INVESTCORP

INSIGHTS

JUNE // 2018

Opportunities in Credit

John Fraser
Head, Investcorp Credit Management US

John Fraser joined Investcorp Credit Management US LLC in February 2017 as a result of Investcorp's acquisition of 3i Debt Management US ("3i DM US"). He was the Co-Founder, Chief Investment Officer, and Managing Partner of Fraser Sullivan Investment Management ("FSIM"), the predecessor to 3i DM US, and served in such capacity since FSIM's founding in 2005. Prior to founding FSIM, Mr. Fraser was a Managing Director and Partner with Angelo, Gordon & Co from 1997 to 2005. He has over 25 years' experience in credit investment management. Mr. Fraser holds a BA degree from Cornell University.

Jonathan Feeney
Co-Head of Research, Alternative Investment Solutions

Jonathan Feeney joined Investcorp in 2003. Mr. Feeney is the Co-Head of Research and a Portfolio Manager and is responsible for investment analysis across Special Opportunity Portfolios, Hedge Fund Partnerships and Multi-manager Solutions offerings. Prior to joining Investcorp, Mr. Feeney worked for Cazenove Capital Management where he was a member of the Investment Strategy Team. He has more than 20 years of investment experience. Mr. Feeney holds a MSc. in Economics and Finance from the University of Bristol and the IIMR (UK equivalent of the CFA) as well as being an Associate of the UK Society of Investment Professionals (ASIP).

Gregory Berman, CFA
Co-Head of Research, Alternative Investment Solutions

Gregory Berman joined Investcorp in 2015 and is the Co-Head of Hedge Fund Research and a Portfolio Manager within the Alternative Investment Solutions team. Mr. Berman joined from Lyxor Asset Management where he was the Head of Credit Hedge Fund Strategies. Prior to joining Lyxor, he was responsible for hedge funds selection across credit, event and equity strategies at Allianz Alternative Management until 2012. Prior to joining Allianz, he was an investment banker at Bear Stearns where he structured and marketed Collateralized Debt Obligations and other structured funds. Mr. Berman holds a BA from the University of Pennsylvania and an MBA from Columbia University and is a CFA charterholder.

Table of Contents

01 Introduction

02 U.S. Residential Mortgages

06 Callable Legacy Non-Agency RMBS

08 Distressed Middle Market Credit

11 Italian Non-Performing Loans

13 Senior Secured Loans

15 Collateralized Loan Obligations

Introduction

With generally low long-term yields and significant compression of credit spreads over the last few years, at first glance, credit markets may appear to many as bereft of opportunity in the near-term.

Meanwhile, the U.S. Federal Reserve is in its second year of a rate hike cycle with such cycles typically pre-staging a pick-up in credit defaults by one to three and a half years[1]. U.S. leveraged loan default rates have slowly ticked upward, exceeding 2% for the first time in nearly two years, though well below the historical average of 3.1%[2]. U.S. leveraged loan portfolio managers forecast a one-year forward default rate of 2.43%[3]. Although neither spreads nor defaults point to a near-term risk of recession, this may not be an obvious environment for traditional carry-based or spread narrowing gains across typical corporate credit. Instead, it would seem the market has its share of potentially asymmetric risks to the downside should the cycle turn.

However, as is often the case, upon closer inspection, several credit-related sub-strategies currently offer investment themes that are not significantly market dependent, but instead potentially provide attractive idiosyncratic returns and margins of safety.

Highlighted herein are the investment merits and idiosyncratic nature of several credit opportunities, including:

- U.S. Residential Mortgages
- Callable Legacy Residential Mortgage Backed Securities (RMBS)
- Distressed Middle Market Credit
- Italian Non-Performing Loans
- Senior Secured Loans
- Collateralized Loan Obligations (CLOs)

Together, these investments offer a fertile landscape of opportunities that may help investors extract a meaningful return in the current credit environment.

[1] Source: Deutsche Bank AG/London
[2] LCD, an offering of S&P Global Market Intelligence
[3] LCD's Default Survey

Though a decade has now passed and the housing market has largely recovered, a combination of regulatory changes and shifting investor appetite has led to a market that no longer serves the breadth of potential borrowers it once did.

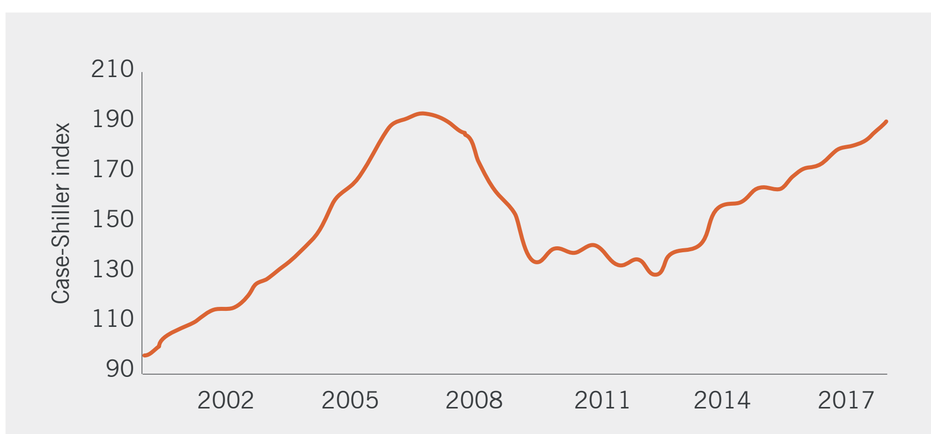
U.S. Residential Mortgages

The U.S. residential mortgage market has changed substantially since the bursting of the housing bubble and the resulting Global Financial Crisis (GFC). Although a decade has now passed and the housing market has largely recovered, a combination of regulatory changes and shifting investor appetite has led to a market that no longer serves the breadth of potential home mortgage borrowers it once did. This underserved portion of the mortgage market offers an attractive potential for above market returns compared to the more traditional mortgage market with a relatively similar risk profile, along with the growing ability to lever or securitize into higher yielding investments.

> The Dodd-Frank Wall Street Reform and Consumer Protection Act became law in 2010 in an effort to prevent a recurrence of the 2008 housing crisis

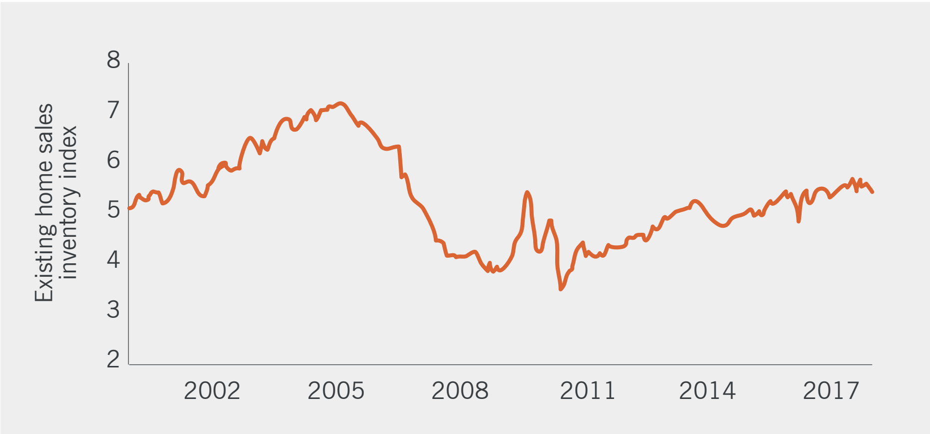
The Dodd-Frank Wall Street Reform and Consumer Protection Act became law in 2010 in an effort to prevent a recurrence of the 2008 housing crisis. Key rules went into effect in 2014 that provide originating banks a safe harbor against certain plaintiff litigation if originated mortgages meet certain criteria, including limited upfront points and fees, no interest-only mortgages and debt-to-income ratios below certain levels.

Figure 1. **Home prices continue to grow at ~6% per annum since 2012**



Source: National Association of Realtors and Bloomberg

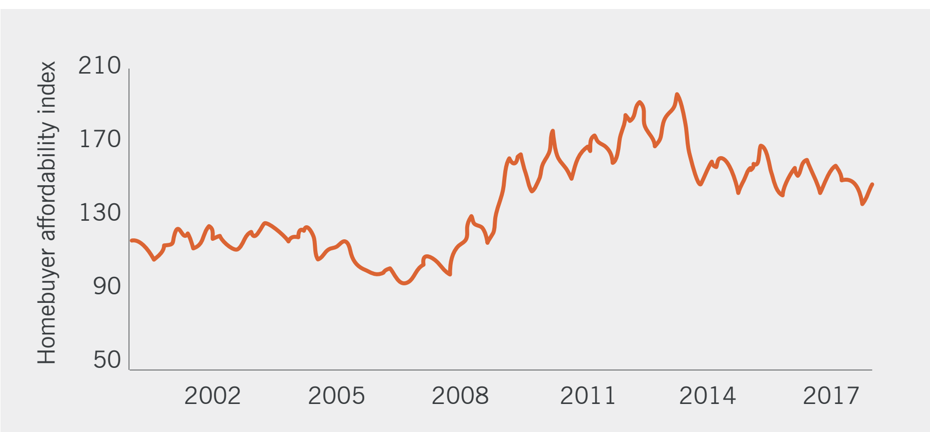
Figure 2. **Existing home sales are at the highest levels post-crisis**



Source: National Association of Realtors and Bloomberg

Additionally, Fannie Mae and Freddie Mac and large traditional mortgage lending banks have shown limited appetite to offer mortgages to a growing portion of potential borrowers, including those who are self-employed or who have variable income, borrowers looking for "jumbo" mortgages and foreign nationals who may not have U.S. credit scores. Such criteria, however, largely discourage a deeper dive into a borrower's creditworthiness, ignoring candidates who may be asset rich, with large deposit account balances, or have a favorable overseas credit history.

Figure 3. **Homes are more affordable**

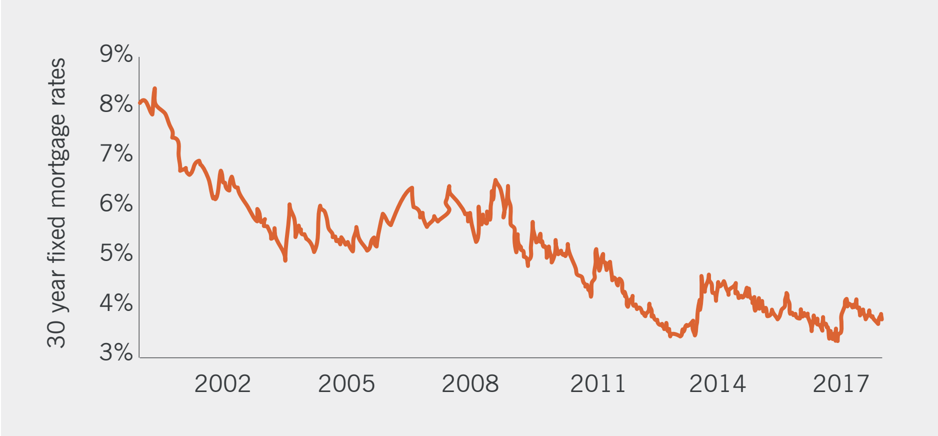


Source: Case Shiller and Bloomberg

Nearly a decade has passed and a new generation is now looking to start families, move out of rentals, and buy their own homes. There is $300bn of demand from borrowers who are currently shut-out of the market[1]. This supply/demand mismatch has allowed a small group of alternative non-traditional lenders to step in and be a source of lending for such borrowers.

[1] PIMCO

Figure 4. **Multi-year low levels of mortgage rates in the US**

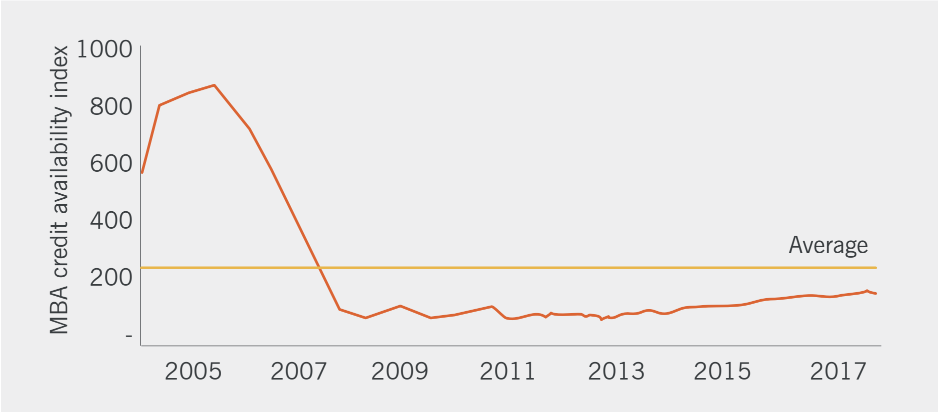


Source: National Association of Realtors and Bloomberg

Early movers have been able to charge significantly higher interest rates of as much as 7%, i.e., 3% above the rates charged on more traditional mortgages.

However, risk levels are not noticeably higher for such non-traditional borrowers. Again due to the supply/demand imbalance, such mortgages are typically sourced with more favorable loan-to-value ratios (LTVs) that are as low as 60%, versus 80% for more traditional mortgages. Lower LTVs (higher down-payments) protect lenders in the event of a default and subsequent sale. Additionally, self-employed U.S. borrowers may be sourced with attractive FICO scores (measures of personal creditworthiness).

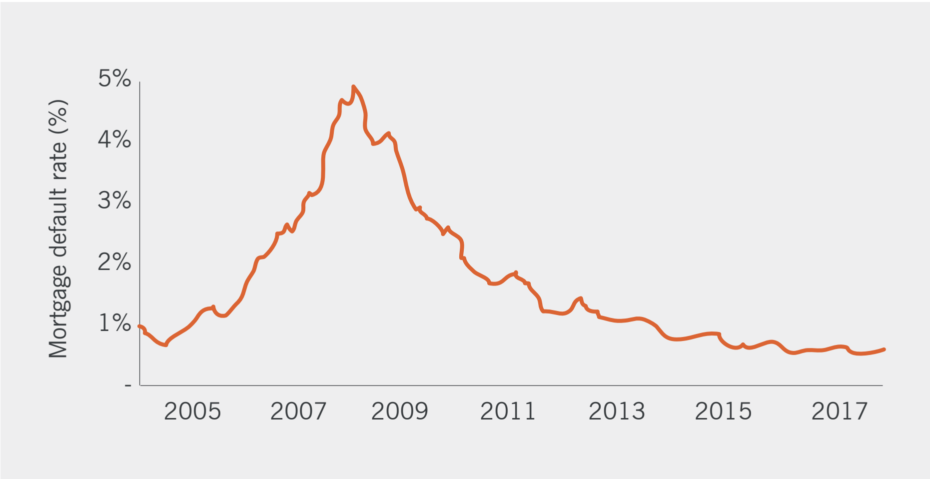
Figure 5. **While lending standards have loosened slightly since the financial crisis, they are still far below the average levels**



Source: National Association of Realtors and Bloomberg

Today's lending occurs against a macro-economic backdrop of reasonable home price affordability, low unemployment, and strong GDP growth, adding additional tailwinds. As discussed previously, lenders are maintaining tough lending standards, especially in contrast to the pre-crisis environment when affordability and underwriting standards were declining rapidly.

Figure 6. **Mortgage default rates have been falling from a peak of 5.7% in 2009 to a post-crisis low of 0.6% in mid-2017**



Source: Bloomberg

Together, these factors have led to an aggregate default rate of just 0.6% for all mortgage borrowers[1] and a near zero-default rate and zero loss rate over the past three years across non-traditional borrowers[2].

Figure 7. **Non-traditional collateral performance**

Vintage	2015 Vintage	2016 Vintage	2017 Vintage
D30+share (% of balance)	1.8%	2.1%	0.8%
Liquidations (% of balance)	0.3%	0.0%	0.0%
Loss (% of balance)	0.0%	0.0%	0.0%

Source: Loan Perfomance, Nomura

Growing Securitization Market

There is a growing market for securitization for such non-traditional mortgages, enhancing liquidity and creating opportunities for more efficiently levered structures. Securitizations more than doubled in 2017, reaching approximately $2.5bn, up from just $1bn in 2016[3]. The structure of the deals has improved with the first AAA-rated deal being issued in December 2016, lowering liability costs and improving securitization economics for issuers. This growing securitization market helps create additional liquidity, providing potential exits for investors.

This underserved portion of the mortgage market offers an attractive potential for above market returns and comparable risks as compared to the more traditional mortgage market, along with the growing ability to lever or securitize into higher yielding investments.

[1] Bloomberg
[2] Loan Performance, Nomura
[3] Nomura

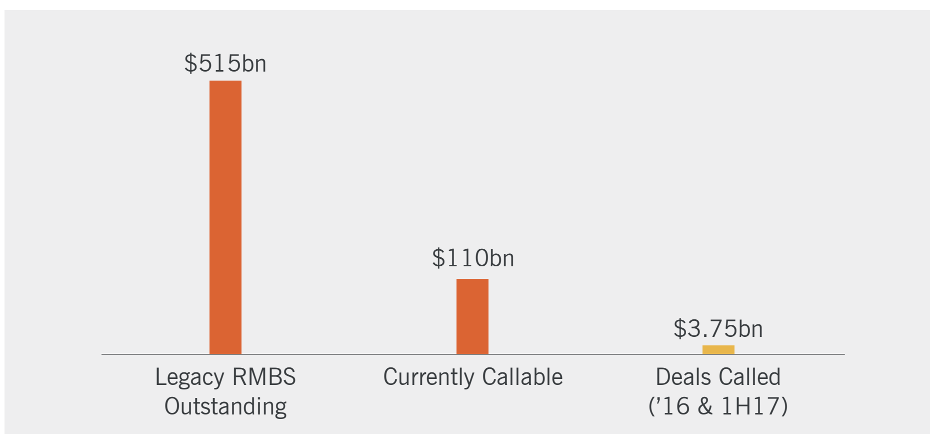
It is estimated that approximately 20% of the $515bn of non-agency RMBS have callable rights that are currently exercisable, i.e., the issuers of the securities have the ability to redeem the outstanding debt at par (100% of face value).

Callable Legacy Non-Agency RMBS

Dislocations persist in the legacy U.S. Non-Agency RMBS market, leaving an attractive opportunity set for investors who can analyze the complex underlying collateral for this specific subset of securities. One such dislocation relates to the mispricing of callable rights. It is estimated that approximately 20% of the $515bn of non-agency RMBS have callable rights that are currently exercisable, i.e., the issuers of the securities have the ability to redeem the outstanding debt at par (100% of face value). However, in many cases, certain legacy issues still trade at a material discount to par for any or all of the following reasons: floating rate coupon resetting to a lower rate, complexity of the underlying collateral, lack of liquidity in the secondary markets (resulting from the dissolution of bank proprietary desks) and the defunct status of many of the original sponsors for the legacy deals.

The U.S. macroeconomic and regulatory environment provides an important backdrop that improves the likelihood that these RMBS issues will be called. First, the U.S. housing market has drastically improved since the crisis. This recovery has resulted in consumers strengthening their balance sheets, thereby causing a declining trend for mortgage delinquencies. Rising home prices also improve the underlying collateral value for legacy issues that were underwritten prior to the crisis. Second, sweeping bank reforms have also created an important catalyst for an accelerated trend for issues to be called. Since banks are typically no longer incentivized to hold these issues due to stricter regulatory requirements and higher capital charges, issues with callable rights have been transferred to non-bank companies that do not fall under the same regulatory scrutiny. The current securitization process for mortgage pools prevents eligibility for some of the more complex legacy RMBS. As a result, owners with callable rights are incentivized to call the securities, and then re-underwrite the collateral to make them eligible for the current securitization regime.

Figure 8. **Callable Non-Agency RMBS vs Eligible Universe**

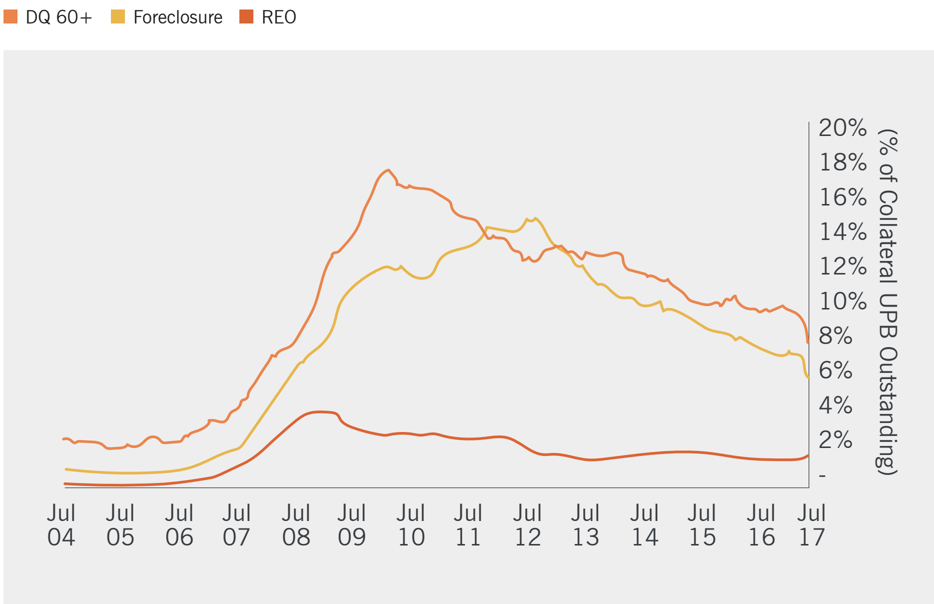


Source: Intex

Over $500bn of non-agency RMBS remains outstanding, including an estimated $100bn of deals that are currently callable. This subset is expected to triple over the next several years as additional deals reach their call thresholds, or the point at which "clean-up calls" become exercisable under the terms of each specific deal. The subset includes deals whose portfolios of underlying mortgages have reached thresholds of 10% of their original size due to amortization and write-downs. The structures have become uneconomical and are now eligible to be called.

Meanwhile, underlying collateral performance has improved dramatically since the bursting of the housing bubble during the previous decade. Non-agency RMBS 60+ day delinquencies have contracted nearly 55% since 2010 but still remain high on an absolute basis at 7.9%. Real estate owned (REO), or properties owned by lenders, and foreclosure backlogs have also improved, declining 60% from their highs.

Figure 9. **Non-Agency Collateral Performance**



Source: JPMorgan Data Analytics

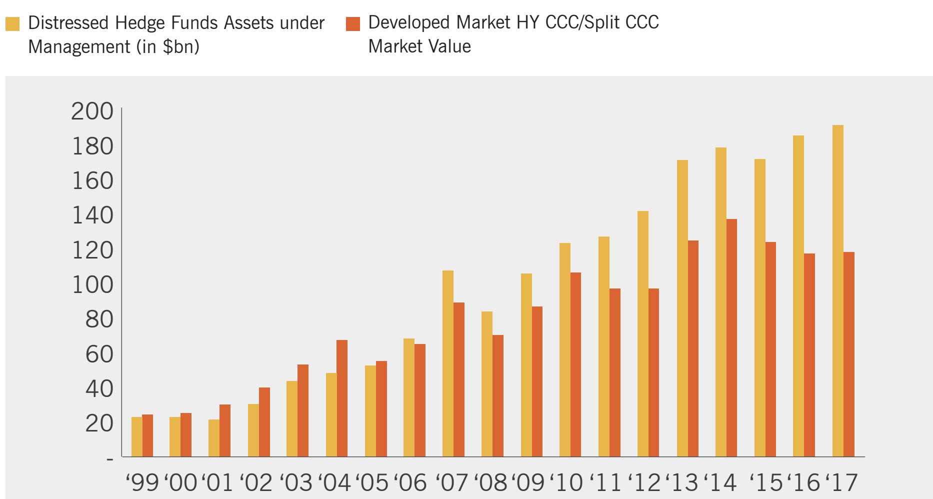
Should the RMBS tranches trade at a significant discount relative to market value of the underlying collateral value, the securities can potentially be purchased and the call right exercised. Those directing the call will need to identify an investor willing to purchase the underlying mortgages. Arbitrage that exists between the price of the underlying mortgage portfolio and the price of the securitization may be used to find win-win pricing and attract investors. In the meantime, the purchaser of the RMBS is able to earn a positive carry of approximately 4% to 5%. Once the securities are called, they may experience a significant uplift in price towards par.

Distressed Middle Market Credit

In today's investment environment, robust performance will increasingly benefit from differentiated investment strategies, playing different risk factors with fewer competitors who face barriers to entry. Distressed credit is one such niche segment where competition is structurally limited as large mutual funds become forced sellers and traditional buyers lack the specialized experience and expertise required to manage non-performing assets or participate in restructurings.

The chart below depicts the evolution, since the late 1990's, of assets under management (AUM) for distressed hedge funds as well as the size of the CCC-rated debt market, used here as a proxy for the universe of distressed or potentially distressed credit. Distressed hedge funds are now managing assets in excess of $190bn while the distressed credit universe shrank to $117bn at the end of 2017[1]. That said, headline numbers do not tell the full story here. Capital flows have disproportionately moved towards large funds, leaving an estimated 66% of capital under management concentrated among only a handful of multi-billion dollar firms[2]. This imbalance in the structure of the distressed credit industry accentuates the scarcity of attractive opportunities for those who need to deploy large amounts of capital in large deals. Meanwhile, smaller situations are often overlooked or discarded by the larger players as they cannot sufficiently scale to drive performance.

Figure 10. **Size of the Distressed Hedge Fund Industry vs Market Value of CCC-rated Debt**



Source: HFR, JPMorgan

On the other hand, hedge funds that are well positioned for such niche prospects may enjoy a greater breadth of opportunity. Alpha-centric hedge funds often seek to benefit from meaningful events affecting the capital structure of companies since these catalysts often provide significant chances to capture great upside/downside moves in the debt or equity securities of the companies in question. These key developments in the life of a company may include, for example: capital markets activity such as company and asset sales, refinancings and tenders, restructurings and various legal issues. They generally come with a significant degree of complexity as financial

[1] HFR, JPMorgan
[2] HFR

and legal expertise is required to assess an event's impact on the firm's value and distribution across the capital structure. Given the sheer size of the mid-cap universe, hedge funds can explore a much wider number of opportunities to create alpha.

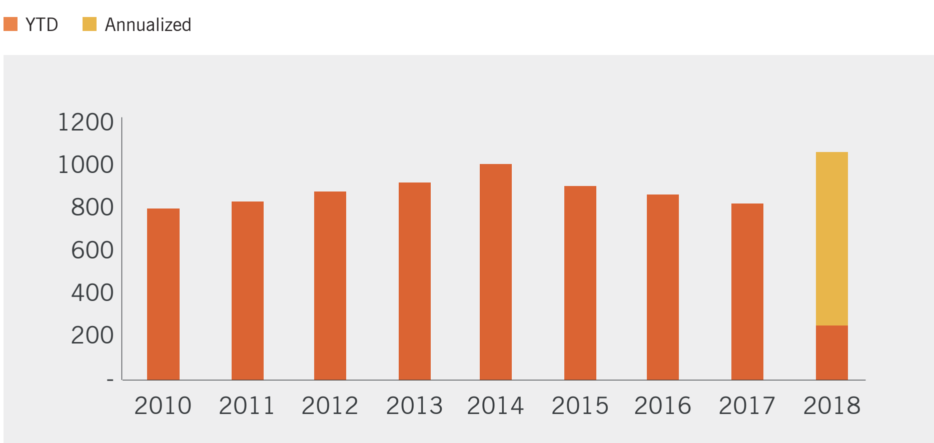
> Given the sheer size of the mid-cap universe, hedge funds can explore a much wider number of opportunities to create alpha

Alpha-centric hedge funds often seek to benefit from meaningful events affecting the capital structure of companies since these catalysts often provide significant chances to capture great upside/downside moves in the debt or equity securities of the companies in question.

The chart below highlights the number of significant events for U.S.-based companies with an enterprise value below $1.5bn. Significant events include:

- Bankruptcy (including exit, filing, liquidation, financing, reorganization)
- Fixed income calls
- Fixed income offerings
- IPOs
- M&A transaction announcements
- Preferred dividend
- Private placements
- Seeking to sell/divest
- Spin off/split off

Figure 11. **Number of Significant Events for US Companies (EV<$1.5bn)**



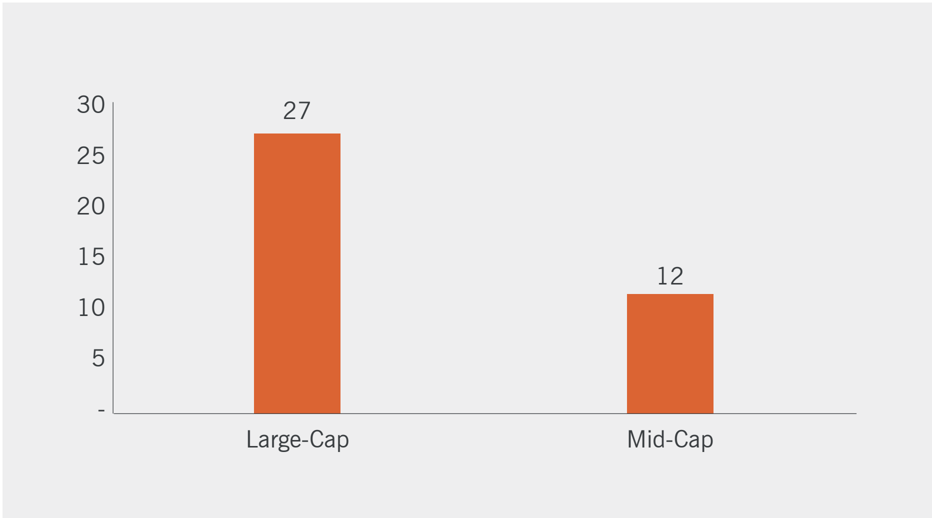
Source: Capital IQ

After a few years of stagnating key developments, corporate events have picked up in 2018, driven by reduced uncertainty across the macroeconomic landscape and rising corporate confidence indicators.

After a few years of stagnating key developments, corporate events have picked up in 2018, driven by reduced uncertainty across the macroeconomic landscape and rising corporate confidence indicators.

On average, hedge funds can typically screen hundreds of these catalysts per year to identify the best risk/rewards. Naturally, this investment style requires significant expertise and resources to provide an informational edge in understanding these transactions.

Figure 12. **Sell-Side Analyst Coverage – Large-Cap vs Mid-Cap**



Source: Bloomberg

This informational edge is then compounded by the limited competition from other investors who often lack coverage from sell-side research analysts. This establishes greater barriers to entry in the trades and the potential for larger payoffs.

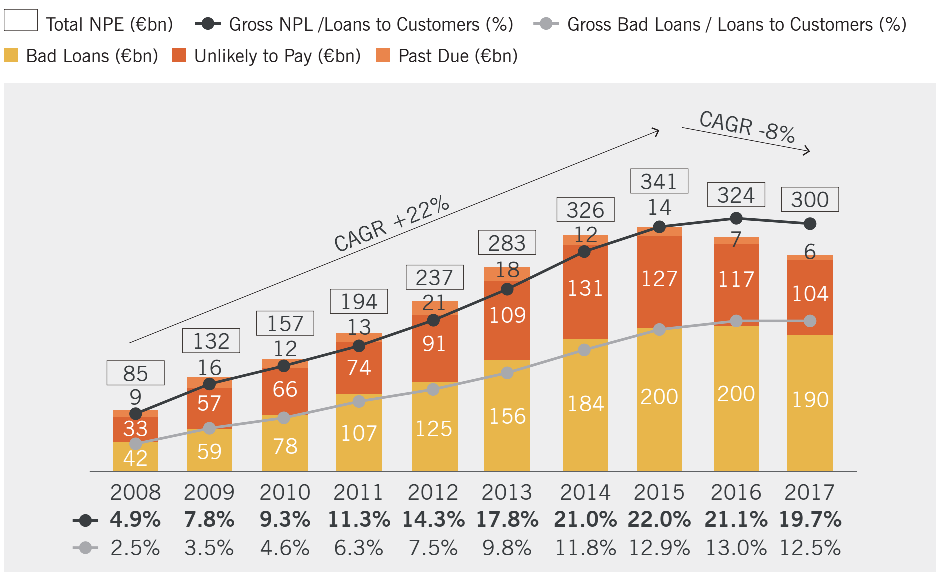
On average, hedge funds can typically screen hundreds of these catalysts per year to identify the best risk/rewards

Italian Non-Performing Loans

Italian non-performing loans (NPLs) currently offer investors a convex risk/reward profile to purchase deeply discounted assets, collateralized by high quality real estate with strong potential upside.

The Italian NPL investment opportunity arose due to the dramatic changes that took place in the European bank regulatory system after the European Central Bank (ECB) took over regulation of the Eurozone's 130 largest banks from national supervisors in November 2014. Italy is one of the European countries that had the most direct impact of these regulatory changes. Although Italy did not undergo the dramatic boom/bust cycle through the Global Financial Crisis that Spain, Ireland and Portugal experienced (its housing market was far more resilient), Italy nevertheless accumulated the highest volume of NPLs in Europe. To date, Italy has accumulated €190bn of NPLs as at year end 2017[1], only slightly down from the peak of €200bn at the end of 2015. If a wider classification of "Unlikely to Pay"[2] is included, Italy has accumulated €300bn of NPLs as at year end 2017, from the peak of €341bn at the end of 2015.

Figure 13. **Total Stock of Italian Non-Performing Exposures**



Source: PWC, December 2017

Though not complete, significant progress has been made over the past two years to tackle the NPL issue. Italian banks have begun re-structuring through vast NPL deleveraging programs and are under pressure to clean up their balance sheets in order to reduce risk-weighted assets to comply with European Central Bank (ECB) capital adequacy targets and reinitiate lending businesses. Such actions taken by the Italian government to improve the stability of its banks, particularly NPL portfolios include:

- The initiation of a state guarantee scheme ("GACS") that guarantees senior tranches of asset backed notes issued by Special Purpose Vehicles ("SPVs") comprised of NPLs. This included creation of "Atlante," a fund that was created to buy shares of troubled lenders seeking to raise capital and to help them securitize and sell non-performing debt.

[1] Associazione Bancaria Italiana
[2] Unlikely to Pay: When according to the bank's own judgment, the debtor is assessed as unlikely to pay its obligation in full, without recourse actions or collateral realization, regardless of any past due amount

- Amendments on bankruptcy and foreclosure proceedings with the aim of accelerating the process of recovering NPLs. Court procedural times have also shortened since laws were enacted in 2015 with auctions now taking only two to three years to reach resolution whereas they had previously taken four to five years.
- Finally, new ECB guidelines introduced in 2017 will require lenders to entirely cover new non-performing loans within two and seven years for unsecured and secured respectively.

In addition to these government initiatives, the Italian real estate market has also shown increasing signs of strength and improved activity after bottoming out in 2013. For example, there were a total of 444,625 residential transactions in 2015, which increased to 528,864 in 2016, a +19% increase. H1 2017 volume for residential transactions is up a further +3.5% from H1 2016.

Figure 14. **Italy Real Estate Transactions**[1]

Asset Type	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	H1 2016	Q1 2017	Delta (%) H1 16-17
Residential	115,194	143,298	123,476	146,896	121,976	145,529	258,493	267,505	3.5%
Office	2,025	2,413	2,510	3,000	2,362	2,486	4,437	4,846	9.2%
Retail	6,776	7,598	7,188	9,024	6,215	7,176	14,374	13,393	-6.8%
Industrial	2,121	2,897	2,565	3,704	2,328	2,996	5,018	5,325	6.1%
Total	**126,116**	**156,206**	**135,738**	**162,624**	**132,881**	**158,187**	**282,322**	**291,069**	**3.1%**
Appurtenances[2]	87,554	110,015	94,007	119,427	85,291	101,566	197,569	186,857	-5.4%
Other[3]	30,828	38,687	35,719	44,090	12,663	14,464	69,515	27,127	-61.0%

Source: PwC publication "Real Estate Market Overview - Italy 2017"

Italy has top-quality real estate collateral and is currently experiencing significant support from reallocations of domestic savings away from Italian government bonds, as well as significant investment from overseas buyers.

We find Italian NPLs topical given the large size of the market and the regulatory pressures for banks to act in the near term. However, given the complexities of the strategy, investors must take into account a manager's Italian specific market knowledge and skill set. The recovery process is complex and requires privileged local relationships to source quality loans, the ability to accurately value collateral, and experience navigating the judicial process on a town by town basis. Finally a high-quality servicer to extract value in a timely manner is critical to the strategy's success.

[1] Transactions are denoted in standardized real estate units, taking into account the share of the property transferred
[2] Appurtenances refer to properties such as basements, garages or parking spots
[3] The sector "Other" includes hospitals, clinics, barracks, telephone exchanges and fire stations

Senior Secured Loans

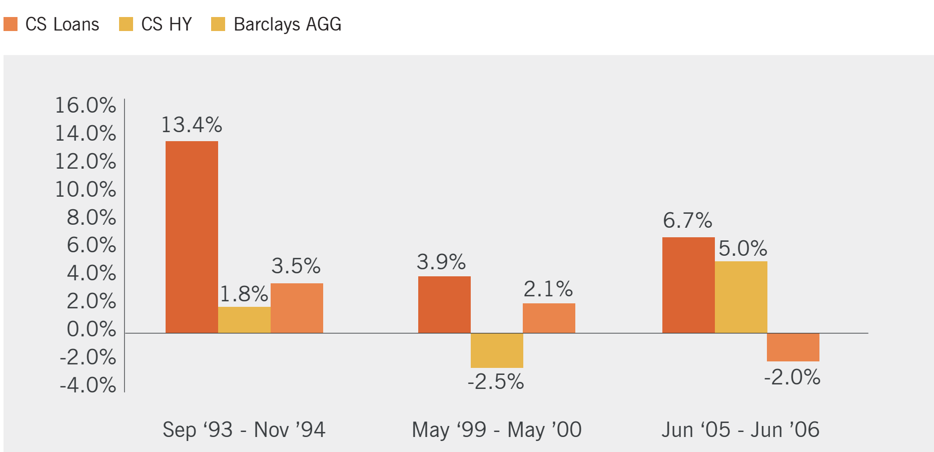
The late stage of the credit cycle and rising short-term rate environment have investors searching for investments that provide downside protection associated with the inevitable weakening of U.S. and global economies, insulation from the impact of rising rates on traditional fixed income assets and current income well in excess of the still historically low risk-free rates around the world. Senior secured loans represent one of the very few asset classes that meet all of these objectives.

The loan market is comprised of several different segments, which in aggregate are often referred to as private debt or private credit. Such segments range from broadly syndicated loans, which in the U.S. represent a $1tn market rivalling the high-yield bond market in size and liquidity, through middle-market loans to smaller companies to direct-lending relationships between a borrower and a lender. Regardless of the market segment, loans share a number of common traits:

1. Seniority and security – loans are generally senior in the borrower's capital structure and first (or in some cases, second) in line to be repaid. Loans also benefit from a security interest in some or all of the borrower's assets. Seniority and security prove particularly valuable during periods of economic weakness, when these attributes provide protection in periods of elevated defaults.
2. Floating rate – the vast majority of loans pay interest based on an underlying floating-rate index such as LIBOR plus a credit spread. Often rising short-term rates are accompanied by higher long-term rates, which negatively impact the value of longer duration fixed rate securities. Over the last 20 years, in periods of Fed tightening and greater than 100bps increases in long-term rates, loans significantly outperformed most other fixed income asset classes.

While each segment of the private debt market shares these common traits, each also differs in several ways, generally due to the size of the borrowing company and the related liquidity.

Figure 15. **Loans Outperform HY and Fixed Income During Periods of Rising Rates**



3. Attractive risk-adjusted returns – loans offer attractive absolute and relative returns. Net of expected realized losses based on a 3% long-term average default rate and 80% recoveries, broadly syndicated loans generate a net return of Libor plus 310-330 bps. This compares very well to IG and HY bonds. The current yield of 5.50% to 5.75% is in-line with fixed-rate HY bonds, without exposure to additional credit risk and longer-duration downside.

The loan market is comprised of several different segments, which in aggregate are often referred to as private debt or private credit.

While each segment of the private debt market shares these common traits, each also differs in several ways, generally due to the size of the borrowing company and the related liquidity:

Segment	# of Lenders per Loan	Size of Borrowing Companies	Liquidity	Ratings	Current Return
Broadly Syndicated (Leveraged Loans)	20+	**Large** EBITDA > $100MM Loan size > $300MM	High	Yes	4% to 8%
Syndicated Middle Market	10-20	**Medium** EBITDA > $50-$100MM Loan size > $150-$300MM	Limited	Generally	5% to 9%
Club Lending	2-10	**Medium/Small** EBITDA > $20-$50MM Loan size > $75-$150MM	Very Limited	No	5% to 10%
Direct Lending	1	**Small** EBITDA > $5-$35MM Loan size > $15-$100MM	None	No	7% plus

Loan investors can allocate capital to market segments based on desired return and liquidity and via a wide variety of fund structures. From daily liquidity open end mutual funds investing in broadly syndicated loans to closed-end, private equity style funds targeting higher returning illiquid direct lending opportunities, investors have a wide variety of ways to take advantage of the solid credit fundamentals, low default rates and attractive returns loans exhibit today, while retaining the downside protections that will be critical to preserving capital during the next economic downturn.

Loan investors can allocate capital to market segments based on desired return and liquidity and via a wide variety of fund structures

Collateralized Loan Obligations

Collateralized loan obligation ("CLOs") are actively managed securitizations of sub-investment grade rated corporate loans. Portfolios are usually comprised of broadly syndicated loans, although issuance of middle market CLOs is increasing. Funding for the securitization is provided by rated term financing in the form of notes sold into capital markets combined with equity representing the first loss exposure to the CLO. The notes are issued for the life of the CLO (typically 12 years), collateralized by the underlying loan assets, rated from AAA to BB based on seniority and pay interest based on LIBOR and a credit spread reflecting position in the CLO capital structure.

Collateralized loan obligations offer investors opportunities to invest in securities backed by a portfolio of loans that represent different risk and return profiles. As floating rate securities, CLO debt tranches are attractive and may provide significant yield pick-up versus similarly rated securitized and corporate debt products. They may also prove quite resilient through credit cycles. CLO equity utilizes the leverage provided by CLO notes to generate mid-teens IRRs through quarterly distributions that start shortly after closing, provides high current income and a four to five-year return of initial capital with residual upside and the ability to take advantage of market volatility without worry of margin calls or forced deleveraging.

Equity receives quarterly distributions based on the difference between the interest income earned on the underlying loans and the interest expense paid on the debt financing. Principal realized from repayment or trading of loans can be reinvested during a reinvestment period of up to five years. After that, proceeds from trading and loan repayments are used to repay the debt tranches in order of priority, with the remaining balance distributed to equity investors after all debt is repaid. Equity returns are influenced by the CLO manager's ability to avoid realizing credit losses and utilizing this reinvestment capability to create upside. The performance of the underlying portfolio and manager trading expertise will drive both the regular cash distributions and the eventual return of capital to the equity investor, with realized credit losses negatively impacting returns and realized gains creating additional value.

CLO debt tranches offer attractive coupons when compared to similarly rated credit instruments:

CLO Tranche	CLO Average Spread to LIBOR[13]	Comparable Average Spread to LIBOR[13]
AAA	1.04%	CMBS: 0.82%
A	2.00%	IG Bonds: 0.89%
BBB	2.90%	HY Bonds: 1.45%
BB	5.50%	Loans: 2.59%

The floating rate nature of CLO liabilities provides protection in a rising rate environment and will benefit investors into 2019 as the Federal Reserve continues its program of increasing short-term interest rates. CLO debt tranches have proven quite

[13] JP Morgan, as of May 14, 2017

As floating rate securities, CLO debt tranches are compelling and may provide significant yield pick-up versus similarly rated securitized and corporate debt products. They may also prove quite resilient through credit cycles.

resilient during more challenging environments, with average CLO notes default rates through the 2008/2009 financial crisis significantly below default rates for similarly rated corporate credit. Collaterized Mortgage Obligations CMOs, Collaterized Mortgage Obligations CDOs and other structured credit products and derivatives thereof often dramatically underperformed expectations during the 2008/2009 timeframe. CLOs, on the other hand, performed largely as expected.

The **CLO market** has grown dramatically following the financial crisis. With well **over $100 billion** in annual issuance over the last two years

CLO equity currently delivers quarterly distributions averaging 14-16% on an annualized basis. While loan spread tightening has temporarily reduced distributions from the high teens seen 12 to 18 months ago, the fixed financing spreads can have tremendous value as loan credit spreads widen. An active CLO refinancing market with a developing yield curve for AAA and AA rated notes offers the opportunity to reduce funding costs at various points during the reinvestment period. The reinvestment period itself permits active portfolio management in different parts of loan market cycles and the opportunity to realize upside associated with purchasing loans at discounts during periods of softness. This feature of CLOs proved its value during the GFC, when high quality loans were available at prices in the low 70s. The leverage inherent in the CLO structure magnifies the cash flows from loans purchased at discounts to par, whether derived from repayment at par or trading into the secondary market as conditions improve, and provides significant potential upside to CLO equity investors. The optionality associated with the ability to take advantage of market dislocation is one of the most attractive features of CLO equity investing.

The CLO market has grown dramatically following the financial crisis. With well over $100bn in annual issuance over the last two years, the U.S. and European CLO markets now exceed $600bn. Investors can choose from over 100 U.S. and 40 European CLO managers who regularly bring new issue CLOs to market. A vibrant secondary market offers the ability to actively manage CLO exposure across risk and return preferences.

From highly rated investments at a premium over other fixed income asset classes to equity-like returns with significant current cash flow, CLOs give investors the opportunity to select the risk and return profile they want to generate from portfolios of loans via a structure that has proven its viability through a variety of market conditions over the last 20 years.

ABOUT INVESTCORP

Investcorp is a leading global provider and manager of alternative investments, offering such investments to its high-net-worth private and institutional clients on a global basis. Led by a new vision, Investcorp has embarked on an ambitious, albeit prudent, growth strategy. The Firm continues to focus on generating investor and shareholder value through a disciplined investment approach in four lines of business: corporate investment, real estate, alternative investment solutions and credit management.

As at December 31, 2017, the Investcorp Group had $22.2 billion in total AUM, including assets managed by third party managers and assets subject to a non-discretionary advisory mandate where Investcorp receives fees calculated on the basis of AUM.

Since its inception in 1982, Investcorp has made over 175 corporate investments in the U.S., Europe and the Middle East and North Africa region, including Turkey, across a range of sectors including retail and consumer products, technology, business services and industrials, and more than 500 commercial and residential real estate investments in the U.S. and Europe, for in excess of $56 billion in transaction value.

Investcorp's alternative investment solutions (AIS) group was launched in 1996 and currently has approximately $4.0 billion in assets across its customized multi-manager solutions, hedge fund partnerships, alternative risk premia and special opportunities portfolios.

Investcorp employs approximately 390 people across its offices in Bahrain, New York, London, Abu Dhabi, Riyadh, Doha, and Singapore. For further information, including our most recent periodic financial statements, which details our assets under management, please refer to:

- www.investcorp.com
- www.linkedin.com/company/Investcorp
- www.twitter.com/Investcorp @investcorp

INVESTCORP

www.investcorp.com
Investcorp
@investcorp

INVESTCORP BANK B.S.C.
Investcorp House
P.O. Box 5340
Manama
Kingdom of Bahrain
T: +973 17 532 000
F: +973 17 530 816

INVESTCORP INTERNATIONAL INC.
280 Park Avenue
New York
New York 10017
United States of America
T: +1 212 599 4700
F: +1 212 983 7073

INVESTCORP BANK B.S.C.
Al Sila Tower – 8th Floor
Abu Dhabi Global Market Square
Al Maryah Island
P.O. Box 36961
Abu Dhabi
United Arab Emirates
T: +971 2 501 8900
F: +971 2 644 1566

INVESTCORP ASIA SERVICES PTE LTD.
Level 24-01, CapitaGreen
138 Market Street
Singapore 048946
T: +65 6679 6032
F: +65 6697 6097

INVESTCORP INTERNATIONAL LTD.
Investcorp House
48 Grosvenor Street
London W1K 3HW
United Kingdom
T: +44 (0)20 7629 6600
F: +44 (0)20 7499 0371

INVESTCORP SAUDI ARABIA
Al Faisaliah Tower
29th Floor
P.O. Box 61992
Riyadh 11575
Kingdom of Saudi Arabia
T: +966 11 484 7600
F: +966 11 273 0771

INVESTCORP INVESTMENTS LLC
Qatar Financial Centre
Tower 1
West Bay Area
P.O. Box 24995
Doha
State of Qatar
T: +974 4496 7966
F: +974 4496 7960