeatedly backstopped the financial system in times of crisis.

One key action is long overdue: regulators must demand far more data on this opaque section of the financial system, so as to better understand, monitor, and mitigate the risks it poses to financial stability and the broader health of the economy. Without it, policymakers continue to risk being blindsided. Already in the past two decades non-banks such as hedge funds and private equity firms have directly and indirectly benefitted from public backstops all while not being subject to the same regulatory and reporting requirements as other financial institutions. To address this, new laws and rules need to be put in place to provide greater transparency into subprime corporate debt markets, and fully utilize the existing regulatory apparatus to enforce better lending practices and proactively manage their systemic risks.
BACKGROUND:
THE HISTORY, DEBT INSTRUMENTS, AND KEY PLAYERS
Corporations can borrow from two primary sources: they can sell debt to investors in the form of a bond or they can obtain a loan from a bank. Starting in the 1980s and pioneered by Michael Milken of the investment bank Drexel Burnham, a broader market was created for non-investment grade corporate debt or “junk bonds” – a category of debt previously considered too risky by most investors. In order to spur the market, Milken and Drexel provided guarantees to “corporate raiders” (a group that overlaps with what became today’s private equity firms) on being able to sell junk bonds and provide financing for their hostile takeovers.

Milken and other early adopters of these practices – including Carl Icahn, T. Boone Pickens, Nelson Peltz, and Saul Steinberg – were able to exploit two key pillars of corporate debt to their advantage. The first was that debt issued for a hostile takeover is assumed by the company being acquired, not the acquirer. As a result, debt-financed takeovers posed little financial risk to corporate raiders and their financiers.

The second was that interest payments on debt are deductible from corporate taxes, which often encouraged corporate raiders, their financiers, and even the companies being acquired to pile on debt rather than issue equity. Eventually, corporate raiding became institutionalized through the private equity and hedge fund industries. In 1988, private equity firm KKR set a record with its $25 billion leveraged buyout of RJR Nabisco. Most of the money for the acquisition came from others; KKR managed to borrow $18 billion from banks, such as Drexel Burnham and Merrill Lynch, in the form of leveraged loans and junk bonds. Ultimately, KKR put down only $15 million of its own money to complete the $25 billion buyout.

In the decades since, private equity firms have proliferated globally (see figure 1) and raised trillions of dollars from pension funds, insurance companies, university endowments, and wealthy individuals. The industry has grown exponentially, increasing from less than $250 billion in the early 1990s to $4.7 trillion today. Such growth has led to a greater number of funds seeking to finance the acquisition of companies by issuing corporate debt, often subprime.

**FIGURE 1: GLOBAL PRIVATE EQUITY FIRMS, 1980-2015**

- **North America**
- **Europe**
- **Asia**
- **Rest of world**

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Following the Global Financial Crisis of 2008, the Federal Reserve lowered interest rates to nearly 0 percent to bolster an economic recovery and support maximum employment. However, the millions of homeowners who had received subprime and often predatory mortgages were in no position to take advantage of the low interest rates – many had lost their homes or declared bankruptcy and suffered severe damage to their incomes and credit. As a result, the financial industry lost a large source of what had been a profitable borrower base. Corporations, by contrast, had relatively healthy balance sheets – making them one of the US economy’s few sectors that could take on new debt, either on their own accord or through acquisition.

This increase in corporate debt following the 2008 crisis coincided with the emergence of new unregulated players. Financial activity tends to migrate to where it is most lightly regulated; after Dodd-Frank imposed many more necessary regulations on the banking system, a significant amount of subprime corporate lending activity that had historically been done at those banks instead migrated to non-bank financial institutions (NBFIs). NBFIs such as hedge funds and private equity firms now account for a far greater percentage of financial activity, making the proper regulation and oversight of the industry increasingly urgent. While the total size of NBFIs at $5 trillion in 2013 was less than half of the $13 trillion banking system, today NBFIs at $18 trillion are much closer to the same size as the $23 trillion banking industry.

As with Milken and the original corporate raiders, private equity firms have been able to exploit existing tax code benefits while taking advantage of historically low interest rates. They issued large amounts of corporate debt, aided by a diverse range of investors (including pension funds, insurance companies, and mutual fund managers) seeking higher returns amid the low interest rate environment.
In addition, private equity firms now find that they can immediately sell many of these loans directly to Collateralized Loan Obligations (CLOs) which are issued by a mix of hedge funds, insurance companies, and mutual funds, entities which have grown from under $200 billion pre-2008 to over $1 trillion today. CLOs are a form of securitization resulting from the process of issuers purchasing hundreds of corporate loans across several industries and geographies into a bankruptcy-remote entity.

The issuers of the CLOs then sell different classes of debt on this new entity to many investors who are a mix of banks, mutual funds, insurance companies and hedge funds.

A systematic transfer of risk therefore occurs where any future non-repayment of a loan is not borne by the original lender, but by final CLO investors who frequently are very distant from the original credit decision.

These circumstances have helped the size of the market for riskier and lower-rated subprime corporate debt to double in size from $1.5 trillion in 2008 to over $3 trillion today (see figure 2).

FIGURE 2: DEBT ON HIGHLY INDEBTED U.S. COMPANIES 1997-APRIL 2021
3. Subprime corporate debt has grown exponentially yet is severely under-regulated and not being used productively.

Subprime corporate debt markets are problematic in several ways, and their growth poses a number of broad risks. In general, five issues are most critical:

- Subprime corporate debt is often extractive and rarely used productively
- Securitized corporate debt markets are under-regulated
- The true risks of subprime corporate debt are disguised through earnings manipulation
- The incentives to securitize subprime corporate debt undermine risk management

It is worth considering each of these problems in turn.

i) Subprime corporate debt is often extractive and rarely used productively.

If the debt proceeds from high-risk corporate lending were invested to make capital investments or devoted to research and development – thus leading to increased employment, training, wages and benefits paid by the borrowing companies – it could create higher earnings to service the debt and generate benefits for workers, households, and the broader economy.

Instead, much of this debt is used to acquire more companies, fund share buybacks and dividend payments, and refinance older debt. Such financial engineering benefits private equity and hedge fund owners, as well as Wall Street firms that profit from transaction costs and fees. It can also benefit shareholders (especially large shareholders in the short term) but has significant costs for most households and for long-term US economic stability.

An analysis of the use of proceeds for $4.26 trillion in leveraged loans issued between 2014 and 2019 revealed that only 3 percent were issued for new investments in the companies acquired[9] *(See figure 3.)

The majority of loans (51 percent) were used to refinance existing debt, while 38 percent were used to acquire a company. Another 8 percent were additional loans issued for the company owner to cash out or for share buybacks. Such arrangements are beneficial to the shareholders but do nothing for the productive capacity of the company, while in many cases incurring additional debt it must repay.
As discussed above, debt incurred in leveraged buyouts is owed by the companies being acquired rather than the private equity fund itself. While any benefits of acquisition go to the private equity firm, the responsibility to repay the debt lies on the firm being acquired. The firm’s capacity to invest in its own productivity and workforce is therefore harmed, since its debt capacity is used to finance its acquisition. The average private equity-owned company typically saw employment fall by 4.4 percent in two years after its buyout between 1980 and 2011 and public companies acquired by private equity saw losses of 13 percent during that timeframe.¹⁰

Typically, private equity firms will do whatever is necessary to extract value from their acquisitions. One notorious example is the case of retailer J. Crew, which was purchased in a $3 billion leveraged buyout in 2010 by TPG Capital and Leonard Green & Partners (a deal financed using $1.2 billion in loans and $400 million in bonds, with an additional $1.4 billion in equity). After years of declining sales and challenges servicing the debt burden created by the buyout, the private equity firms in 2016 opened a new shell company in J. Crew’s name in the Cayman Islands and transferred $250 million of intellectual property away from the previously existing company and its existing debtholders. While private equity owners TPG and Leonard Green were paid $787 million in dividends,¹² the retailer has had to layoff thousands of workers as it struggled to service that debt.¹³

When corporate value is siphoned away or mismanaged by private equity or other outside investors, workers often pay the highest costs. Private equity investments in retailers are estimated to have killed off 1.3 million jobs over the past 10 years, largely due to retailers needing to service debt costs rather than investing back into their own businesses to keep up with industry trends.¹⁶ In 2017, for example, Art Van Furniture was purchased by private equity firm Thomas H. Lee. The firm proceeded to engage in a “sale leaseback,” common in retail takeovers, in which Thomas H. Lee sold Art Van’s properties to commercial landlords who then charged Art Van, who previously owned them debt free, to lease them back.¹⁶ When Art Van eventually ran into financial trouble, the sale leaseback left them exposed and reduced their ability to pay interest on debt to other creditors. Art Van eventually declared bankruptcy in March 2020 and 4,500 employees lost their jobs. Many also lost, in the middle of the COVID-19 pandemic, the money they had contributed to their flexible spending health accounts.¹⁷
Private equity firms and hedge funds are lightly monitored, due to their reliance on an exemption they received in 1996 under section 3(c)(7) of the Investment Company Act of 1940. This law requires mutual funds and other investment funds to provide detailed monthly and quarterly reports to their investors as well as abide by several SEC regulations – but unlike banks, which are overseen by the Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC), and Federal Reserve, non-banks due to that long-running exemption are not subject to anywhere close to the same level of reporting nor required to abide by several regulations put in place to protect investors in mutual funds. It is for that reason that non-banks are often referred to as “shadow banking.”

Until the Dodd-Frank Act in 2010 there was almost no transparency into these shadow banks. For the first time, Dodd-Frank gave the Securities and Exchange Commission (SEC) the ability to collect data on the total assets of entities like private equity lenders and hedge funds. However, this information is quite limited compared to what regulated financial institutions provide their regulators. Issuers of most subprime corporate debt are also still not required to furnish investors with a complete set of information and disclosures.

Moreover, the $1.3 trillion in leveraged loans are entirely exempt from securities laws, even when sold in secondary markets or after securitization. As a result, disclosure requirements are diluted and anti-fraud rules are difficult to enforce. This gives investors fewer protections overall and takes negotiating power away from investors and lenders in favor of the debt originators. It also removes a key deterrent against borrowers and intermediaries making material misstatements and omissions regarding a borrower’s financial condition.

There are a few notable features and consequences of this under-regulation:

Under-regulation makes subprime corporate debt markets highly opaque: Every CLO and a majority (60 percent) of high-yield bond offerings are currently not required to file public statements with the SEC as a result of the Rule 144a exemption (see figure 4). This means that investors are not entitled to the same disclosures and protections as they receive with registered securities. Also, as noted, leveraged loans specifically are not subject to securities laws at all.
The lack of adequate disclosures means that investors have less information to assess the details and complexities of a CLO offering. Investors in CLOs, who are indirectly investors in leveraged loan borrowers that make up the CLO’s portfolio do not have access to those issuers’ financials. The problem is further compounded by the fact that the industry standard that is currently used to report corporate earnings is very easily manipulated. See the discussion below on the problems with EBITDA.

Continued lack of oversight of credit rating agencies allows securitization markets to grow uncontrollably:
Credit rating agencies like Moody’s, S&P Global, Fitch, DBRS Morningstar, and Kroll Bond Rating Agency are supposed to offer quality assurance mechanisms for corporate debt and securitized products like CLOs. They are supposed to play key intermediary roles in subprime corporate credit markets, because their ratings often dictate the capital charges paid by buyers of corporate credit or CLOs. Yet these ratings agencies face a well-known and long-standing conflict of interest: they are paid by the issuers and sellers of the securities they rate.

Investors themselves may not pushback on mis-ratings because some of them have capital reserve requirements that depend on the ratings and so artificially high ratings may benefit them by allowing them to reserve less capital while earning the higher returns of an inherently riskier investment. Foreign investors at banks, insurance companies, and pension funds were consequently active investors in the highest rated tranches of Collateralized Debt Obligations (CDOs) leading up to 2008, but eventually led to a quarter of them defaulting and massive investor losses.

Limited reforms to the oversight of credit ratings agencies were put in place in the Dodd-Frank Act. However, these reforms did not fundamentally change the ratings agency business model. While the SEC has fined certain rating agencies for playing too loosely with their ratings criteria in order to win market share for repackaged securitizations (and in particular, the SEC specifically called out the gaming of certain ratings primarily for the benefit of insurance companies.); the consensus is that the incentives and practices that can lead to misleading and inflated bond ratings continue.
Concerns about the sustainability of leveraged lending markets are heightened by the extent to which borrower earnings have been manipulated. Just as subprime mortgage markets before the 2008 crisis were boosted by mischaracterizations of homeowners’ incomes and ability to repay mortgage loans, the corporate leveraged lending market has also seen manipulation of corporate earnings to exaggerate borrowers’ abilities to pay.

A key issue during the marketing and sale of a loan or bond is how a company’s past and future projected earnings are derived. While some have made the case for focusing on accounting figures that strictly track the amount of cash that flows in and out of the company (Free Cash Flow),

companies increasingly use Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA). Ostensibly, EBITDA assesses how much a company makes after stripping out non-recurring expenses such as assets depreciating, paying down debt, or taxes. But EBITDA is not an audited financial figure subject to Generally Accepted Accounting Principles (GAAP), and as such, companies have immense flexibility in defining how it is calculated. Perhaps the most widely used method of manipulation is the use of earnings “add-backs” by private equity owners. Add-backs are essentially projections of future earnings and cost savings that might be realized following a leveraged buyout, which are often inflated. Ongoing current expenses can also be mischaracterized under EBITDA as “one-time.” The net effect is that companies and their financiers can overstate their ability to repay debt.

Such issues with EBITDA accounting – which can range from simple number-fudging to more deeply misleading activities and outright fraud – are not new. They first received attention when former telecom giant WorldCom suddenly declared bankruptcy in 2002 (when the company still had an investment grade rating from the major credit rating agencies), after it was revealed that it had misstated its EBITDA for 2001-2002 by an astounding $3.8 billion. Warren Buffett has said: “People who use EBITDA are either trying to con you or they’re conning themselves.”

In response to these issues, in 2013 banking regulators issued guidance that called on (but did not strictly require) bank intermediaries to refrain from extending corporate loans that would increase a company’s total debt level beyond six times their estimated EBITDA. Since this guidance did not address the manipulation of EBITDA at all, however, it had the opposite effect of borrowers utilizing a greater number of earnings adjustments to artificially stay under the six times threshold.

The prevalence of gaming earnings therefore picked up significantly between 2014 to 2019, when the share of leveraged loans that included some sort of add-back in its EBITDA figure increased from about 18 percent to 40 percent (see figure 5).
Taken at face value, these add-backs allowed leveraged loan borrowers to appear below the “six times EBITDA” level put out by regulators. But after stripping out these earnings adjustments, approximately 65 percent of leveraged loans in 2019 exceeded the regulators’ 6x threshold, with 45 percent exceeding even 7x EBITDA, according to analysis by UBS Securities (see figure 6).

By comparison, at the peak of the previous credit boom in 2007, 15 percent of loans had leverage greater than 6x EBITDA and only 10 percent had higher than 7x. The seriousness of this problem is underscored by the fact that nearly 90% of the time earnings and cost savings projections claimed to investors at the time of a leveraged buyout fail to materialize two years later. On average, the actual earnings ended up being 38 percent lower compared to the projected earnings a year earlier while the loan was being marketed.
The skewed incentives around earnings manipulation highlights a broader risk, namely that subprime corporate debt is being originated with the awareness that it can readily be bundled and sold into large securitizations in a process which includes little pushback on widespread manipulation. The issuers of these securitizations are in many cases primarily interested in acquiring more leveraged loans in order to issue more securitizations and collect more fees. Worse, in the specific case of leveraged loans, the lack of any securities law protection allows for the underwriting banks and issuers to intentionally favor selling their loans during the initial sale to investors who specifically are known to be less likely to contest such earnings revisions.

iv) The incentives to securitize subprime corporate debt undermines risk management

In the late 1990s, CLOs began to expand the buyer pool for corporate debt. No longer were subprime corporate issuers limited to selling to a small set of buyers; by bundling hundreds of loans and issuing a new set of securities with varying levels of risk and return, the pool of potential buyers was substantially increased. However, this new set of buyers who are one additional step removed from the original underwriting process, now assume the risks if the original loans by the original lenders was poorly underwritten.

CLOs are divided into different classes based on risk and return. Proceeds from the portfolio of securities are distributed in a “waterfall” capital structure, with “senior” down to “mezzanine” classes followed by the equity level.

CLO investors in the senior-most classes are the most insulated from default but receive a lower interest rate as a result. Credit rating agencies usually give senior class CLO debt a “triple A” investment grade rating (similar to U.S. Treasuries) and it is primarily purchased in large quantities by highly regulated financial institutions, including banks, insurance companies, and pension funds. The “mezzanine” classes of CLO debt, typically rated from AA to BB (similar to high-quality corporate bonds), feature somewhat higher risks of default as well as higher interest rates.

Buyers of mezzanine CLO debt are a mix of insurance companies, mutual fund investors, and hedge funds. At the very bottom of the capital structure, investors in the equity class are exposed to the highest levels of risk; in the event of default, they are the first to observe losses. The increased risk is rewarded with higher interest rates, often in the range of 13-17 percent.
Following the 2008 financial crisis, some CLO investors (namely insurance companies) dramatically increased their purchases of riskier CLO debt in an attempt to offset portfolio losses amid the low interest rate environment. The increased demand for CLOs resulted in more CLOs being launched, which in turn created increased demand for more leveraged loans.

As a result, in the current regulatory environment, CLO issuers are incentivized to issue as many CLOs as possible – as their fees increase based on the amount of total assets outstanding, and more assets enable more leveraged loans. CLOs are now the largest and most important buyers of new leveraged loans, comprising approximately 60 to 70 percent of the leveraged loan market.

Two related features of the incentives in the securitization process are worth highlighting centered around the originate-to-distribute model:

The originate-to-distribute model of securitization prioritizes volume at the expense of underwriting quality: The advent of CLOs appeared to offer a win-win diversified investment vehicle, expanding the pool of buyers for debt from thousands of non-investment grade companies while creating investment grade-rated securities that offered higher yields than similarly rated “ultra-safe” securities like U.S. Treasuries. However, CLOs are not immune to the problematic incentives generated by all forms of securitization – namely the “originate-to-distribute” model, in which banks and the issuers of securitizations collect fees for creating and selling the securities but exit quickly and bear none of the underlying risk. And the problem is of course exacerbated by the lack of transparency or oversight in these markets. Under these circumstances, CLO originators can benefit by concealing poor-quality loans from outside buyers.

The subprime mortgage market before the 2008 financial crisis is the most well-known precedent highlighting the dangers of the incentives in the originate-to-distribute model. Financial engineering created a range of instruments which collectively multiplied the risk exposures of institutions like Lehman Brothers, Bear Stearns, and AIG up to 4 to 6 times the actual size of home loan market. The result was a cascade of defaults, trillions of dollars in losses, and multiple bank failures in 2008 and 2009, alongside millions of foreclosures – particularly concentrated among homeowners of color who had been targeted for abusive loans - as unrealistic and often predatory home loans went into default.

The Dodd-Frank Act sought to address a number of the structural issues that contributed to the rise of CMOs and CDOs across the banking system – including through more stringent underwriting standards for home loans, regulated and overseen by the Consumer Financial Protection Bureau. But unfortunately, the lessons learned from the mortgage market’s collapse have not been applied to the subprime corporate debt market, despite its increasingly similar originate-to-distribute dynamics. A few comprehensive sets of rules and regulations around corporate debt and corporate debt packaged into CLOs have been proposed in Congress, but none have yet gained traction.
Originate-to-distribute scatters lenders and enables private equity misdeeds. Investor protections and transparent information about risk typically help credit markets grow responsibly and efficiently. However, in the opaque and under-regulated leveraged lending market, investors cannot enforce good underwriting standards or even adequately measure the risks of their investments.

This is especially true with CLOs. As more and more issuers seek to securitize (and collect fees from) a limited and slowing pool of underlying corporate debt, more are willing to accept fewer and fewer protections. In booming markets, many issuers can even blacklist investors who demand strong quality control – all of which echoes the dynamics of the late subprime mortgage boom.

Reduced investor protections have other consequences. The growing, scattered, and sometimes unsophisticated investor base for corporate debt has allowed private equity firms and hedge funds to siphon value from both investors and workers during debt restructuring processes. In the case of J. Crew and Art Van mentioned above, for example, much of the debt backing the takeover by private equity firms was sold off to a wide group of other investors, some of whom were not familiar with the process of negotiating language in covenants – which dictate, for example, the amount of debt a borrower can take on and the actions that a private equity owner is conditionally allowed to take, such as paying itself a dividend.

A combination of poor initial underwriting combined with greater amounts of value being siphoned from a scattered group of investors has led investors on high-yield bonds to recover less of their initial investment upon bankruptcy. For every initial $1 invested in 2021, investors in leveraged loans and high-yield bonds received back only 45 cents on average, down from the 59 cents average in 2008-2009 and the long-term historical average of 50 cents (see figure 8).
During the post-2008 period, many institutional investors, especially insurance companies, significantly expanded their holdings of subprime corporate debt and CLOs. As interest rates reached historically low levels, first in the post-2008 period then again in 2020, these investors – who traditionally invested in safe assets like government bonds and higher-quality corporate debt – sought to maintain their standard rates of return by shifting their portfolio holdings towards riskier, higher-yielding assets (see figure 9).

Insurance companies also faced rising liabilities and increased losses during this period, including those stemming from the increasingly damaging effects of climate change as evident by the nearly $100 billion in insurance payouts in 2017 from hurricanes Harvey, Irma, and Maria as well as the northern California wildfires (see figure 10). To cover these liabilities, insurance companies increasingly shifted their investment portfolios towards corporate debt of higher and higher risk profiles.

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**Figure 9: Portfolio Composition to Earn 7.5%. 1995, 2005, 2015**

**Rolling the Dice**

Investors grappling with lower interest rates have to take bigger risks if they want to equal returns of two decades ago.

**Estimates of what investors needed to earn 7.5%**

<table>
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<th>Year</th>
<th>Expected return</th>
<th>Bonds</th>
<th>U.S. Large Cap</th>
<th>U.S. Small Cap</th>
<th>Non U.S. Equity</th>
<th>Real Estate</th>
<th>Private Equity</th>
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<td>1995</td>
<td>7.5%</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>2005</td>
<td>7.5%</td>
<td>20%</td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>7.5%</td>
<td>5%</td>
<td>14%</td>
<td>22%</td>
<td>13%</td>
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<td></td>
</tr>
</tbody>
</table>

*Likely amount by which returns could vary*

Source: Callan Associates

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According to analysis by the Federal Reserve Bank of New York, insurance company holdings of corporate bonds increased from $1.1 trillion to $1.8 trillion between 2009 and 2019. During the same period, insurance company holdings of CLOs grew from $13 billion to $125 billion, increasingly concentrated in lower-rated mezzanine debt (which climbed from 5 percent to 44 percent over the period). In general, insurance companies’ exposure to non-investment grade-rated debt has grown dramatically over the last two decades (see figure 11).

The growing insurance company purchases helped the leveraged loans market double in size from $600 billion to $1.2 trillion from 2009 to 2021. During the same period, outstanding CLOs (the largest leveraged loan buyers) also more than doubled, from $300 billion to over $700 billion.
These trends are eroding quality control and leading to other perversions in the market. An unholy alliance has been forming in which private equity firms acquire insurance companies, then use them to purchase more of the corporate debt issued by private equity firms or packaged into CLOs. In recent years, Blackstone acquired Allstate Life Insurance Company, Apollo Global Management acquired Athene, and KKR combined with Global Atlantic.

Insurers now face the twin risks of rising liabilities and rapidly-growing exposure to increasingly higher-risk corporate debt – leaving them in a precarious financial situation should a recession arrive which market participants and economists alike are increasingly warning about in 2023. We have seen this danger before: when Drexel Burnham filed for bankruptcy in 1990, effectively shutting down the junk bond market, several insurance companies – amounting to 30 percent of junk bond purchasers – were seized by state regulators due to insolvency.
Leading into 2020, growing levels of corporate indebtedness and the risks stemming from securitization of corporate debt were already creating concern among global financial and economic leaders. The Bank for International Settlements, for example, warned back in 2018 that the combination of growth in debt to highly-indebted corporate borrowers and rising interest rates (years before the current round of increases) could lead such borrowers to struggle to service their debt payments, in turn leading to losses for the debt investors.57

In fact, many of the leveraged loans between 2012 and 2019 were scheduled to come due for repayment in the mid-2020s, leading Moody’s to predict in January 2020 – just before the magnitude of the COVID-19 crisis began to become clear – that widespread corporate defaults would occur throughout the decade.58

A few months later, however, as US policymakers sought to shore up the economy amid COVID-19 and the resulting economic crisis, their unprecedented decision to backstop corporate credit markets did more than forestall a wave of defaults; it unleashed a record wave of corporate borrowing.

Two features in the resulting chain of events are worth noting. First, subprime corporate debt markets expanded even further as a result of the Federal Reserve’s unprecedented support for the broader corporate debt markets, exacerbating their risks and challenges. Second, while the worst-case scenario did not materialize in 2020 or 2021, the risks of it materializing in the future have only heightened.

(j) Public subsidies to corporate debt markets during the crisis

Before COVID-19, the heightened risks, under-regulation, and extreme leverage of the booming corporate debt markets raised a number of questions: How would leveraged loans and their securitizations withstand an economic downturn? In the event of a full-blown crisis, would thousands of corporations default, sparking a cascade of bank and insurance company failures – much like the collapse of the mortgage industry in 2008? Would the Federal Reserve intervene again to bail out highly indebted corporations, their lenders, and CLO investors?

All these fears began to materialize in March 2020, as financial markets seized up and economic activity ground to a halt, short-circuiting corporate revenues and their ability to service their debts. Many corporate borrowers were caught ill-prepared for a sudden disruption to their debt-financed businesses.

As a result, corporations had to draw on their emergency revolving lines of credit with banks (similar to overdraft lines) to the tune of $162 billion by the end of March (see figure 12).
But a financial and economic crisis on the scale of 2008 was not ultimately triggered. The Federal Reserve – enabled by the passage of the CARES Act in Congress – took the extraordinary step of directly purchasing corporate debt. While the Fed actually purchased only $14 billion, their public willingness to stand behind the corporate debt market to the tune of $750 billion had an electrifying effect; as soon as the programs were announced, corporate debt issuance began to soar.

While COVID-19 created economic pain for millions of Americans, including historic levels of unemployment, the effects in financial markets were relatively minor and temporary. As former Federal Reserve Board Governor Jeremy Stein remarked in June 2021:

“[I]f you’re an industry advocate, you might be tempted to say... it wasn’t all that bad. It really wasn’t all that bad because the Fed saved you.” (emphasis added)

It’s perhaps no surprise, then, that corporate borrowers, emboldened by the unprecedent backstop on the corporate credit markets unleashed the greatest years of borrowing on record (see figure 13).
As was the case in the period leading up to the pandemic, however, most of the pandemic-era corporate debt was not used for capital investments or hiring workers but to refinance existing debt, take on additional debt for acquisitions, or worst of all, to take on more debt in order to pay dividends to the private equity owners (referred to as dividend recapitalizations or “dividend recaps”).

According to analysis by J.P. Morgan, 65 percent of junk bond issuance in 2020 were used to refinance existing debt, thus kicking the can down the road without reducing overall debt burdens. (Even after refinancings, close to $1.2 trillion in non-investment grade corporate debt is due over the next five years.) Another 28 percent was additional capital raised as a safety buffer from the economic uncertainty. Meanwhile, 8 percent was opportunistically raised to acquire other companies.

Stunningly a record $88 billion in debt was issued in 2021 for dividend recaps – more than in 2019 and 2020 combined (see figure 14). In the midst of the COVID-19 health and economic crises, private equity firms incurred more debt on a number of their companies only to have those funds get taken out of the company. DuPage Medical Group (now called Duly Health and Care), which operates a network of 750 doctors in the Chicago area, received $80 million in grants and loans from taxpayers in 2020 theoretically to weather COVID era challenges; in 2021 it distributed $209 million in dividends to its private equity owner Ares Management. The practice alarmed credit rating agencies; Moody’s wrote that it “leave[s] DuPage more weakly positioned to absorb any unexpected operating setback.”

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*Figure 13: Gross Annual US CLO Issuance, 2008-2021*
(ii) Greater debt burdens raise risks of amplifying economic downturns

The sharp and sudden selloff in leveraged loans underlying CLO portfolios in March 2020 created significant losses for many investors, especially first-loss equity investors – who briefly would have faced 100 percent losses (as measured by Net Asset Value) if they had been liquidated then. While the CARES Act and the Fed’s unprecedented backstopping of corporate credit markets helped corporate credit markets bounce back, the near-crisis provides a stressful preview of what a worst-case scenario could look like.

Indeed, the worst-case scenario would likely be far more consequential. The COVID-19 pandemic was an isolated and exogenous shock; more concerning is a prolonged period of underlying corporate defaults and ratings downgrades, which would ripple through the financial system. Any prolonged pause in the creation of new CLOs would also negatively affect demand for leveraged loans, given that CLOs account for over 60 percent of leveraged loan purchases. This would adversely affect the already highly-indebted class of corporate borrowers by significantly raising their financing costs and/or preventing some from repaying their existing debt. Treasury Secretary Janet Yellen said in 2018 (before being appointed to her current role in 2021): “If we have a downturn in the economy there are a lot of firms that will go bankrupt because of this [subprime corporate] debt. It would probably worsen a downturn.”

As interest rates rise in 2022, many companies that significantly increased their debt burdens may be put to the test. As Anne Walsh, the Chief Investment Officer of corporate debt investor Guggenheim Partners, recently commented: “There’s quite a bit of leverage throughout the credit markets... the cost of capital is also going to be rising... and the cost of leverage within the system then may be unsustainable.”
In recent years, and accelerating during the pandemic, an even more opaque form of highly leveraged corporate debt has grown rapidly, with private equity firms lending directly to companies without a bank involved (referred to as “direct lending” or “private credit”). Relatedly, many private equity firms are forming separate divisions that can buy debt from the very companies they acquire through leveraged buyouts. Unlike the junk bond or leveraged loan markets, though, no regulated entities (e.g. banks) are involved in the origination process – leaving the exact size and composition of the direct lending market unknown. Market participants estimate its size to be around $1 trillion (see figure 15).
6. CONCLUSION & POLICY RECOMMENDATIONS

The growth of subprime corporate debt markets raises fundamental questions for policymakers. How much economic activity should be financed by creditors? Should economic policy incentivize companies to issue more and more debt? While leveraged lending could serve a purpose – providing financing that would otherwise be scantly available to heavily indebted and speculative companies – the recent surge is primarily being used to finance leveraged buyouts, acquisitions, share buybacks, and dividend payments. These trends and the broader financialization of the economy threaten to reduce competition, concentrate market power among a few firms, and increase the risk of predatory business practices that are bad for consumers, bad for the environment, and bad for workers – ultimately reducing job quality, worsening inequality, and hurting economic dynamism and competitiveness. Now, as interest rates rise after being at record-low levels and concerns about an economic slowdown increase, US regulators and legislators urgently need to take steps to properly monitor and regulate these markets.

Various administrative, regulatory and legislative steps can be taken to bring oversight to subprime corporate debt markets, reduce the systemic risks they pose, decrease misaligned incentives that drive corporate concentration and wealth extraction, and create a safer and more transparent financial system. These efforts are long overdue: policymakers missed numerous opportunities in the 1990s and after the 2008 crisis to increase oversight and regulate the shadow banking industry. Moreover, the Fed’s pandemic response in 2020 showed that subprime corporate debt markets have grown so large that financial policymakers seem to accept the necessity of bailing them out in times of crisis. The current moment presents a critical and urgent opportunity to address these issues before the next financial crisis.

With such rapid growth, even market participants have raised cautions about direct lending – Carlyle Group Head of Global Credit Mark Jenkins, for example, observed that many of the new non-bank participants in the practice are operating in an “undisciplined” way. As a result, more small and medium-sized US companies are being taken over by private equity firms who are financing their acquisitions directly using highly risky loans, all of which is invisible to regulators.

State Street Chief Executive Officer Ron O’Hanley also pointed out that while Dodd-Frank addressed a number of problems with the risk bubbling up in the banking system that led to the 2008 financial crisis, regulators have little to no insight into half of all of the loans that are being originated outside the banking system now in private credit. “We’ve taken care of the banks… but is it being re-aggregated elsewhere where it’s going to cause, yet again, a systemic problem?”

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The recommendations below fall into four main categories:

(i) Treasury should focus on these crucial financial stability issues and use all of its tools to address them

The Treasury should focus on identifying and responding to the risks posed by these markets, including by moving swiftly to use policy tools created by Dodd-Frank that have not been fully utilized.

1. Rescind the 2019 SIFI designation guidance and move quickly to identify and designate non-banks as systemically important

Title I of Dodd-Frank established FSOC, bringing together the financial regulatory agencies to identify and coordinate responses to emerging threats to financial stability. FSOC was also given statutory authority to designate non-banks as SIFIs, which would give the Federal Reserve direct oversight over these unsupervised firms. However, in 2019 then Treasury Secretary Mnuchin significantly hampered FSOC’s ability to designate non-banks as SIFIs by issuing guidance prioritizing designating financial activities rather than entities.75

Treasury should rescind its 2019 guidance regarding non-bank SIFI designation and to act swiftly to designate non-banks that pose systemic risks.

2. Treasury should task the Office of Financial Research to gather the information needed to monitor subprime corporate credit

The Office of Financial Research (OFR) should be tasked to collect and analyze all data on corporate lending from the SEC, Commodity Futures and Trading Commission (CFTC), and state regulatory agencies. Even for debts issued outside the banking system, banks are often involved as intermediaries or administrative agents, and Dodd-Frank gave OFR subpoena power to collect critical information such as the investors in corporate and securitized debt from intermediary banks.

The OFR should utilize its subpoena power to collect information such as the investors in subprime corporate debt that is underwritten by banks. Treasury should also establish clear guidelines as to how regulatory agencies can access information submitted by other regulatory agencies to OFR or gathered through its subpoenas to prevent any data collection or analysis gaps so that FSOC and regulators can better understand how risk is distributed throughout the financial system.
(ii) Collect the data needed to provide greater transparency into subprime corporate debt markets

Policymakers and regulators do not have sufficient information about the holdings of non-banks or the subprime corporate credit markets. Given how large and important to the financial system these markets have become, regulators should act swiftly to increase and improve data collection.

3. Collect critical data on corporate lending by non-banks

A significant portion of leveraged lending since the 2008 crisis has been conducted by opaque and lightly regulated non-banks. While the OCC and Federal Reserve’s bank examiners issue quarterly call reports on banks’ corporate loan books, there is no such standard for non-bank lending. But non-bank losses can quickly spread and magnify through the financial system, including to Systemically Important Financial Institutions (SIFIs).

The SEC should amend Regulation D which allows companies to privately sell securities without registering them to the SEC.

The SEC should finalize its proposals requiring hedge funds and private equity firms to report more detailed data on all their holdings and risk exposure via Form PF. This would in turn make it possible to share the data with the Financial Stability Oversight Council (FSOC), the financial regulatory coordinating body.

4. Modernize financial disclosures across bonds and corporate loans

High-yield bonds, leveraged loans, direct loans/private credit, and CLOs are key sources of corporate lending but are subject to completely different regulatory and disclosure regimes. While 60 percent of the $1 trillion non-investment grade bond market is SEC Registered, little information is available to the public on the remaining $400 billion – or the $1 trillion in outstanding CLOs – due to SEC exemptions under Rules 144A and 506.

The SEC should amend Rule 144A and Rule 506 so that that regulators and investors have uniform access to essential financial data, especially related to risk concentration.

(iii) Require better lending practices and close regulatory arbitrage opportunities

Lightly regulated subprime corporate debt and securitized markets incentivize short-term profits while transferring most risks to parties not privy to the underwriting process. Policymakers must take steps to require better underwriting processes.
Banking regulators failed in 2013 to limit how much debt a bank could underwrite for already highly-indebted companies through the Leveraged Lending Guidance. The 6.0x debt/EBITDA (also more simply referred to as leverage) limit was consistently evaded by subprime corporate debt issuers (and the private equity industry in particular) because of the widespread artificial boosts to EBITDA which consequently brought leverage levels below the 6.0x limit. The leverage limits to debt arranged by banks may have also encouraged more underwriting to migrate instead to the far more opaque and less regulated non-bank direct lending market.

After much industry pressure, the Trump Administration ended up scrapping the Leveraged Lending Guidance entirely in 2017. Yet, even without the limits, widespread manipulation of EBITDA continues today.

The SEC should more rigorously enforce anti-fraud provisions, such as Section 17(a)(2) under the Securities Act of 1933, to address flagrant and persistently misleading earnings projections in subprime corporate debt markets, just as they have done as has for public companies.” For any future reintroduction of a Leveraged Lending Guidance to be effective, it must be based on figures that cannot be manipulated without consequence and also apply to non-bank lenders.

Even as the riskiest corporate debt markets have now ballooned to over $5 trillion in size, investor disclosure and registration exemptions under Rule 506 and Rule 144A, and which were passed decades earlier when these markets were far smaller, should only apply to the smallest borrowers in the market – i.e. those issuing under $200 million.

The SEC should amend Rule 506 under Regulation D and Rule 144A to limit corporate issuers from relying on such reporting exemptions to debt under $200 million.
7. Restrict brokers from quoting debt securities without conducting proper due diligence and sharing issuer information with the public

Investment banks and brokers continue to work with corporate issuers who choose to provide minimal information to their investors by relying on reporting exemptions under Rule 144A. In 2020, the SEC finalized amendments to Rule 15c2-11 that would restrict brokers from providing prices on debt securities that rely on Rule 144A – these rules are scheduled to go into effect starting on January 4, 2025 after being delayed by two years. The new rules will better protect debt investors by ensuring that a greater onus is placed on the brokers to do their homework on the issuer before transacting in the issuer’s debt.

In addition to the prior recommendation limiting the number of issuers from relying on the exemptions under Rule 144A, the SEC should make the necessary preparation to finally implement Rule 15c2-11, prohibiting brokers from providing prices on debt securities unless they properly conduct due diligence and provide the public with information about the issuer on its scheduled date on January 4, 2025.

The standard setter for the US insurance industry, the National Association of Insurance Commissioners (NAIC), finds that ratings arbitrage on CLOs can provide an average capital charge benefit of over 6 percent to insurance companies as compared to investing in the underlying leveraged loan, when ultimately the underlying holdings are fundamentally similar. Given the significant role that insurance companies play in leveraged lending and the extent of their exposure to subprime corporate debt markets, the NAIC should treat insurance company holdings of CLOs more similarly to the way it treats holdings of the underlying leveraged loans.

The NAIC should require insurance companies to hold more capital against their CLOs.

8. End favorable capital treatment for securitized subprime corporate debt
9. Re-impose legal liability on credit rating agencies

Credit rating agencies are one of the only participants in the financial system who are exempt from any legal liability from their actions even though trillions of dollars of financial assets are sensitive to their ratings. This is particularly problematic because conflicts of interest which can lead to mis-ratings, remain rampant.

The SEC repealed Rule 436(g) as a part of implementing Dodd-Frank. This would have required credit ratings to be included in offering documents and prospectuses and opened the credit rating agencies to legal liability under section 11 of the Securities Act of 1933 for material misstatements or omissions on their ratings. But after receiving doomsday warnings from rating agencies and from corporate issuers over fears of being unable to raise new capital, the SEC in 2010 issued a no-action letter stating the SEC would not take enforcement action against credit rating agencies that refused to include their ratings on prospectuses.

The SEC should reverse their no action letter, so that credit rating agencies are liable as experts for the ratings on offering documents. This will dramatically improve the incentives for credit rating agencies to provide accurate ratings.

(iv) End exemptions that allow non-bank financial institutions to escape from needed regulatory oversight.

Non-bank financial institutions such as private equity firms and hedge funds have grown uncontrollably due to exemptions that allow them to operate on their own set of rules and with little oversight. The exemptions were established in the 1980s and 1990s, when corporate debt markets were a fraction of their current size. Given non-banks’ impact on today’s financial system and repeated bailouts during crises, the exemptions no longer make sense. The private equity industry has unfairly benefitted from the arrangement where debt acquired for a leverage buyout becomes the responsibility of the company being acquired. Moreover, there is little reason why the $1.3 trillion leveraged loan market should be exempt from securities laws altogether.
10. End exemptions for private funds under the Investment Company Act

Hedge funds and private equity firms have benefited tremendously from the National Securities Markets Improvement Act of 1996, which amended section 3(c)(7) of the Investment Company Act of 1940 to exempt them as "private funds" rather than "investment companies" like mutual funds and many other types of funds. While non-banks were small players at the time, today they account for $18 trillion in gross assets making them much closer in size to the entire $23 trillion US banking system. In addition, private funds have repeatedly been rescued by the public/government action, as was the case for example with Long Term Capital Management in 1999 and highly leveraged hedge fund trades on US Treasury bonds that went awry in March 2020.

Congress should amend the Investment Company Act of 1940 to end non-bank exemptions under section 3(c)(7), subjecting these firms to more direct SEC supervision.

11. End unfair practices in private equity by passing the Stop Wall Street Looting Act

Private equity funds have benefitted unfairly for decades from a system that allows them and their partners to acquire firms using debt that the acquired company bears responsibility to repay. This "heads I win, tails you lose" system means that private equity shifts all risk onto their acquired firms, creating incentives for excessive debt loading and minimal productive investments. Among other things, the Stop Wall Street Looting Act, introduced by Senator Elizabeth Warren and co-sponsored by Senators Sherrod Brown, Bernie Sanders, Tammy Baldwin, and Jeff Merkley seeks to end these pernicious incentives by requiring joint responsibility for debt used in a buyout and limiting when new debt can be issued for dividends to private equity firms before paying other creditors.

Congress should pass the Stop Wall Street Looting Act to reign in private equity abuses.
12. Amend securities laws to encompass leveraged lending and afford investors adequate disclosures and protections.

Despite their massive size and growth, the $1.3 trillion leveraged loan market and $1 trillion direct lending market are not subject to securities laws – meaning their hundreds of institutional investors do not have basic investor protections from insider trading, self-dealing, and fraud, including false earnings projections. In May 2020, the Southern District Court of New York affirmed this view in Kirschner v. JP Morgan Chase Bank, ruling against a loan investor in the medical company Millennium Labs that came under investigation for health care fraud before filing for bankruptcy.26

Congress should amend the Securities Act of 1933 to treat corporate loans as securities which would subject issuers and intermediary banks to anti-fraud rules and make it illegal and punishable in court to provide materially false statements or inflated earnings figures.

13. Prevent large subprime corporate debt issuers from avoiding reporting requirements by being taken or staying private.

Large companies should not be able to simply go private to dodge crucial reporting requirements. Recent proposed legislation seeks to prevent this. The Private Markets Transparency and Accountability Act introduced by Senators Jack Reed, Elizabeth Warren, and Catherine Cortez Masto in 2022 would add disclosure requirements for private companies valued over $700 million (the threshold at which a company qualifies as a large accelerated filer under SEC Rule 12b-2) or has greater than $5 billion in annual revenues and 5,000 total employees. Passage of this legislation would also bring more transparency into large, private equity owned companies that issue subprime corporate debt.

Congress should pass legislation such as the Private Markets Transparency and Accountability Act requiring large companies to file the same disclosures and financial statements as public companies.
14. Pass legislation giving the Federal Reserve oversight of large insurance companies for purposes of systemic risk.

Insurance companies are increasingly playing a major role in helping to finance subprime corporate lending, yet currently there is no federal agency that regulates the largest, systemically risky insurance enterprises, both because the states traditionally have dominated insurance regulation and the Trump Administration, in the 2019 guidance on non-bank SIFI designation, made it highly difficult to designate systemically important insurers as non-bank SIFIs under the Dodd-Frank Act.

Congress should pass new legislation that would subject all insurance companies over a certain asset size in the U.S. to direct oversight and supervision by the Board of Governors of the Federal Reserve System for purposes of systemic risk.
Collateralized Loan Obligations (CLOs):
Packaged securitizations of corporate loans (similar to CDOs below). A CLO will own anywhere from 100-200 different corporate loans. The CLO issues tranches of varying levels of seniority from senior, mezzanine, and first-loss equity. CLOs are some of the largest buyers of leveraged loans, ranging anywhere from 60-70 percent of the leveraged loan market.

Collateralized Debt Obligations (CDOs):
Packaged securitizations of residential mortgage bonds or junk bonds (similar to CLOs above). Were predominantly issued leading up to the Global Financial Crisis of 2008. Investment banks such as Goldman Sachs, Morgan Stanley, Citigroup, Merrill Lynch and others would package thousands of poorly or fraudulently written home loans into mortgage bonds, then package and sell the mezzanine classes again as structured finance vehicles. Ultimately the majority of CDOs lost money for their investors and are more rarely issued today compared to CLOs.

Direct lending:
Corporate loans extended directly by non-banks (e.g. private equity firms) without a bank intermediating the transaction in any way (as occurs in traditional corporate lending). Also referred to as private credit.

Dividend recapitalization:
Additional debt issued by a company to pay a one-time dividend to its shareholders (often private equity holders). Such debt deals are criticized because the company assumes additional debt while not receiving anything in return. “Dividend recaps” for short.

Insurance company:
Financial institution that issues policies protecting policyholders from a loss of life, property, or other valuable asset. Insurance companies pool the money collected from those policies into a General Account that invests in financial assets in order to generate a sufficient return to manage future claims to policyholders.
Junk bonds:
Securities issued by a company that has a high debt load relative to its annual earnings and has received a credit rating on its debt below BBB- or Baa3 by one of the major credit rating agencies. Interchangeably referred to as high-yield bonds or non-investment grade corporate debt.

Leverage:
Measure of how indebted a borrower is by comparing its total debt to its equity.

Leveraged buyout:
A private equity firm’s acquisition of a company using debt (hence leveraged) to finance the purchase. Debt is sold through a mix of junk bonds or leveraged loans.

Leveraged loan:
A corporate loan made by a bank or a group of banks to a subprime corporate borrower. The loan is either held by the bank or sold to a mix of hedge funds, mutual funds, insurance companies, and/or CLOs.

Leveraged lending:
Used interchangeably with subprime corporate debt where credit is being extended to corporate borrowers that have a high debt load relative to their annual earnings. Can either come in the form of loans extended by banks or by non-banks (see direct lending) or through issuing bonds.

Originate-to-distribute:
Criticized practice of a lender originating assets with little regard to proper underwriting and quality control because the lender does not bear the ultimate risk and is instead offloading the risk to a ready buyer.

Private credit:
See direct lending.
Non-banks that raise money from pension funds, insurance companies, wealthy individuals, non-profits, and endowments to purchase and take over companies. Also refers broadly to the extension of credit by private equity funds to corporations (see shadow banking).

**Securitization:**
The practice of investment banks pooling debt-linked assets (e.g. consumer loans, corporate loans, mortgages) into a portfolio that is then sold. Securities are divided into “tranches” according to risk profile (from senior-class with the least risk, mezzanine, and equity or first-loss with the highest risk), with different tranches sold to investors.

**Shadow banking:**
The non-bank extension of credit to subprime corporations. Shadow banks are non-banks (e.g. private equity firms, hedge funds, credit investment vehicles) that extend and purchase the debt of companies beyond the view of regulators.
The $5 trillion figure also includes two sub-types: non-bank direct lending and collateralized loan obligations.


2. Prequin.

3. Preqin.


19. For banks these are bank capital charges, for insurance companies this is in accordance to capital standards set by the National Association of Insurance Commissioners (NAIC).

20. In the leadup to the 2008 financial crisis, rating agencies rated trillions of dollars in deeply flawed subprime mortgage-backed securities as safe investment grade products. In its report on the causes of the crisis, the Financial Crisis Inquiry Commission called rating agencies “key enablers of the financial meltdown” and stated that the crisis “could not have happened without them.” (see FCIC report)


https://jsf.pm-research.com/content/27/3/47


https://www.privateequityinternational.com/ebitda-on-steroids/

https://www.wsj.com/articles/SB1025743931610221560


https://www.bauer.uh.edu/yerramilli/EBITDA_Addbacks.pdf


19. For banks these are bank capital charges, for insurance companies this is in accordance to capital standards set by the National Association of Insurance Commissioners (NAIC).

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https://jsf.pm-research.com/content/27/3/47


https://www.privateequityinternational.com/ebitda-on-steroids/

https://www.wsj.com/articles/SB1025743931610221560


https://www.bauer.uh.edu/yerramilli/EBITDA_Addbacks.pdf
The players involved in creating mortgage securitizations – similar players that create CLOs – all received fees when securitizations were created and sold to outside investors, but they rarely stayed invested or exposed thereafter. The fee-based originate-to-distribute model created incentives for these insiders to make and bundle bad loans based on unrealistic repayment assumptions, hiding the poor loan quality with “safe” credit ratings. Even once investment banks began struggling to sell the higher-risk classes of CMO securitizations, they securitized again by bundling the unsold pieces into CDOs. To collect more fees and capture even more value from the booming real estate market, banks and insurers increasingly created and sold mortgage-related derivatives, or financial contracts whose value is dependent on an underlying asset. These included credit default swaps, where investors swap or offset their credit risk with other investors, paying regular fees similar to insurance premiums. These derivatives were in turn securitized and sold to generate additional fees.
ENDNOTES


49. Id.


53. Id.


69. Fleming, Sam. Financial Times. Janet Yellen sounds alarm over plunging loan standards. Oct 25, 2018. [https://www.ft.com/content/04352e76-d792-11e8-a854-33d6f82e62f8](https://www.ft.com/content/04352e76-d792-11e8-a854-33d6f82e62f8)


80. Partnoy, Frank. UC San Diego School of Law. What’s (Still) Wrong with Credit Ratings. 2017. [https://digitalcommons.law.uw.edu/wlr/vol92/iss3/6/](https://digitalcommons.law.uw.edu/wlr/vol92/iss3/6/)


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