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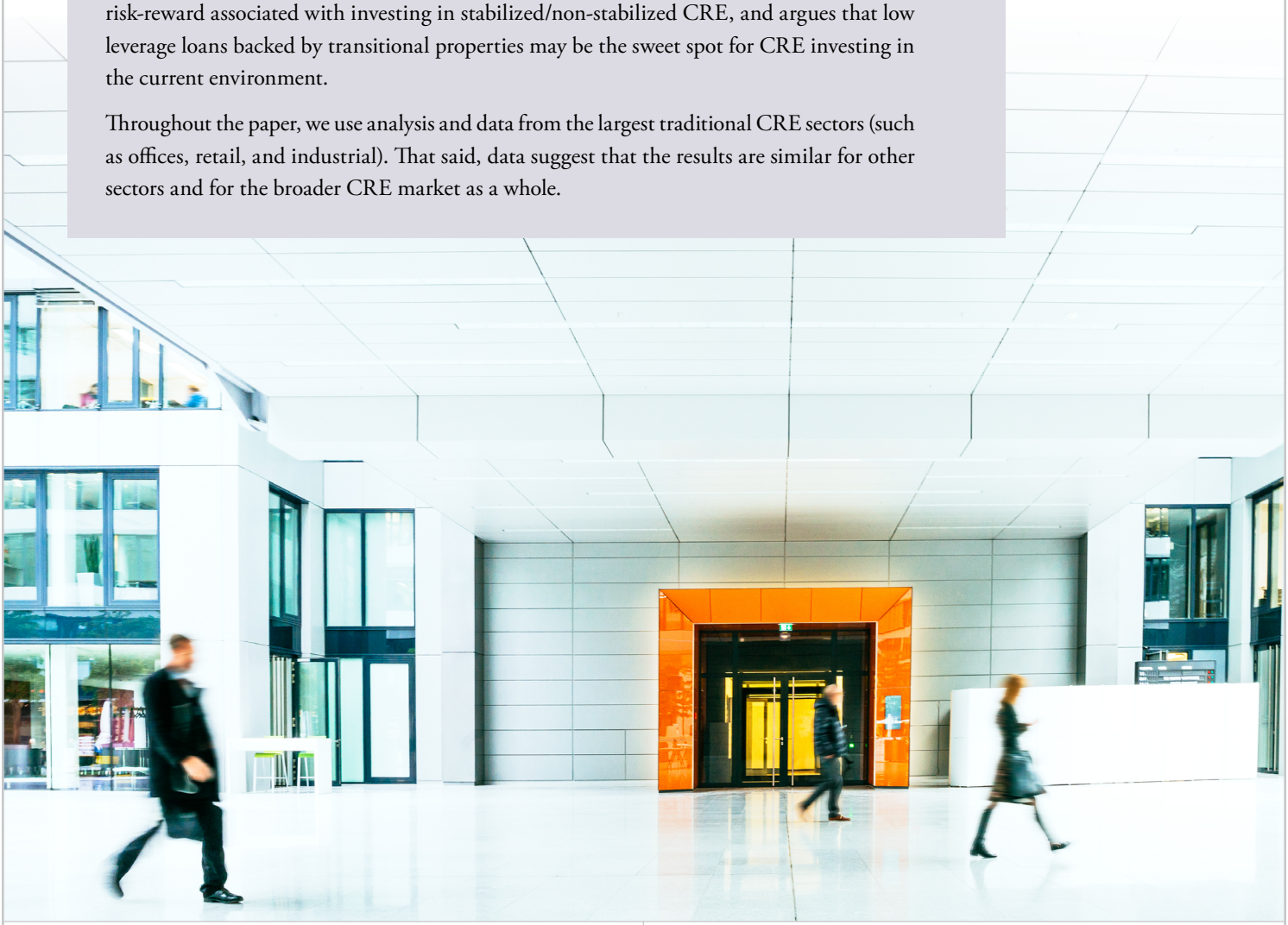
Transitional Lending — The Sweet Spot in CRE Investing

INTRODUCTION

The mortgage market relies heavily on recent historical performance to make long-term forecasts. In commercial real estate ("CRE"), we believe this habitually manifests itself in underpricing the risk of an occupied building becoming vacant and overpricing the risk of a vacant building remaining vacant. In other words, the market assumes that stabilized fully occupied properties remain stable forever and non-stabilized vacant properties have only a small chance to improve — although data suggest otherwise. This paper examines the risk-reward associated with investing in stabilized/non-stabilized CRE, and argues that low leverage loans backed by transitional properties may be the sweet spot for CRE investing in the current environment.

Throughout the paper, we use analysis and data from the largest traditional CRE sectors (such as offices, retail, and industrial). That said, data suggest that the results are similar for other sectors and for the broader CRE market as a whole.



Amherst CAPITAL MANAGEMENT
A BNY MELLON COMPANY

444 Madison Avenue
19th Floor
New York, NY 10022
www.amherstcapital.com

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SECTION I
STATE OF THE CRE MARKET

Before diving into transitional commercial real estate ("CRE") lending, it is useful to first understand the scope of CRE and the CRE mortgage markets. CRE is a very broad term and can mean different things to different investors. Generally speaking, any property which generates income can be considered CRE. In that respect, offices, retail shopping centers, apartments, hotels and industrial properties have long been considered CRE. These constitute what many people consider traditional CRE. However, we believe CRE is broader and includes income-producing single-family rentals ("U.S. Single Family Rentals — An Emerging Institutional Asset Class") and niche sectors such as data centers, self-storage facilities, and parking garages. We also define transitional CRE properties as properties facing near-term cash flow shortfalls or underperformance relative to their local markets, necessitating a short term loan and business plan to stabilize the property to the point at which it can again generate long term income in line with the local market (for more details see Section II).

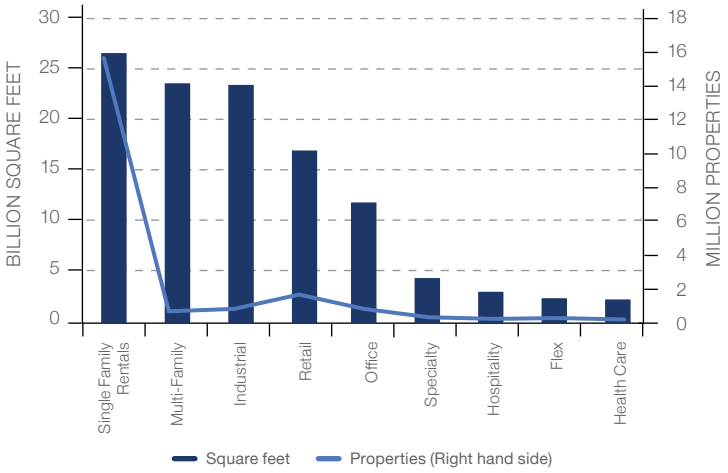
In this section, we discuss the size of the CRE market, its recent price performance, including variations across sectors and why we believe debt investments in CRE make more sense at this stage in the cycle.

1.1 HOW BIG IS THE CRE MARKET?

The CRE market is sizeable, both in physical size and dollar terms. As of Q3 2016, CoStar tracks over 3.6 million ("mn") U.S. properties with over 87 billion ("bn") square feet ("sf") of rentable space (and it's possible that this data does not capture every single CRE property). Their number includes 23bn sf of industrial properties, 23bn sf of multi-family, 17bn sf of retail and 12bn sf of office space (Figure 1). In addition, we separately estimate another 26.2bn sf of space in income generating single family rentals. In dollar terms, the traditional five CRE property types are valued at over $10 trillion ("tn"), and the total rises to $13tn including single family rentals. These largest traditional sectors include apartments ($3.5tn), retail ($2.7tn), office ($2.2tn), industrial ($1.6tn), and hotels ($0.9tn) as seen in Figure 2.

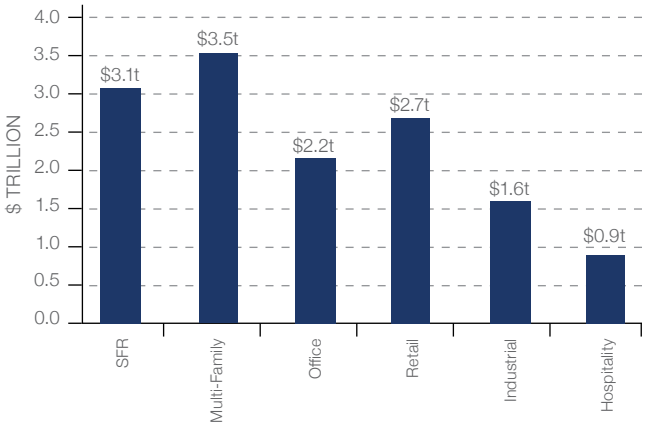
According to estimates based on U.S. Census Bureau data, the size of this asset class puts it in the league of some of the largest investible asset classes in the U.S.

FIGURE 1 ***CRE Market — Estimated Square Feet and Number of Properties***



Source: Amherst Capital Management estimates based on Costar data as of Q3 2016, SFR estimate of units based on 2014 Census Bureau's American Community Survey. SFR square feet estimate based on 1700 sf house size estimate.

FIGURE 2 ***Estimated Value of CRE***



Source: U. S. Census Bureau, Amherst InsightLabs, Amherst Capital estimates based on U.S. Census Bureau surveys as of Q2 2016. Single-family values based on Amherst InsightLabs automated valuation model ("AVM"); Office/Retail and Industrial based on Costar data as of 2016 Q2 and "Slicing, Dicing and Scoping the size of the US Commercial Real Estate Market", by Andrew Florence, Norm Miller and Ruijue Peng of Costar/PPR; multi-family based on National Multi-family Housing Council and Moody's CPPI as of 2015; Hospitality based on RCA and STR Global estimates as of 8/31/2016.

economy, such as U.S. single family housing ($24.5tn), the stock market ($22.2tn), and the U.S. Treasury market ($13.4tn), as shown in Figure 3.

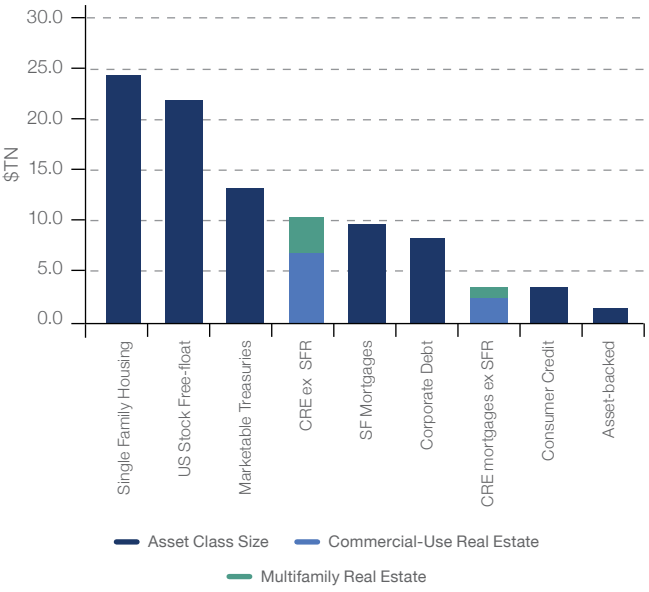
There is also a sizeable mortgage market backed by CRE. Based on Federal Reserve Z.1 data, the CRE mortgage market stood at $3.7tn in June 2016, roughly a third of the size of the $10tn single-family mortgage market. While not the largest market, it is still comparable to the size of total consumer credit (including student loans, auto loans and credit card).

1.2 CRE MORTGAGES HAVE DIFFERENT TERMS THAN RESIDENTIAL MORTGAGES

Mortgages on CRE properties generally have shorter maturities than residential mortgages. Most have terms of <= 10 years, with a large balloon payment due at maturity to retire the remaining balance. This is because borrowers are generally real estate investment companies, which use mortgages as a financing method similar to corporate debt. Many CRE loans may include interest-only periods during some or all of the term before amortizing on a customary 30-year schedule, and can be fixed or floating. Loans on transitional CRE properties have mostly 3-5 year terms and have floating rate coupons. The loan structure variations allow investors to get a mortgage suitable for both a property's unique needs/business plan and their investment horizon.

The lease terms, in contrast could be very different depending on the asset class. For example, it is common for retail, office, and industrial property owners to generally let to business tenants with lease terms of 5 years or longer. This stability helps businesses predict costs, but can create large shifts in property income when leases expire. Other CRE assets like multi-family, self-storage and hotel leases are generally made to individuals for shorter terms. Multi- and single-family rentals are usually leased for 1-year increments, self-storage rentals are generally for 1-month increments, and a hotel stay can be viewed as a 1-day lease. These property types generally respond more quickly to changing economic conditions. These shorter-lease properties are also more operationally intensive, as additional turnover and specialized services such as cleaning and guest support for hotels lead to higher operating expenses.

FIGURE 3 ***Estimated CRE value & debt vs. other asset classes***



Source: Estimated by Amherst Capital based on Federal Reserve Z.1 release as of June 9, 2016 and MSCI data as of Q3 2016, SIFMA data as of Q3 2016, and multi-family based on National Multi-family Housing Council and Moody's CPPI as of 2015

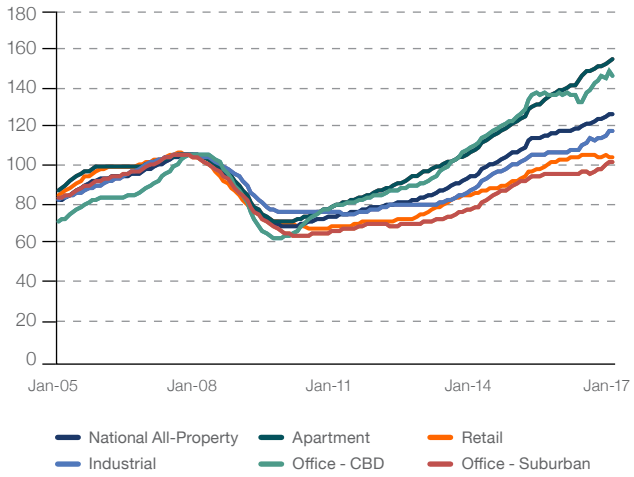
"...the CRE mortgage market stood at $3.7tn in June 2016, roughly a third of the size of the $10tn single-family mortgage market."

1.3 CRE HAS BEEN MARKED BY MULTI-PACED RECOVERY — ACROSS SECTORS/REGIONS/MARKETS

Commercial real estate has recovered in aggregate from the depths of the great recession which began in 2008, and asset prices overall are at all-time highs. The recovery in CRE can be seen through Moody's/RCA CPPI overall price index, which is 23% higher than 2007's peak before the most recent recession (Figure 4). Interestingly, the overall growth in CRE prices has only slightly been driven by rising rental income. REIS data suggests that rents are up 22% in the apartment sector, but are only up 1-2% for the office, retail, and industrial sectors nationally versus 2007 levels. Instead, most CRE price growth has come from compressed capitalization (cap) rates (which measure a property's income relative to its price). Figure 5 highlights that cap rates tightened significantly since their 2010 widest levels.

There is also significant variation in price performance across sectors and regions. In general, major markets (New York, San Francisco, Los Angeles, Boston, Chicago, and Washington, DC as defined by Moody's/RCA) have witnessed a much sharper increase in prices (combined effect of rent growth and cap rate compression) than secondary markets. Across sectors, the largest price growth has been in the apartment and central business district ("CBD") office building sectors. Apartment and CBD office valuations are over 53% and 43% higher, respectively, than the previous peak value in 2007 according to Moody's/RCA CPPI. Similarly, industrial properties also witnessed rising values in recent years, aided by growing demand for distribution centers to power the ecommerce economy. However, retail (particularly outside top tier malls and high end retail) and suburban office sectors lagged the recovery, as structural trends (such as desire to work in cities and less shopping in brick and mortar stores) limited these sectors' ability to recover. These two sectors remain below their 2007 peak prices.

FIGURE 4 *Overall CRE Prices at All-Time Highs*



Source: Moody's, RCA CPPI (Commercial Property Price Indices) data as of January 2017 indexed to November 2007 prices by Amherst Capital Management

Note: Index to 100 = November 2007 prices (the peak for the All-property index). All-property includes office, retail, industrial and multifamily properties

Charts are provided for illustrative purposes and are not indicative of the past or future performance of any product.

FIGURE 5 *Cap Rates at Multi-Year Lows*

Property type	Q4 16	Change from crisis bottom	Changes from pre crisis peak
All properties	6.1%	-1.5%	-0.4%
S&P 500 consumer staples earnings yield	4.4%	-4.1%	-0.5%
Major Metros	5.2%	-1.8%	-0.7%
Non-Major	6.8%	-1.2%	-0.2%
Major Metros: Apartment	4.6%	-1.6%	-0.6%
Major Metros: Retail	5.6%	-1.9%	-0.5%
Major Metros: Office	5.8%	-2.3%	-0.2%
Major Metros: Industrial	6.1%	-2.1%	-0.1%
Non-Major: Apartment	6.8%	-1.4%	-0.1%
Non-Major: Retail	7.0%	-1.7%	0.0%
Non-Major: Office	7.3%	-1.3%	0.0%
Non-Major: Industrial	7.3%	-1.3%	0.0%
Major Metros: Hotel	7.3%	-0.9%	0.5%
Non-Major: Hotel	8.8%	-1.4%	0.3%

Source: RCA, Morgan Stanley, and Bloomberg. Cap rates and Earnings yield as of Jan 2017

Note: Crisis bottom is 2010 and pre-crisis peak is 2006-08 for various sectors.

1.4 NO IMPENDING CORRECTION BUT IT IS MORE LIKELY THIS LATE IN THE CYCLE

This increase in CPPI prices have caused some concern that the market is overvalued, particularly compared to single family housing, which is only 5% above pre-crisis peak, according to the Amherst Home Price Index ("HPI").[1] That said, the trend in CRE prices is no different from other income-producing asset classes such as equity consumer staples, where yields have fallen below pre-crisis levels, driven by low real interest rates in the U.S. market, according to Bloomberg. In other words, the CRE market is not necessarily cheap on an overall basis; but it remains in line with most other asset classes.

In light of that macro backdrop, we believe the CRE market should no longer rely on further rapid improvement in valuations. Do not get us wrong - we are not calling for an impending correction in the CRE market but believe that we are in the late stages of the bull cycle. This is particularly true for gateway markets that have seen meaningful net operating income ("NOI") growth and are trading at ultra-low cap rates. The implication is that investors must pick their spots in the CRE market – we believe first lien debt investments have the potential for better risk adjusted returns than being in an equity position in CRE in the current environment. *In particular, we believe that first lien lending backed by transitional CRE properties is the best way to express that view.*

BOTTOM LINE — While not the largest, the size of the CRE market is nothing to scoff at. In addition, given the point we are at in the current cycle, we believe CRE debt has potential for better risk adjusted returns than equity.

"...we believe the CRE market should no longer rely on further rapid improvement in valuations."

1 Amherst InsightLabs, Amherst Capital Management. Note: Amherst HPI reflects prices through November 2016 as of February 2017.

SECTION II

THE MARKET HEAVILY DISCOUNTS THE LONG TERM EARNING POTENTIAL OF TRANSITIONAL PROPERTIES

Before getting into the details, we first need to define transitional properties. At the risk of being overly simplistic, transitional properties are generally pre-existing properties that are experiencing a temporary interruption in cashflows or not generating income to market potential. It is important to note that no properties are permanently transitional; being in a transitional state in just a part of the natural lifecycle of every CRE property as depicted in Figure 6.

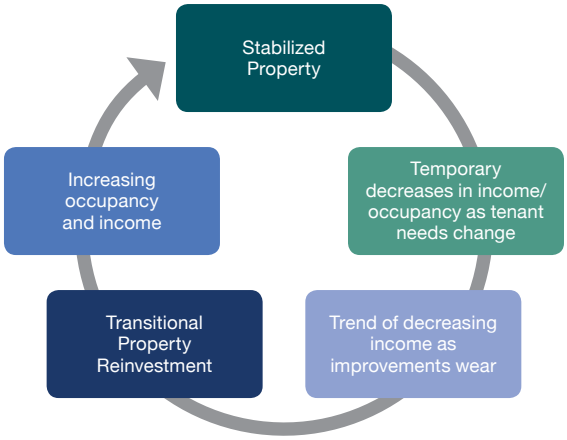
2.1 TRANSITIONAL PROPERTIES ARE A NATURAL OCCURRENCE IN THE CRE LIFECYCLE

After initial construction of a CRE asset and lease-up (if successful) at or around market level occupancy and rents, the market would typically classify the property as stabilized. Properties may remain stabilized for many years as long term tenants stay in the building. During this time however, properties may briefly become transitional as tenant rollover generates drops in income, sometimes necessitating transitional loans. Additionally, as properties age, they can become out-of-date and unable to maintain market rents, resulting in long-term underperformance. Such properties are likely to require significant capital expenditures (CAPEX), necessitating a transitional loan to fund a new business plan. Last but not the least, changes in market conditions may also make a property inefficient relative to current uses for which there's demand. For example, an office building vacated by a long-term tenant may need refurbishing to create a more open floorplan to take advantage of current office demand.

At any point when a property becomes "transitional", it usually requires significant new capital investment to maximize income from the property. Equity investors may call the property "core+", "value-add", or "opportunistic", depending on the amount of equity and occupancy gains needed to stabilize the property and the perceived risk. Debt investors may describe their investment as "transitional" loans or "bridge" loans, and the terms are generally used interchangeably.

Practically speaking, transitional opportunities come in two parts of the CRE lifecycle. One, properties with relatively little needed CAPEX and a temporary decrease in income or a near term lease expiry may

FIGURE 6 ***Lifecycle of CRE Properties***



Source: Amherst Capital Management
For illustrative purposes only

"...when a property becomes 'transitional', it usually requires...new capital investment to maximize income from the property."

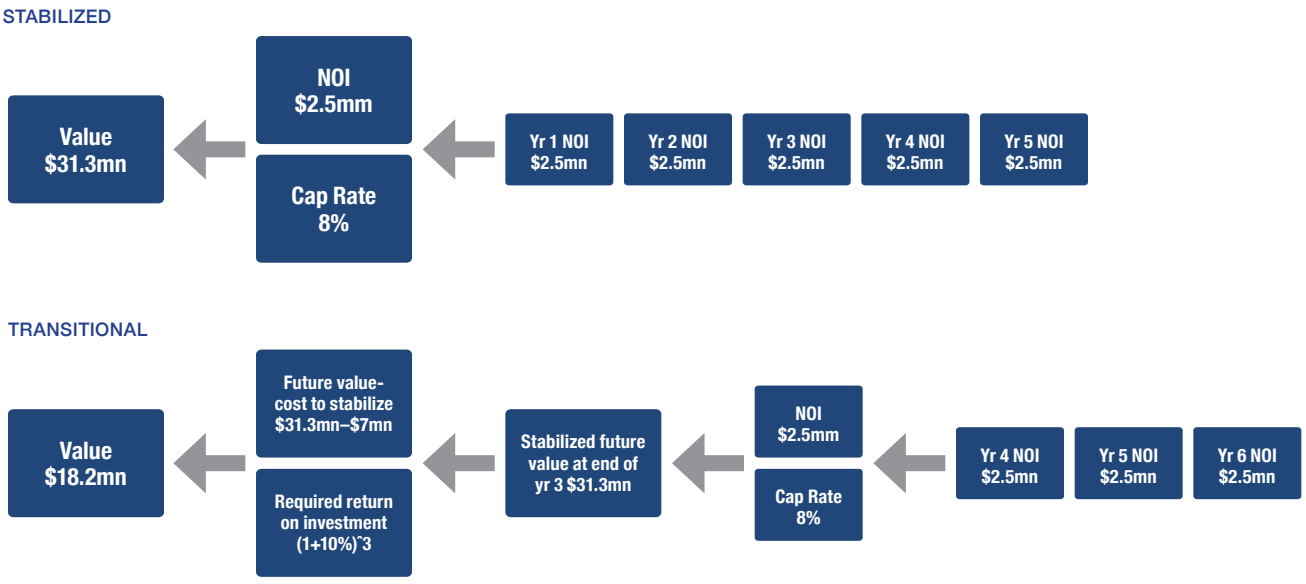
need a transitional loan. These loans are likely to have less capital draws built in as the property is readily marketable. Two, aging buildings which can no longer generate potential income without significant capital (such as refurbishing an office, converting a space, or substantial reconstruction) also frequently need transitional loans. These loans are structured with large draws to fund capital expenditures as needed. The problem is – the market assigns a high likelihood of transitional properties not stabilizing which gets reflected both in the value of the property and the cost of capital used to finance it.

2.2 EQUITY BUYERS PRICE TRANSITIONAL CRE AT STEEP DISCOUNTS

As we mentioned earlier, the market relies heavily on recent historical performance and in-place tenants to value CRE. This focus on recent performance is reflected in valuation metrics used for stabilized and transitional properties. For stabilized properties, the market generally analyzes relative value for a property by treating the year 1 income as a perpetual dividend discounted by a market-implied capitalization rate, similar to a discount dividend model for equities. For example, a property may generate $2.5mn in net operating income ("NOI") and be discounted at an 8% cap rate, which equates to a value of $31.3mn ($2.5mn divided by 8%). As we highlight in Figure 4 earlier, most (stabilized) properties are trading at cap rates of 4.5–8% on a notional basis (which is an implied unlevered return on the property).This valuation method fundamentally assumes that the current net operating income will continue indefinitely (5–10 years or more).

In contrast, for a transitional property buyers require a significantly higher expected unleveraged return of 10–15% on the investment in the property, compared to the 4.5–8% cap rates. These expected returns are valued on the basis of a multi-year stabilization plan which carries execution risk. Additionally, a stabilization plan is likely to require out of pocket cash for CAPEX (such as the $7mn highlighted in Figure 7) which also needs to generate a similar 10–15% return for the equity buyer. The higher required rate of return results in a steep discount to the value of transitional properties and in our opinion, more than compensates the risk of transitional properties not stabilizing or taking longer than expected to stabilize (more on this in Section III). Once stabilized, the property is usually valued using traditional (lower) cap rates, leading to a potentially large jump in value. This gap in valuation levels is particularly pronounced when cap rates are low as they are currently.

FIGURE 7 ***Transitional Properties are Heavily Discounted***

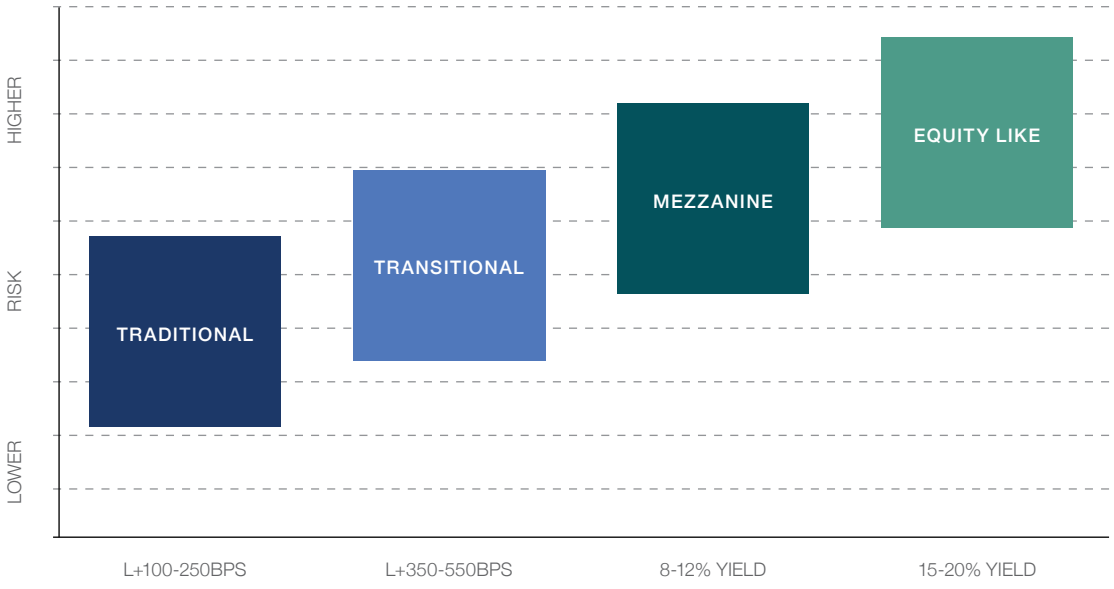


Source: Amherst Capital Management
For illustrative purposes only

2.3 LENDING ON TRANSITIONAL PROPERTIES ALSO FACES DISCOUNTS AND STRONGER COVENANTS

In addition to using heavily discounted property valuations, debt lenders provide lower leverage (relative to stabilized long-term values), often with higher coupons and more stringent covenants on loans for transitional properties as compared to stabilized. Stabilized properties are generally allowed up to 75% loan-to-value (LTV) on their current stabilized value, with little to no discount applied to the cash flow, and it is assumed the current stabilized value will at least remain stable (if not grow) over time. Transitional loans are lent usually up to 75% LTV as well but on the current discounted valuation discussed in Section 2.2. This implies that transitional loans are issued at a significant discount to their expected stabilized value, with loan-to-stabilized value often at 50% or lower. Additionally, transitional properties get shorter terms of usually only up to 5 years, versus 10 years for stabilized properties, and higher coupon rates LIBOR+3.5-5.5%, versus fixed rate spreads of Swaps+225bp or rates of LIBOR+1%-2.5%, based on Amherst Capital estimates. As an added security over stabilized properties, transitional loans generally offer stronger covenants, sometimes with personal or asset guarantees, and funded reserves, to ensure completion of improvements and strongly incentivize borrowers to remain committed to a property.

FIGURE 8 ***Where Transitional Lending Fits into CRE Lending Market***



Source: Amherst Capital Management

Note: Ranges are unlevered estimates based on Q4 2016 markets. L+ indicates LIBOR+.

2.4 LENDERS UNDERESTIMATE DEPRECIATION WHEN VALUING STABILIZED CRE RELATIVE TO TRANSITIONAL

We would argue that not only are lenders overestimating the risk for transitional property loans, they are also underestimating the risk for loans on stabilized properties. Cap rate valuations for stabilized properties fundamentally assume that the current net operating income will continue and grow indefinitely. Valuations are adjusted for expected capital expenditures ("CAPEX") such as physical adjustments to the building, but rarely account for the large, single-time period CAPEX required for re-leasing tenants (unless a tenant rollover is known or expected in the near term). Therefore, a property with a 10-year lease should be lent with the assumption that the value at the end of 10 years will be lower than today, since the property is likely to need a large CAPEX at that time. However, lenders often fail to reserve sufficient funds from ongoing cashflows to pay for re-leasing tenants, which can be substantial. While a borrower will likely fund these capex out of pocket if rents have increased, the borrower will only exercise this reinvestment option if it is in borrower's interest. If the new out-of-pocket investment in the property is not enough to preserve capital and generate a sufficient return, the borrower is likely to try to extract as much cash as possible from the property until the property's outlook improves or the loan defaults.

On the other hand, transitional lenders are seeing CAPEX investments added to the property during the loan term. This implies that the property value is likely to rise during the term, all else equal, as the property approaches its stabilized value. Therefore, even if the equity owner fails to fully stabilize the property to its expectations, the transitional lender may still benefit as the CAPEX is likely to increase the value of the property.

Readers interested in intricacies and details of what we described above may want to look at a real life example in Section 2.5. It merely highlights that stabilized properties can result in large losses for mortgage lenders when an owner does not have an incentive to invest more capital into it and transitional loans can benefit from their lower cost basis, despite facing higher business risk.

BOTTOM LINE — Transitional CRE are a natural occurrence as tenants move, demand changes and properties age. Despite that, we believe the market ignores the long term income generating potential of transitional properties and heavily discounts them. Loans backed by transitional properties have costlier financing and stronger loan covenants, but in our view are not as risky as generally believed versus loans on stabilized properties.

2.5 CASE STUDY — STABILIZED VS. TRANSITIONAL LOAN VALUATION

To understand the sudden drop in valuation when a loan becomes transitional, it is useful to look at the performance of a loan on a stabilized property which became transitional. Here, we look at a suburban office building located at One Campus Drive, Parsippany, NJ.

AT ORIGINATION (2006):

The loan on the stabilized property was originated in 2006 (securitized in CMBS deal BACM 2006-3, as reported in the BACM 2006-3 prospectus) as:

- $80mn loan on a $107mn appraisal, for a 75% loan-to-value (LTV)
- 10-year term, interest only payments, with a balloon payment of $80mn at maturity in 2016
- 7.5-year lease term to a single tenant, for 100% of the building

The 75% loan-to-value implies that the value of the property would have to drop 25% to take a loss, providing a cushion from a potential decline. However, the loan does not take into account the significant capital that may be required to keep or find a new tenant when the current tenant lease expires. Even if rents are unchanged and the tenant renews, the property may need millions of dollars of capital to get a tenant lease renewal, which can be uneconomical for the borrower if rents decline even marginally.

FIVE YEARS INTO THIS 10-YEAR MORTGAGE (2011), OVERLEVERAGED LOAN AND RECESSION CREATE AN EQUITY DILEMMA:

- With two years' lease term remaining, tenant announces they won't renew lease[2]
- Rents declined 29% because of the recession and weakness in suburban New Jersey office space[3]
- Large capital expenditures are needed to secure a new tenant

After the tenant announces its decision to leave, the borrower must decide to commit more capital to the property or let the property fall into foreclosure once the tenant departs. The owner would potentially have to commit as much as $30mn in capital costs and interest out-of-pocket to find a new tenant. However, because rents have fallen, a stabilized property with a new tenant would likely only be worth $66mn, well under-water on the $80mn loan amount (Figure 9). Thus the borrower would only be increasing their losses to reinvest, and will likely allow the loan to fall into foreclosure. In actuality, the borrower for this property was unable to find a new tenant and decided not to invest additional capital in the building at this point.

FIGURE 9 ***Losses on Stabilized Properties are Exacerbated when Becoming Distressed***

	Property Occupancy	Rent (NNN basis)	Cap Rate	Estimated Stabilized Value based on market rent	Estimated Cost to Stabilize	Appraisal value (as is)	Reserves held by trust at lease expiry	Sale Price	Recoveries to lender	Loss to lender
2006	100%	21	6.5%	107,000,000		107,000,000				
2013	0%	15	7.5%	66,164,190	30,000,000	14,700,000	7,274,093	8,350,000	15,624,093	64,375,907

Source: Amherst Capital Management estimates based on BACM 2006-3 remittance reports from trustee Wells Fargo, Costar, as of January 2017

2 Based on BACM 2006-3 remittance reports from trustee Wells Fargo as of Jan 2017
3 Based on Costar rent data as of Q4 2016

BORROWER DEFAULTS ON THE LOAN (2012)

After the tenant left, the initial borrower defaulted and the property was foreclosed upon, placing the lending entity into the owner's seat. However, the lender did not have available the estimated ~$30mn capital needed to stabilize the property as only $7.3mn had been held in reserve from available cash flow before the tenant departed, and consequently put it up for sale. In the actual loan, the borrower handed the keys to the lender in July 2012, according to BACM 2006-3 remittance, and the property was now lender-owned (REO).

ULTIMATE LIQUIDATION LEADS TO SUBSTANTIAL WEALTH DESTRUCTION BECAUSE OF UNFUNDED CAPITAL NEEDS (2013)

- New buyer (owner-occupier) bought the property from the lender for $8.4mn (just 8% of 2006 value)[4]
- Large discount was justified by extensive 2-year renovation project to improve and re-lease the building[5]
- A new transitional loan could be used to fund the purchase and renovation
- We estimate a new owner would be able to sell the property for $65mn or more with a long term lease
- Original lender took $64mn in losses, despite stabilized value change implying original lender losses of only $15mn, because capital expenditures were not properly budgeted in the loan

Ultimately, the actual building was sold for only $8.35mn (which was 8% of the 2006 appraisal) based on BACM 2006-3 remittance reports to a company that would occupy the building[6]. The new owner invested an estimated $30mn in capital over a 2-year period to move into the building including substantial renovations such as LEED certification[7]. The purchase and renovation costs could have been funded by a transitional loan if the buyer was a property investor (rather than an end-user). A potential loan on this property would have benefited from the new CAPEX which would lead to deleverage of a potential transitional loan.

UNDER-BUDGETED CAPEX CAN HURT STABILIZED PROPERTY LOANS WHILE TRANSITIONAL LOANS HAVE INVESTED CAPEX UPSIDE

The liquidation price, combined with recoveries of reserves held when the tenant announced they were leaving, resulted in a $64mn loss to the original lender, compared to a $15mn loss implied by the change in the long term value of the property comp. The failure to account for CAPEX can result in large losses beyond implied changes in long-term value to stabilized lenders, while transitional lenders can benefit from new CAPEX added during the loan term.

4 Based on BACM 2006-3 remittance reports from trustee Wells Fargo as of Jan 2017
5 "Roofing company GAF to move 600 jobs from Wayne to Parsippany", NJ.com, December 3, 2013
6 "Roofing company GAF to move 600 jobs from Wayne to Parsippany", NJ.com, December 3, 2013
7 "CBRE team wins NAIOP Deal of the Year award", REW-online.com, July, 16, 2014

SECTION III

TRANSITIONAL PROPERTIES MAY OUTPERFORM IN OCCUPANCY GAINS

Does the market appropriately assign a much greater risk to transitional properties due to higher risk in performance? To understand this, we compare the performance of transitional properties to stabilized properties.

3.1 USING OCCUPANCY CHANGES AS A PROXY FOR TRANSITIONAL PROPERTY PERFORMANCE

Transitional loans are made on properties with uncertain prospects, in the expectation of new capital invigorating a property. But the success of such strategies is not easy to determine. To proxy for transitional properties, we used Costar data to review performance of CRE properties with suboptimal initial occupancies which we define as below <80% and have the ability to increase income by increasing occupancy. We chose occupancy as a proxy for transitional because of limited data on the income performance of actual transitional CRE, plus the inability to identify transitional properties solely based on rents (which could be due to property quality and location attributes beyond their transitional status). However, because low occupancy is generally a sign of a property in transition, that metric remains a valuable proxy as an indicator of distress. The Costar dataset covers a broad portion of the CRE market, beyond just properties backing loans in the CMBS market, and allows us to view a wide swath across geographies and sectors. We focused on the most recent data from Q4 2011- Q4 2016 to focus on recent performance over a five year period which is a standard investment length for transitional loans. We also looked at data from Q4 2006- Q4 2011 to see performance over the worst of the recession.

Approximating for transitional properties, we broke up CRE data by property type and occupancy level of the property. To ensure we took primarily distressed properties, we focused on properties with an initial occupancy <80%. These underperforming properties capture buildings which experienced significant vacancies and are likely to be in need of transitional funding to stabilize operations and have the potential to increase income by increasing occupancy. We are likely missing some transitional properties that may be operating closer to full occupancy but which face lease rollover or are failing to reach local market rents (such as an out-of-date but near-fully occupied office building) and may be capturing some stabilized properties which may simply operate at lower occupancy rates. On the other hand, we considered properties above 90% to be fully stabilized and properties at 80-90% occupancy to be potential stabilized or transitional.

We did not include buildings with 0% or 100% occupancy in our analysis, as those are often single tenant properties and are not updated as frequently in the Costar dataset. We believe including those would have increased our overall occupancies across all time periods and exhibited similar trends to those presented below.

3.2 DISTRESSED, LOW OCCUPANCY PROPERTIES HAVE SHOWN STRONG IMPROVEMENTS OVER TIME WITH GAINS ACROSS PROPERTY TYPES

While overall occupancy gains have been positive between Q4 2011 and Q4 2016 they were not equally spread across properties with different initial occupancies. In the office market, properties with starting occupancies >90% have generally seen occupancies decline slightly, by 2-5% on average. That's because some properties with full occupancy lose tenants due to tenant rollover, and properties that are already fully occupied cannot improve further. However, large gains were seen in occupancy for office properties with <80% occupancy, with occupancy rising about 44 percentage points for office properties which had starting occupancies 25-40%, and gains of 29 percentage points for offices with a starting occupancy ranging 40-60%, and gains of 13 percentage points for offices with a starting occupancy ranging 60-80%. On the other hand, office properties with starting occupancies ranging 80-90% rose only slightly by 1-3% (Figure 10). These indicate significant turnover in occupancy performance for individual properties, and that low occupancy office buildings did not stay vacant but rather gradually approach market performance during the time period.

The *retail* and *industrial* sectors show similar gains in occupancy for buildings with lower starting occupancies. Retail properties <60% occupied have also shown sharp recoveries in occupancy, similar to those in office. (Figure 11). The gains were even slightly larger than the office sector for properties with 60-80% starting occupancy in Q4 2011, rising 15% percentage points on average occupancy by the end of 2016. Similar gains were seen in the industrial sector which has been aided by an improving economy and trends such as e-commerce which has boosted warehouse demand, in our opinion (Figure 12).

"Occupancies typically improve more in low initial occupancy transitional properties compared to stabilized properties."

FIGURE 10 ***Office occupancy as a function of starting occupancy (Q4 2011–Q4 2016)***

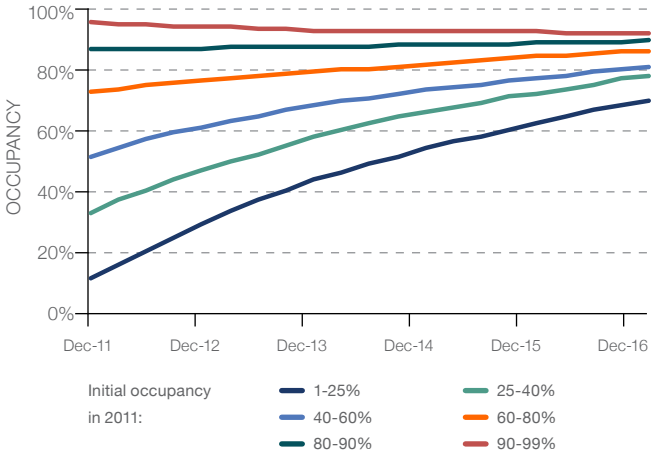


FIGURE 11 ***Retail occupancy as a function of starting occupancy (Q4 2011–Q4 2016)***

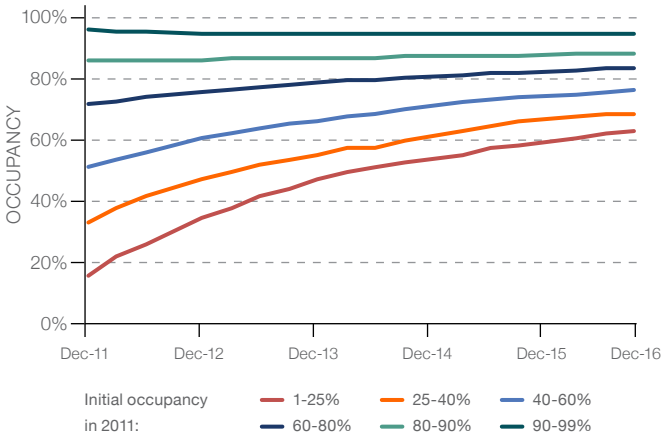
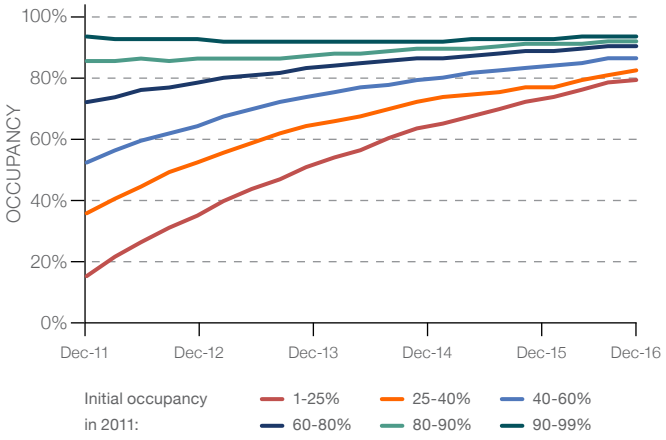


FIGURE 12 ***Industrial occupancy as a function of starting occupancy (Q4 2011–Q4 2016)***



Source: Amherst Capital Management estimates based on aggregation of Costar property data

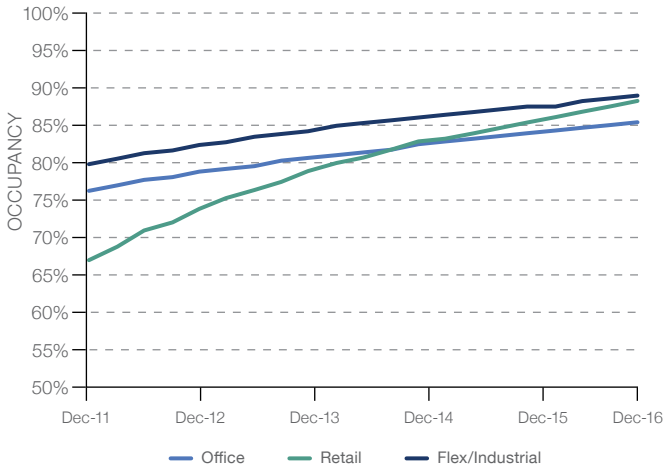
Note: Excludes properties with 0% or 100% initial occupancy in 2011, which are overrepresented by single-tenant properties.

Past performance is no guarantee of future results.

3.3 EVIDENCE OF IMPROVING TRANSITIONAL PERFORMANCE, EVEN IN WEAKENING METROS BY OCCUPANCY

We believe the outperformance in lower occupancy properties from Q4 2011 can be partially attributed to gains in the broader CRE market. Occupancy in the overall CRE market showed steady improvement since 2011. For all sectors, occupancies rose across asset classes through 2016 (Figure 13). Industrial properties had the strongest occupancy gains, while retail and office had steady but slow gains. However, some markets had worsening trends during this time period, which will show us how transitional properties perform in times of stress.

FIGURE 13 ***Overall occupancy trends were strong the past few years (Q4 2011–Q4 2016)***



Source: Amherst Capital Management estimates based on aggregation of Costar property data

Note: Does not include properties with 0% or 100% initial occupancy in 2011, which are overrepresented by single-tenant properties. Using those data points would increase occupancies.

To get a sense of how transitional properties do in times of stress, we divided the CRE universe of office properties into groups based on Costar defined metropolitan areas ("metros") into groups by each metropolitan area's occupancy growth from Q4 2011–Q4 2016. Strong markets were considered to have occupancy growth of >3% since 2011, Moderate markets were considered those with 0-3% improvement in occupancy since 2011, while weak markets showed metro-level occupancy worsening 0-5% since 2011. As expected, leasing gains were worst across stabilized and transitional properties in weak markets. However, considerable outperformance was still demonstrated from low occupancy properties in weak markets. For example, in weak markets, properties which started at 25-40% occupancy in 2011 still rose to 77% occupancy on average by the end of 2016 (Figure 14), almost as much as the rise to 80% occupancy in strong markets. On the other hand, declines in overall occupancy in weak markets were driven by worse performance by stabilized properties (>90% starting occupancy) falling 5 percentage points in weak markets compared to 3 percentage points in strong markets. We believe this highlights that even in weak markets, many partially vacant properties have the ability to increase occupancy even while overall conditions are worsening. The trend is for properties to have occupancies approach the regional mean, even if the mean is declining. This allows for transitional properties to remain viable investments even as stabilized properties become riskier in a declining market. The numbers discussed here are for office properties but we see similar trends for the retail and industrial property types.

FIGURE 14A *In Weak Markets, Low Occupancy Office Buildings Still Show Strong Lease-Ups, While Stabilized Properties Decline*

Tier (Starting Occupancy)	Starting Office Occupancy in Q4 2011	Ending Occupancy in Q4 2016		
		Strong Markets	Moderate Markets	Weak Markets
Tier 1 1-25% occ.	12%	70%	67%	69%
Tier 2 25-40% occ.	33%	80%	73%	77%
Tier 3 40-60% occ.	51%	81%	80%	78%
Tier 4 60-80% occ.	72%	86%	85%	84%
Tier 5 80-90% occ.	85%	89%	88%	86%
Tier 6 90-99% occ.	95%	92%	91%	90%

Source: Amherst Capital Management estimates based on aggregation of Costar property data

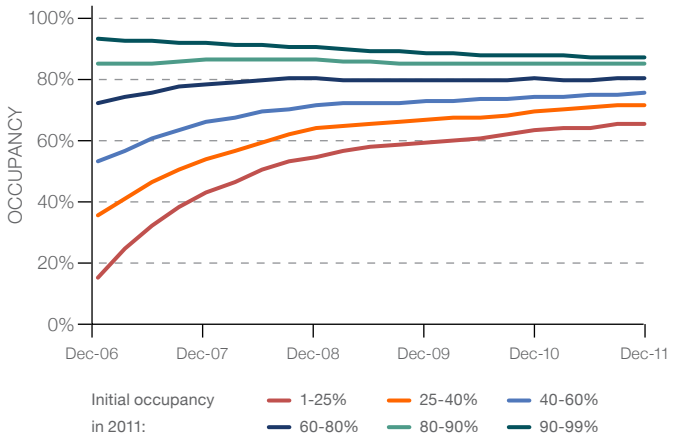
Note: Strong markets had occupancy growth of >3% from Q4 2011–Q4 2016, Moderate markets had occupancy growth of 0-3% from Q4 2011–Q4 2016, and weak markets had occupancy declines <0% from Q4 2011–Q4 2016.

Past performance is no guarantee of future results.

3.4 DISTRIBUTION OF OUTCOMES FOR TRANSITION PROPERTIES HIGHLIGHTS BETTER OCCUPANCY PERFORMANCE VERSUS STABILIZED

Finally, we look at cross-sectional data for the last 5 years to validate results from the analysis for Q4 2006–Q4 2011. In addition to improving in weak markets, we also saw improving performance for transitional properties even during the recession, albeit at a slower rate. There is evidence that the same trend of improvement from low occupancy occurred from Q4 2006– Q4 2011, a period which saw declining metrics as the CRE market went from overheated to a severe recession. Figure 14B highlights that from 2006, office occupancies initially improved very fast for properties starting at 40-60% occupancy (in 2006) rising 20 percentage points from Q4 2006–Q4 2008, and then only rising 5 percentage points as the recession took hold in Q4 2009 to Q4 2011. Similar trends were seen in properties with occupancies below 40%. On the stabilized side, properties starting above 90% showed a decline in overall occupancies close to that seen in the 2011-2016 period falling 6% from 2006 to 2011. We saw similar trends in the retail and industrial sectors as well. The 2006-2011 time period reinforces that even during a recession, declines in occupancy may come from stabilized properties with high occupancy while low occupancy buildings may generally improve overall.

FIGURE 14B ***Improving trends for low occupancy offices even seen during the Q4 2006– Q4 2011 period***



Source: Amherst Capital Management estimates based on aggregation of Costar property data

"...improvement from low occupancy occurred even during the great recession."

Now that we have established that average occupancies are rising for low starting occupancy buildings, the distribution of outcomes is crucial for how valuable this increase is. Figure 15A highlights the distribution of 2016 ending occupancies for office transitional properties with a starting occupancy of 25-40%. The majority of these office properties showed significant improvement, with 70% of properties reaching 80% or higher occupancy, while only 5% of properties had occupancy fall <25%. Figure 15B shows that while most stabilized properties continued to perform well, even during the steady recovery of Q4 2011 to Q4 2016, a sizeable 12% had have a significant drop (to below 80%) in occupancy due to idiosyncratic risks such as tenant rollover, property deterioration, or new competition, despite overall gains in occupancy.

BOTTOM LINE — Transitional properties with low occupancy have showed clear signs of improvement over time, in both stronger and weaker performing market environments. In contrast, a sizeable portion of stabilized properties fall into transitional status.

FIGURE 15A ***Outcomes — 25–40% starting occupancy office buildings***

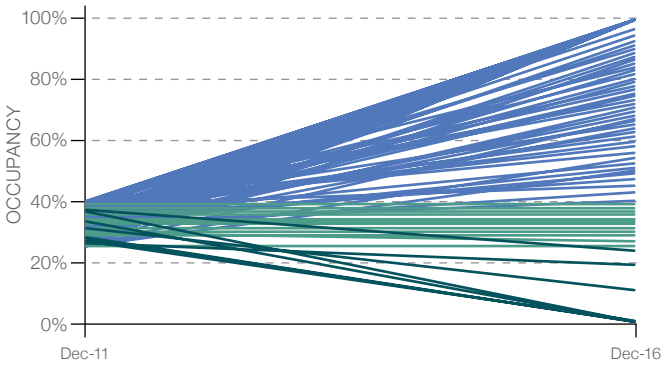
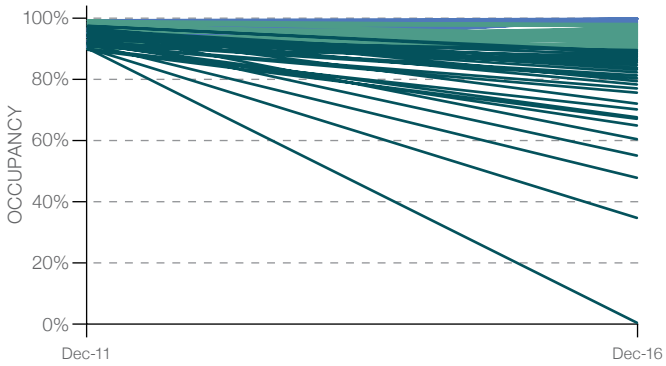


FIGURE 15B ***Outcomes — 90–99% starting occupancy office buildings***



Source: Amherst Capital Management estimates based on aggregation of Costar property data

Note: Only starting and ending occupancies are shown, not the path of occupancy change over the period. Representative 100 paths shown from dataset.

SECTION IV

OCCUPANCY GAINS JUSTIFY PRICE IMPROVEMENTS IN EXCESS OF MARKET EXPECTATION

While there's evidence that transitional properties with low occupancy have outsized occupancy gains, it's not yet clear if this represents an investment opportunity. Some credit is clearly given to recovery value as transitional properties are not valued at zero. However, due to the valuation premium for stabilized properties, transitional properties have the ability to see large gains in value for changes in occupancy. That may bode well for transitional loans, which can benefit from stabilization even if rents are below expectations.

4.1 JUMPING FROM A TRANSITIONAL VALUATION TO A STABILIZED CAP RATE VALUATION DELIVERS LARGE GAINS

One would generally expect a property to rise in value as occupancy rises, all else equal. However, tracking that can be difficult on an aggregate basis, as limited sales data often does not reflect occupancy or stabilized value. Additionally, metrics like price per square foot are likely to be capturing idiosyncratic differences between properties, such as location within the metro area, as much as actual performance. Additionally, even if a property is vacant or nearly vacant, that does not imply the property is worthless. Instead it will usually be valued on a replacement costs basis, expectations of the ability to fill the vacancy, and the cost to do so. Data on capital spent on stabilizing transitional properties are also unavailable on a systematic basis.

To estimate the impact of rising occupancy on prices, we estimated values for properties in our dataset (office, retail, and industrial) from 2011 to 2016 keeping rents constant at Q4 2011 metropolitan level rents and kept cap rates constant, while assuming a fixed expense ratio. Additionally, we kept cap rates unchanged at Q4 2011 levels. This allows us to estimate the gains in property price due to gains in occupancy separate from gains in value due to rising rents and compressing cap rates (which benefited all property valuations from 2011 through 2016). To estimate value for individual properties, we valued each as a fully occupied building based on cap rates, then valued it as vacant using a per square foot valuation relative to the potential rent of the building. We weighted these two valuations by building occupancy. For the sample office building in Figure 16, we looked at property value at a fully occupied rate with a 7.6% cap rate, versus a vacant value of 3X the potential rent per square foot. Using such metrics, the vacant value of this property is $0.75mn and the fully occupied value is $2.0mn, as the property can rise significantly in value when moving from vacant to fully occupied. Note that a vacant property would also likely need additional capital beyond its purchase value to return to a full occupancy value. These potential valuations are somewhat theoretical, but provide a useful approximation for how values can change in an amplified or levered fashion due to occupancy changes.

FIGURE 16 ***Estimating value for a sample CRE property***

Unit	Calculation	Sample office values
Square Feet		10,000
MSA Rent	Estimated based on MSA and property type	$25 psf
Potential Revenue	Rent * Sq ft	$250,000
Expenses (40%)	Assumed 40%	$100,000
Variable Expenses	Assumed 67% of expenses	$67,000
Fixed Expenses	Assumed 33% of expenses	$33,000
Full occupancy NOI	Potential revenue - expenses	$150,000
Fully occupied value	Full occupancy NOI / cap rate (7.4%)	$1,986,079
Vacant Value	3x multiple of rent psf * sf = $75 psf	$750,000
Current occupancy		25%
Value	Blended value of vacant/occupied value weighted by current occupancy	$871,520

Source: CoStar, Amherst Capital Management

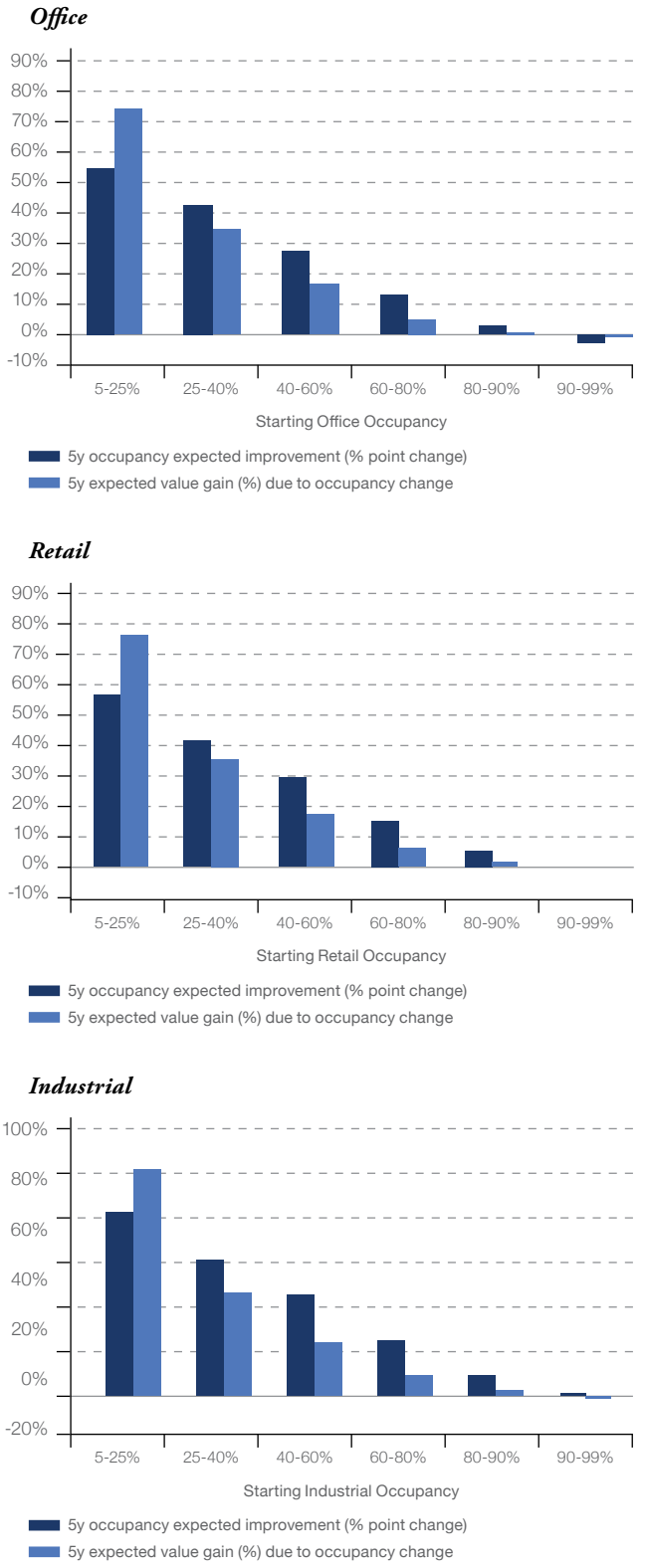
For illustrative purposes only.

4.2 IMPROVING PERFORMANCE MAY INCREASE VALUATION GAINS FOR TRANSITIONAL PROPERTIES, EVEN BEYOND GAINS DUE TO CAP RATE COMPRESSION AND RENT INCREASES

Using the methodology above of estimating prices based on occupancy, we can estimate the gain in value as occupancy increased across property types (office, retail, industrial for which we have data) from Q4 2011 through Q4 2016. As shown in Figure 17, based on our estimated valuations there was a substantial gain in value for transitional properties based on occupancy gains, with properties starting at 5-25% in occupancy rising about 75-85% in value, and properties which started at 25-40% occupancy had 35-40% valuation gains based solely on rising occupancies (depending on property type). Note that these estimated value gains are on top of rent increases and cap rate compression, both of which have helped raise prices for all properties during the analysis time period. Generally - for office, retail and industrial properties, occupancy gains were consistent, with large estimated value gains for low initial occupancy properties. Occupancy gains resulted in smaller price gains for properties that were closer to being full, while for nearly full properties, the expected reversion to mean for fully occupied buildings did push expected prices slightly lower. However, with gains in rents and compressed cap rates, in aggregate all categories of CRE properties increased in value between Q4 2011 through Q4 2016.

The extra increase in prices for transitional properties with low initial occupancies comes with the caveat that it is likely that additional capital was required to increase the value. Unfortunately, the data does not include capital expenditures to estimate exact return on investments. However, for the transitional CRE lender the gains in value will help performance regardless of whether the equity holders meet their expected returns.

FIGURE 17 *Theoretical (cap rate neutral) price gains based on starting occupancy (Q4 2011–Q4 2016)*



Source: Amherst Capital Management estimates based on aggregation of Costar property data.

Past performance is no guarantee of future results.

4.3 OCCUPANCY GAINS MAY HELP TRANSITIONAL LOAN PERFORMANCE (AS THOSE LOANS ARE TYPICALLY LESS LEVERED)

Using these occupancy gains and estimated values, we can extrapolate how they would affect LTVs on transitional vs. stabilized properties. For a 60% LTV transitional loan on a 40% occupied property, we estimate the expected occupancy gains would reduce LTV to 51% over 5 years. For a stabilized 95% occupied building, reversion to mean occupancies would lead to an expected 4% decline in occupancy, thus raising LTV to 62%. While we believe both such loans would likely benefit from rent gains, the stabilized property faces a small risk from its ability to lose tenants, while the transitional property has more upside potential. One additional risk for transitional properties is that the dispersion of occupancies five years out is wider (see Figure 15a in Section III), which makes the final valuation more variable. However, not all low occupancy buildings receive capital investments and we believe properties with new capital investments backed by transitional loans have a higher chance of achieving improved performance.

BOTTOM LINE — Our analysis shows outsized potential value gains for transitional properties as a result of improving occupancies. These value gains are beneficial to the transitional property lender, whose loans deleverage as a result of these gains.

"...the stabilized property faces a small risk from its ability to lose tenants, while the transitional property has more upside potential."

SECTION V

POTENTIAL FOR ATTRACTIVE RISK-ADJUSTED RETURNS IN A NICHE MARKET

We make the case that transitional CRE lending has the potential for attractive risk-reward versus other opportunities. We estimate the issuance size of the transitional CRE market at about $50bn annualized for the last few years, which could rise in coming years due to more highly leveraged loans maturing.

5.1 TRANSITIONAL DEBT OFFERS ATTRACTIVE RISK-ADJUSTED RETURNS IN CURRENT ENVIRONMENT

After highlighting the potential investment opportunity in transitional CRE, it's important to consider risk-reward. We see the risks of the current macro environment pointing us to favor debt rather than equity investments in the transitional CRE sector.

We believe the lengthy run-up in prices after the recent recession means that equity investments will require perfect execution. We also believe equity and mezzanine loans may be able to achieve double digit spreads, but are very sensitive to market conditions. Equity transactions may not be able to meet expected returns if cap rates widen or if a transitional property is unable to realize expected rents, and can no longer count on a rapidly recovering market as seen from 2011-2016 (see Section I). While returns are lower for transitional lending (at about LIBOR+3.5-5.5%), we believe risk is lower at lower LTVs plus they have the ability to absorb some market shock. For example, even if rents fall, a low rent paying tenant can still be used to stabilize a property enough so a lender does not take a loss. However, transitional lending is still exposed to a severe downturn scenario, when tenants may be difficult to find even at reduced rents. That said, we believe low leverage and a capital-committed equity holder, lessen the downside risk on transitional property lending.

An additional comparison for transitional CRE loans is relative to stabilized CRE loans and to corporate debt in terms of loan characteristics. Some corporate loans are typically unsecured, but are generally at lower LTVs implied by the market value of the equity. As such, spreads tend to be lower, with even BB rated bonds having a spread of about 250-300bp according to Barclays, versus 350-550bp for transitional CRE loans (based on potential loan opportunities seen by Amherst Capital Management). Adjusting for credit costs, we believe the spread offered by transitional loans is much higher than for corporate BBs and stabilized properties (Figure 18).

To increase potential returns, transitional CRE loans can also be leveraged up to 65-70% using either warehouse financing and/or securitization at around LIBOR+2.0% (based on observed market conditions). This amount of leverage can increase yields to the high single digit to low double digit range, but with the potential for higher losses in a stress scenario.

5.2 TRANSITIONAL LENDING MAY PROVIDE UPSIDE IN CURRENT LOW-NOI GROWTH/FLAT CAP RATE ENVIRONMENT

Ultimately, we believe the transitional CRE market has the ability to provide an attractive investment opportunity in the current environment, particularly as value growth driven primarily by lower cap rates slows, replaced by steady gains in rents and occupancies driving value. Transitional properties have shown strong evidence of improving property occupancy performance the past few years, even while overall improvement has been relatively modest. With lower risk than the market is pricing in, transitional lending has the ability to provide attractive relative returns in a market which is still growing slowly but steadily, and is no longer cheap. In our view transitional lending also benefits from budgeting to include large capital expenditures, which otherwise can be underestimated for stabilized CRE properties where the focus is on in-place NOI-based valuations.

FIGURE 18 ***Relative Value — CRE Debt & Corporates***

METRIC	Transitional	Stabilized CRE Loans	Corporate Debt A/BBB	Corporate Debt BB
Underlying Asset Valuation Method	Deeply discounted odds of stabilization	Cap rate on in-place rents	Equity Market Value plus Debt Notional	Equity Market Value plus Debt Notional
Leverage	65% LTC 50% LT as stabilized value	70% LTV	Estimated 30-45% LTV to Market Equity Value 40-60% to Book Value	Estimated 40-55% LTV to Market Equity Value 50-75% to Book Value
Term	3-5yr floating	5/7/10yr fixed	5/10/15 yr Fixed	5/10/15 yr Fixed
Spread	+350 to 550	225	Single A 75-100/ BBB 125-150	250-300bp
Non Financial EOD	Liquidity, milestones	None	Typically none	Typically none
Sponsor Cash Equity	30+%	Often unknown	Often backed by future cash flows rather than hard assets	Often backed by future cash flows rather than hard assets
Approximate Annual Credit Option Cost	30-70bps	~15-20 bps	~7bps for Single A, 19 bps for BBB (historical)	94bps (historical)
Alpha (Credit OAS)	+320bps	+210bps	~68bps for Single A, ~121bps for BBB	~221bp for BB

Source: Amherst Capital Management, JPM, Towers Watson, and Barclays as of Q4 2016

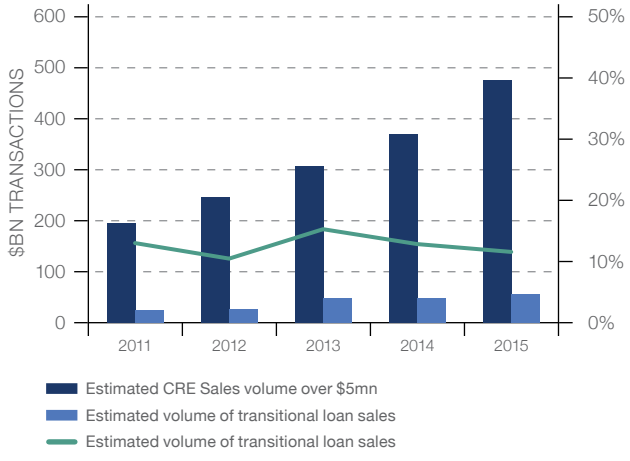
5.3 WE ESTIMATE $35–55BN/YEAR OF TRANSITIONAL LOAN DEMAND ON AVERAGE OVER 2011–2015

We've established the investment opportunity in transitional CRE lending, so it is now important to gauge market size. Using data from Real Capital Analytics ("RCA"), the Mortgage Banker's Association ("MBA") and Costar, we estimate a sizeable $50bn/year origination market for transitional loans as we detail in the next paragraph. With enough size to invest, we believe the niche market has the ability to provide an attractive risk-adjusted return in the current economic environment.

Of course, estimating the transitional property and loan market remains an inexact science; we can't properly identify transitional loans due to limitations in transaction and refinance data. To best estimate the transitional loan market size, we first looked at RCA transaction volume from 2011 through 2015 on properties exceeding $5mn (which steadily rose, from $197bn in 2011 to $478bn in 2015, based on our adjustments to account for smaller than $5mn sales). As a reasonable proxy for transitional loans we used Costar tenant occupancy data to estimate the percentage of sales where occupancy was <80%. This combination yielded $26bn in transitional property transactions in 2011, which rose to $48bn in 2014 and hit $56bn in 2015. Note that while transitional property transactions declined slightly as a share of recent sales as the CRE market improved, the size of transitional loan transactions grew as rising market confidence fueled transitional property plays (there were more opportunities to fix old properties and bring them up to rising market rents).

From this estimate of transitional property transactions, we went on to estimate the amount of acquisition transitional loans.[8] We pegged 80% of transitional purchases as using financing, and the average LTV of first liens at ~65% using RCA data, with roughly 5% average additional leverage for 2nd lien/mezz loans (and to account for higher leverage on transitional properties). We then performed the same analysis on refinances, using MBA mortgage origination volume net of estimated purchase transactions. Putting it all together — we estimate transitional lending as having grown from $21bn in 2011 to $51bn in 2015. We expect transitional loan demand to remain strong due to the ongoing maturity wave from overleveraged CMBS loans, and because we anticipate the CRE market should create opportunities for new capital to be rewarded with higher rents in older buildings, discussed below.

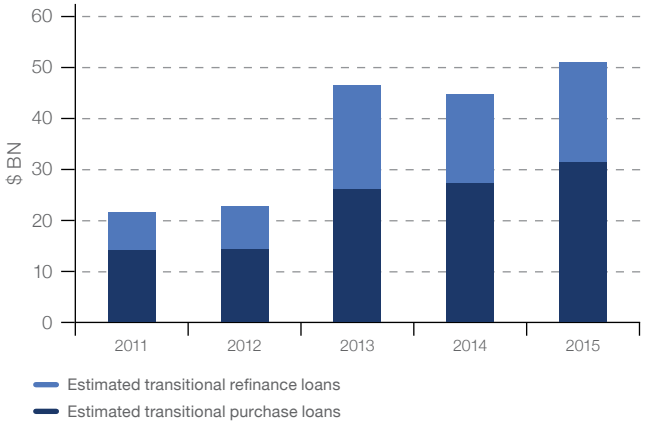
FIGURE 19 ***Transitional Properties Remain a Sizeable Percentage of Sales, Even as Economy Recovers***



Source: Amherst Capital Management estimates based on RCA volume data and Costar performance data

Note: Costar data as of Q1 2016. RCA data as of Jan 2017

FIGURE 20 ***Estimated Size of Transitional Loan Market is ~$50bn, and Growing***



Source: Amherst Capital Management estimates based on RCA volume data and Costar performance data

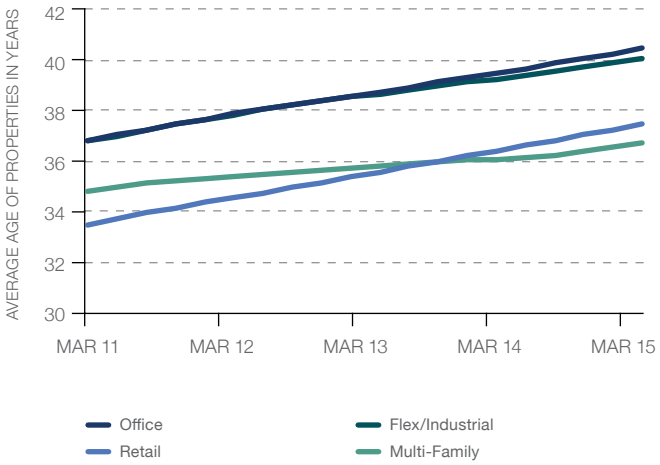
Note: Costar data as of Q1 2016. RCA data as of Jan 2017

8 Acquisition transitional loans — acquisitions are the purchases of properties; these are loans financing these purchases.

5.4 AGING CRE STOCK PROVIDES NATURAL DEMAND FOR TRANSITIONAL LENDING

We believe another factor likely to spur demand for transitional lending is the aging inventory of CRE. Figure 21 highlights that office, retail and industrial properties are steadily aging due to limited new construction. According to Costar data, the average retail and office property is now 35+ years old as of Q4 2016. The only exception is in the multi-family space, where a large amount of new supply is maintaining average apartment age at a relatively constant level. Older properties are likely to need new capital to bring buildings up to modern standards (such as more open workspaces for offices, infrastructure for advanced telecommunications and modernized utilities) that can require significant capital. Traditionally, such improvements and investments are made when tenant rollover has reduced property income. That often creates demand for transitional lending.

FIGURE 21 ***CRE stock is aging outside of multi-family (2011–2016)***



Source: Amherst Capital Management estimates based on Costar data as of Q1 2016.
Note: Weighted by square footage.

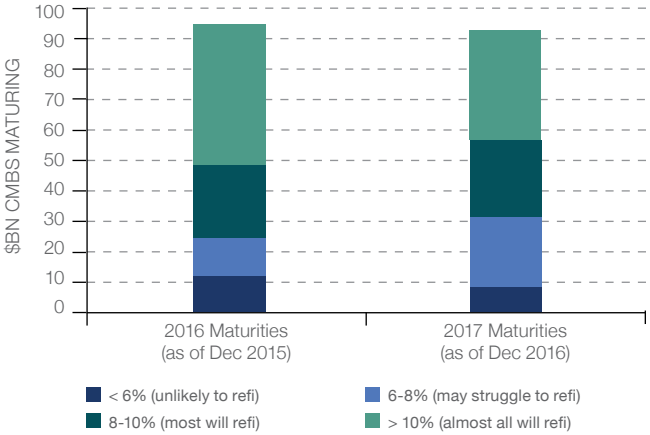
"...the average retail and office property is now 35+ years old..."

5.5 TRANSITIONAL LOANS DEMAND TO BE SUPPORTED BY RECENT CMBS MATURITIES

We expect demand for transitional loans to be supported in the medium term by properties backed by CMBS loans which matured or are maturing in 2015-2017. Overleveraged CMBS properties lent to in 2005-2007 (with little amortization due to aggressive lending) have faced large balloon maturities. We believe these loan maturities may lead to transitional loan demand in both the near term and for several years after they mature. This is because some sponsors will use transitional loans to refinance while others will take several years to be liquidated and eventually be purchased by new sponsors, often using transitional lending. For example, $23bn in primarily ten-year term loans from the 2004-2006 CMBS vintages remain outstanding (CMBS Credit Monthly, December 2016, JPM, Trepp), most of which are in special servicing and have maturity defaulted. Properties backing these loans may also need CAPEX as there was little income or incentive to reinvest capital in the overleveraged assets. Sponsors of these distressed properties frequently turn to the transitional loan market to fund upgrades.

We believe this supply from CMBS maturities will likely continue for the next few years. In addition to the $23bn above, another $93bn is maturing in 2017, mostly from the 2007 CMBS vintage (CMBS Credit Monthly, December 2016, JPM, Trepp). Some of those loans have barely managed to perform, with estimated debt yields (the ratio of NOI to loan balance) under 8%, a level at which many properties find it difficult to refinance in the current environment. We estimate that 34% of loans maturing in 2017 have less than an 8% debt yield and may struggle to conventionally refinance, particularly if lending rates increase. That could generate an additional $20-30bn in potential demand for transitional lending spread over the next 1-4 years.

FIGURE 22 ***Weaker CMBS Maturing Loans Will Need Transitional Lending***



Source: Morgan Stanley , JPM, Trepp as of December 2016

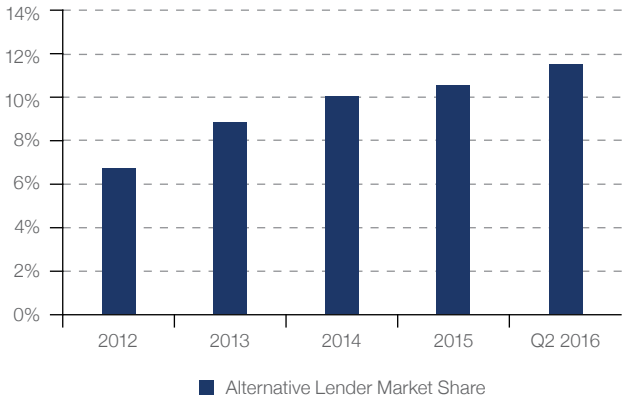
5.6 POTENTIAL REGULATORY CHANGES ADD SOME UNCERTAINTY TO TRANSITIONAL LOAN DEMAND

We believe regulations have helped transitional CRE lending in the past few years, but they are both a potential positive and negative going forward. CMBS risk retention came into effect in 2017. This requires issuers or B-piece investors (first-loss below investment grade investors) to invest in 5% of the market value of the transaction, which significantly raises costs. Issuers or B-piece investors hold these risk-retention slices on their own books, and this is one reason (among others) we have seen signs of underwriting improving on CMBS deals, such as lower LTVs. Another factor in transitional lending availability (particularly from non-bank sources) is bank lending. CMBS net issuance has been negative in recent years, and commercial banks have been increasing their share of lending. But the banks are falling under increasing capital requirements from Basel III, liquidity requirements, and higher capital for high-volatility CRE loans. Plus, regulators have voiced concern on growing bank CRE loan books. The October 2016 Federal Reserve Loan Officer's Survey indicates that a net 19% of banks are reporting tighter lending conditions. We believe these factors are already leading to an increase in lending from alternative lending sources, which have shown signs of increasing their market share from 2012 through Q2 2016 (Figure 23).

While we believe these new regulations have helped non-bank transitional lenders, it is unclear how much of these regulations will be scaled back as a result of the 2016 presidential election. Looser lending standards for CMBS and banks could lessen some of the surge in demand expected for next year as borrowers find it easier to refinance via the conduit or bank markets without transitional loan terms. However, even with the change, we believe the natural demand for transitional loans will remain for properties with unstable cash flows and capital needs and we expect alternative lenders to continue to provide a growing share of this market.

BOTTOM LINE — We believe the transitional loan market has the ability to provide attractive risk adjusted returns relative to other fixed income investments, and is an attractive niche market to invest in.

FIGURE 23 ***Signs That Alternative Lending is Increasing***



Source: RCA, Morgan Stanley, as of October 2016

Note: Alternative Lender is defined as Financial and other lenders, compared to CMBS, gov't agencies, insurance, and bank lending.

"...we believe the natural demand for transitional loans will remain strong and the share of alternative lenders will continue to go up."

SECTION VI

SUCCESSFUL EXECUTION REQUIRES EXPERIENCED REAL ESTATE TEAM

We believe the opportunity in CRE lending has the ability to provide attractive returns. However, unlike public debt investments, a sophisticated team with real estate experience is needed. Ground work, data analysis, and due diligence are required to analyze each property, the market where it is located, and the sponsor, to determine if the investment is suitable.

6.1 TRANSITIONAL CRE LENDING REQUIRES UNDERWRITING AND STRUCTURING TAILORED TO INDIVIDUAL PROPERTY BUSINESS PLAN

We believe lending on CRE loans takes more underwriting than lending on stabilized properties to account for both the higher risk and the unique business plan for each property. Underwriting both stabilized and transitional CRE loans require analyzing a property's current and expected performance metrics such as LTV and debt service coverage ratio ("DSCR") and also analyzing the sponsor to make sure they are discouraged from "bad behavior." For example, one common covenant is personal liability for the sponsor to discourage the borrowing entity from filing for bankruptcy, which can cause a property to languish for years in court and lose significant value. However, transitional CRE properties require additional analysis of the sponsor's business plan to ensure that the plan is viable both relative to the market and the sponsor's available funds. For instance, a borrower's expected rents once a property is stabilized must match expectations for the entire market, and renovation costs need to be in line with actual costs seen on other projects. A detailed breakdown of the underwriting required for a CRE loan can be seen in Figure 24.

In addition to probing the viability of a business plan as part of transitional loan underwriting, we feel a transitional loan needs to be structured to properly ensure that a business plan is followed. These structures include detailed, loan-specific conditions at origination such as reserves for interest payments on the loan (which are commonly needed since property cash flows for transitional loans may not support the debt service). Furthermore, structuring is required for managing the loan while the business plan is executed during the loan term, such as permitted draws for more proceeds from the lender designed around anticipated property

FIGURE 24 ***Underwriting Needed to Make a CRE Loan***

Sponsor	• Ensuring sponsors are credible partners • Have the capital to complete business plan
Operator	• Experienced in the management of asset type and market expertise • Preferable to have solid track record and experience in executing in transitional asset business plans
Business Plan	• Assess viability of sponsor's business plan and factor in the risk based on sponsor's history
Markets	• Thorough review of property market and submarket dynamics, including: rental rates, occupancy rates, stability of demand drivers, historic and projected absorption and new supply dynamic • Review and analysis of 3rd party market research and market participants
Asset Diligence	• Analysis of property including on-site evaluation, tenant analysis, 3rd party valuation of collateral, and 3rd party analysis of property physical and environmental conditions
Deal Structure	• Loan structures may include business plan milestones, operational covenants, cash management, and other credit enhancements.

Source: Amherst Capital Management

capital expenditures or reserve releases to the sponsor if it is successful in its stabilization plan. Finally, the loan needs to have maturity extension options to handle potential delays to the stabilization or exit plan of the sponsor, with the number and the cost/metrics of extensions determined at origination.

These features need to be negotiated individually for each loan while transacting with sophisticated sponsors. Lenders must also ensure that the sponsor has an adequate cash equity incentive in the property to avoid strategic default (as detailed in the example earlier in Section II). While we believe the transitional CRE loan market is attractive, the detailed, custom underwriting and structuring required for this sector cannot be effectively handled simply by having a couple traders in an office, but rather requires significant real estate experience to underwrite the loans directly as part of the investment process.

6.2 TOP-TO-BOTTOM PROCESS NEEDED TO MANAGE CREDIT RISK AND AVOID MORAL HAZARD

Besides the thorough underwriting and loan structuring needed, the lending platform construction is important for investing. In a typical CMBS conduit lending platform (particularly pre-2009), the original underwriter and lender's business plan is to sell the mortgage to a separate investor through the CMBS platform. This focuses the initial lender on short-term property performance until a loan can be sold rather than a long term-term total return. That can create incentives for the initial lender to provide weak covenants or overvalue a property which faces lease expirations during the mortgage term or near loan maturity; that, in turn, may be difficult for secondary investors in a CMBS transaction to properly discount. However, a structure where the original lender retains all or a portion of the mortgage can help incentivize that lender to focus on value for the entire life of the loan. This can reduce the incentives to 'flip' mortgages (which set the stage for large losses in the post-2008 recession).

6.3 DATA ANALYSIS AND MODELING CAN ADD VALUE TO THE LENDING PROCESS

Besides fundamental loan underwriting, loan and property level data underwriting can provide an additional analysis to find better transitional loan opportunities and to price them accordingly. This extra layer adds to, but does not replace, the fundamental credit work described above. Additionally, modeling can help price the risk of various potential loans on a single property and across properties. For more details on an option-adjusted spread ("OAS") based approach to price risk, see Section VII.

BOTTOM LINE — Understanding the risk-reward is not enough to successfully execute a transitional CRE lending strategy. To invest in the market it is crucial to have a sophisticated real estate team on the ground with significant experience in evaluating business plans and sponsors, plus having knowledge of local property markets.

"...transitional lending cannot be effectively handled by having a couple traders in an office, but rather requires significant real estate underwriting experience."

SECTION VII

ANNEX: QUANTITATIVE APPROACH CAN AID CRE INVESTING

While lending in the space still requires significant legwork with property and local market level fundamental research, we believe the use of quantitative analytics can in many instances, help better price the risks associated with CRE lending. Below, we describe an OAS based model framework for analyzing CRE loans, including transitional properties.

7.1 ONLY SOME CRE RISKS CAN BE MODELED QUANTITATIVELY

CRE loan risks can be split into business, value, and refinancing. Business risk is that of executing the equity sponsor's plan for a property. Transitional properties face higher business risk due to the need for successful implementation of a property stabilization plan, compared to a property already being stabilized. This risk must be analyzed manually as described in the process in Section VI. Value risk is a bit lower for CRE loans on transitional properties, as properties start at low distressed valuations compared to stabilized properties whose appraisals are dependent on low cap rates (as be we discussed in Section IV). This risk can be analyzed quantitatively based on historical default and loss performance. Lastly, refinancing risk is present in both stabilized and transitional CRE loans, as higher rates or tighter lending conditions could make paying off a balloon payment difficult. However, this risk is somewhat mitigated by extension options which give a borrower some flexibility to refinance when markets are attractive. This risk can also be quantitatively analyzed based on historical interest rate and lending environments.

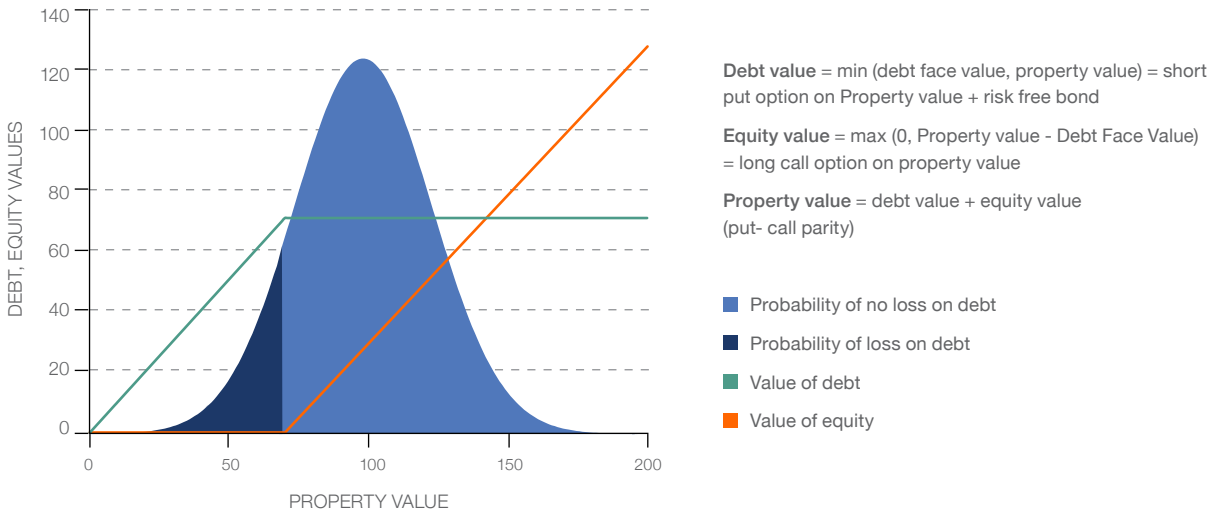
"CRE loan risks can be split into business, refinancing, and value risk."

7.2 CRE LOANS INCLUDE A BUILT-IN OPTION FOR THE BORROWER TO DEFAULT

Underwriting transitional loans on CRE properties remains more of an art than a science for most, despite more data being available on transitional loan performance. Lenders have customarily focused on fundamental analysis. That has included in depth look at the sponsor and borrowing entity, the experience and business plan of the operator, and local economic conditions and nearby properties. These factors remain crucial and important in evaluating sector risk, but can overlook broader risks to the economy and borrower conditions which can lead to a default for a CRE loan even when thorough underwriting is conducted.

For both stabilized and transitional properties, we believe lenders must take into account the implicit default option available to the borrower. Figure 25 highlights how equity in a CRE property can be viewed as being long an option for which the CRE lender is short. That's because the borrower can walk away from the property once the equity has fallen below zero and the loan defaults. This can particularly be a problem for stabilized properties as a property's income may be large for many years, which allows a borrower to cash-out of the property until significant new capital is required to maintain income. This default option becomes easier for the borrower if they have already received or recovered a substantial portion of their equity. We believe transitional lending has the ability to mitigate this risk to some degree by lending on a cost basis, often requiring committed capital improvements to be done to a property via strong covenants. However, transitional lending is subject to execution risk of the borrower's stabilization plan. Once this underwriting is accounted for, quantitative analysis can begin to model this default option for the borrower.

FIGURE 25 ***Lender is short a put on the building***



Source: Amherst Capital Management
For illustrative purposes only

7.3 ADDING QUANTITATIVE OPTION ANALYSIS TO CRE LENDING

To add more quantitative analysis to CRE lending, it's useful to look beyond fundamental analysis (such as sponsor/borrower, tenants, and property conditions discussed in Section VI) to analyze expected return using historical data. Unfortunately, transitional loan data is limited. CMBS data, while not a perfect analogy for transitional CRE loans, can be used to calibrate performance of loans using the history of the sector over the recent 2007 stress period. To properly account for the borrower's option cost in a loan, we propose a model using CMBS data to estimate a credit option-adjusted spread to prevailing interest rates implied by the loans. This credit-OAS can be viewed as the implied spread return the loan earns minus the option cost for borrower default. The credit OAS is based on the coupon charged, the characteristics of the mortgage such as LTV and DSCR, and the location and property type of the loan. Note this model is one example method to estimate credit risk, and other methods of modeling can be used to estimate credit risk.

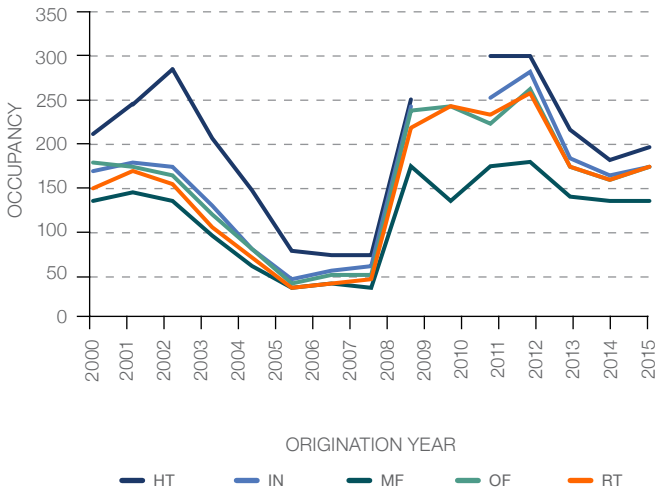
"Credit-OAS can be viewed as the implied spread return the loan earns after adjusting for default risk."

7.4 MODEL CALIBRATED TO BORROWER DEFAULT DECISION AND LENDER'S RATE DECISIONS

The credit OAS model we propose is based on a two-step calibration. First, the model calibrates a borrower's decision, which is at what LTV the borrower will exercise their default option. Note that this is not strictly 100 LTV because a borrower with a higher DSCR may not default when a loan exceeds 100 LTV, since the borrower can still earn money from the property, and because of other factors such as location and borrower expectations. The model then uses implied severities from historical data and estimates fixed and variable costs at default. That second calibration consists of determining the lender decision, knowing when the borrower will default, and how much the lender will charge (in terms of coupon rate) on each loan (assuming par pricing). This produces an implied volatility of property prices by property type and location that is fit to CMBS by pricing each loan as close to par as possible. The resulting implied volatility can be used to price new loans with embedded credit options, and arrive at an OAS using a simulation approach.

To highlight how the OAS fitting is applied to CMBS, Figure 26 highlights relative OAS for CMBS loans by vintage. Unsurprising, OAS plummeted for 2005-2007 loans as loan underwriting standards implied that investors were being minimally compensated for risk in the underlying properties. Additionally, since then, there are signs that CMBS OAS declined starting in 2013-2015 from very tight standards in 2010-2012 (as investors became more confident in lending). Calibrating the model produces relatively high levels of volatility across geographies, as seen in Figure 27. These implied volatilities are significantly higher than observed volatilities, and about two times higher than realized volatilities. This is because lenders have priced more volatility into their loans in order to have excess returns to be compensated for the risks in CRE lending.

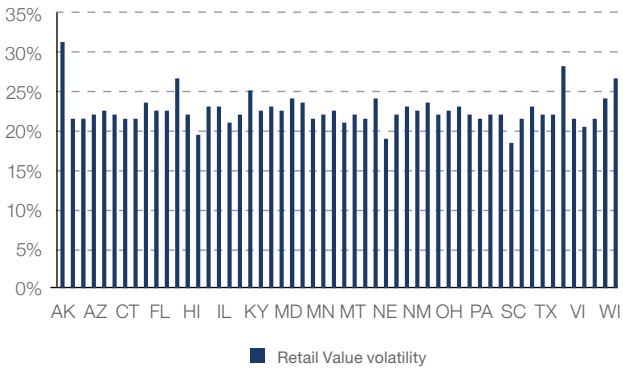
FIGURE 26 ***OAS calibration for CMBS (2000–2015)***



Source: Amherst Insight Labs analysis based on Intex data

Note: HT—hotel, IN—industrial, MF—multifamily, OF—office, RT—retail

FIGURE 27 ***Distribution of Volatility***



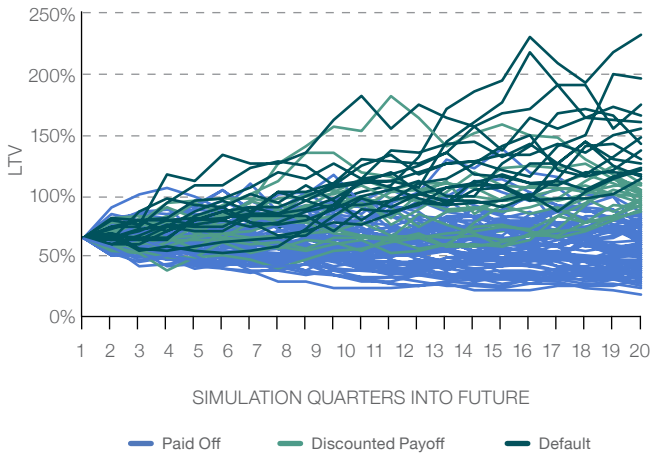
Source: Amherst Insight Labs analysis based on Intex data from 2000-2015.

Note: Volatility implied by historical defaults

7.5 MODEL CAN BE USED TO SIMULATE PROJECTED OUTCOMES

Once the model has been calibrated on the historical dataset, the model simulates a distribution of results for a new loan being considered. The model uses a simulation of thousands of paths of value and NOI growth with the calibrated parameters (LTV cutoff, severity, and property price volatility). Along each path, the model will end the loan with 3 scenarios: paid off in full, default with a subsequent loss, or discounted payoff (the borrower is unable to refinance and the loan takes a small loss to account for a workout). Figure 28 highlights the 1000s of paths of a property; blue lines indicating full payoff, dark green lines indicate default, while light green lines indicating a discounted payoff. From these simulations, the model can then calculate expected cash flows for a loan and ultimately the yield and OAS for the new loan (if given a price, or *vice versa*).

FIGURE 28 ***Model-Based Simulation of LTV for Specific Property***



Source: Amherst InsightLabs analysis based on Intex data

No investment strategy or model can predict performance or guarantee future returns.

7.6 CASE STUDY — USING A MODEL TO AUGMENT THE LOAN ORIGINATION PROCESS

To see how a model is used, it's helpful to look at how it can work in the transitional lending process. As we noted before, a model does not supplant underlying fundamental analysis, but can help determine if a loan is being priced appropriately. For example, a lender may be considering making a loan at the market rate of LIBOR+3.75% at 65 LTV or at LIBOR+3.85% at 70 LTV on a transitional San Francisco office. Without a model, it is not clear which loan the lender should be willing to make. However, with an OAS model, the two loans can be evaluated on their respective merits using OAS as a comparison. A model simulates the LIBOR+3.75% at 65 LTV OAS of 243bp and the loan at LIBOR+3.85% at 70 LTV has a lower OAS of 211bp. This indicates that for this location and for these coupon rates, the lender would prefer to make the 65 LTV loan over the 70 LTV loan (Figure 29). Another potential use of an OAS model is to appropriately adjust loan terms which may need to change during the lending process. Let's say a borrower is seeking a 60 LTV loan at LIBOR+4.0% for an office in Pennsylvania. The model determines OAS for this loan at 356bp. However, during the negotiation process the borrower determines they need higher leverage, at 65 LTV. The model indicates that to maintain the same OAS (356bp), the rate for the loan would need to increase to LIBOR+4.22% (Figure 30). We believe an OAS model provides a basis for addressing risk for the expected return of CRE loans; it can be additive to fundamental loan analysis, plus provide additional value for a lender.

BOTTOM LINE — We believe an OAS based model can provide additional insight on potential returns when making a CRE loan and adds to, but does not replace, fundamental analysis in the lending process.

FIGURE 29 ***Model OAS for evaluating market lending terms***

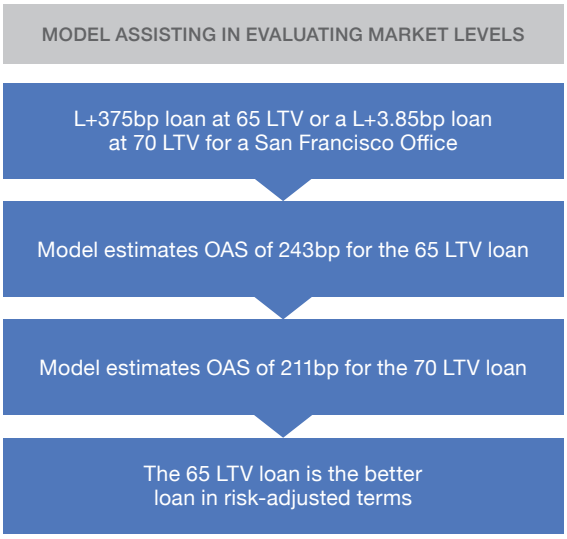
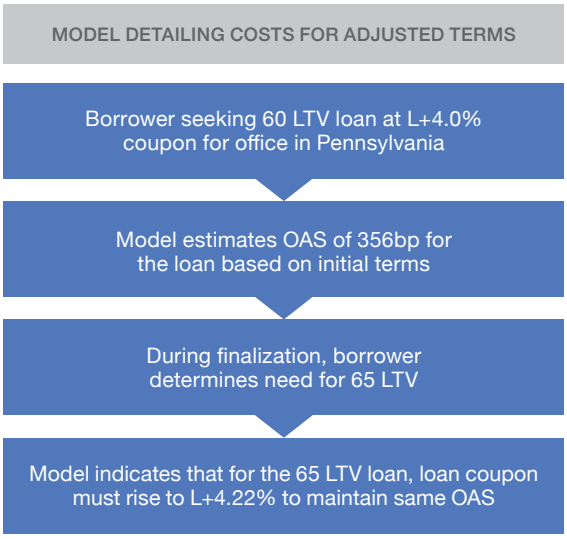


FIGURE 30 ***Model OAS for adjusting loan terms***



Source: Amherst Capital Management example using Amherst Insight Labs analysis based on Intex data

Note: L+ indicates LIBOR+ coupons

For illustrative purposes only

ABOUT AMHERST CAPITAL MANAGEMENT

Amherst Capital Management LLC is a real estate investment specialist with approximately $5.7 billion[1] of assets under management. Amherst Capital was established in 2014 as a majority-owned indirect subsidiary of The Bank of New York Mellon Corporation (BNY Mellon), and is minority-owned by Amherst Holdings, LLC a financial services holding company with more than 10 year history of utilizing its mortgage expertise to assist clients in navigating the real estate capital markets. Amherst Holdings is not an affiliate of BNY Mellon. Texas Treasury Safekeeping Trust Company is a founding seed investor of Amherst Capital.[2] Amherst Capital offers traditional and alternative real estate investment strategies to private and institutional investors globally. Amherst Capital's investment strategies are grounded in deep intellectual capital and proprietary technology designed to help clients meet their portfolio needs. For more information please visit www.amherstcapital.com

ABOUT AMHERST HPI MODEL

Amherst home price index is generated and maintained by Amherst InsightLabs LLC. The index tracks price changes of single-family detached properties in 90 core based statistical areas (CBSA) and 50 states in the US. The index is published monthly and is based on the Case Shiller repeated sales methodology. Unlike HPI published by S&P Case Shiller Weiss, Corelogic and Federal Housing Finance Agency (FHFA), Amherst HPI is a distressed-free index which does not include price changes due to foreclosures, short-sales, bank repossession and REO resale. The repeated sales HPI rely on tracking price changes in transactions of the same house over time. For each arms-length and distressed free home sale transaction, a search is conducted to find information regarding previous arms-length and distressed-free sales of the same house. If an earlier transaction is found, the two transactions are paired into a "sale pair." Sale pairs are designed to track price changes over time for the same house, while holding the quality and size of each house constant. After sales pairs are formed, the index is calculated under a weighted least square framework, in which weights are based on price anomalies and time interval within pairs.

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1 As of December 31, 2016. This amount includes $4.5 billion assets pertaining to certain discretionary multi -sector fixed income clients of our affiliate Standish Mellon Asset Management Company, LLC ("Standish"), for which certain Amherst Capital employees provide advice acting as dual officers of Standish. In addition, discretionary portfolios with approximately $422 million are managed by certain of our employees in their capacity as dual officers of The Dreyfus Corporation. AUM includes gross assets managed in the single family equity strategy, which includes $243 million of leverage.

2 Seed capital Investor. It is not known whether the listed client approves or disapproves of the adviser or the advisory services provided.

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LIMITATIONS OF PROJECTED RETURNS

Projected returns are hypothetical in nature and are shown for illustrative, informational purposes only. This material is not intended to forecast or predict future events, but rather to demonstrate how the economics of transitional commercial real estate may affect the performance of a portfolio of a transitional CRE loan. Specifically, the projected returns are based upon a variety of estimates and assumptions by Amherst Capital of future CRE returns including, among others, ability of the sponsor to execute on its transitional plan and meet milestones, assumptions of loan-to-value and loan-to-cost, vacancy, capital expenditures, portfolio level expenses such as taxes, insurance, repairs and maintenance, and expense and rent growth. The returns and assumptions are inherently uncertain and are subject to numerous business, industry, market, regulatory, competitive and financial risks that are outside of Amherst Capital's control. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Actual operating results, asset values, timing and manner of dispositions or other realization events and resolution of other factors taken into consideration may differ materially from the assumptions upon which estimates are based. Changes in the assumptions may have a material impact on the projected returns presented. The projected returns do not reflect the actual returns of any portfolio strategy and do not guarantee future results. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown.

For more information, please contact:

Sandeep Bordia
Head of Research and Analytics, Amherst Capital Management
212.303.1594 | sbordia@amherstcapital.com

Aaron Haan
Senior Research Analyst, Amherst Capital Management
212.409.5405 | ahaan@amherstcapital.com

444 Madison Avenue
19th Floor
New York, NY 10022
www.amherstcapital.com

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CAPITAL MANAGEMENT
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Media Contact:

Jessica Rutledge
AVP, Marketing & Communications
212.303.1595 | jrutledge@amherstcapital.com