

# Mortgage Backed Securities

June 2013



## Table of Contents

Introduction.....	3
Evolution of the RMBS Market.....	3
Investment Process and Philosophy.....	5
Market Outlook and Current Opportunities.....	9

## Introduction

Over the last decade, the U.S. housing and mortgage markets have weathered an unprecedented boom and bust cycle. We believe that the effects of this cycle are evident today in RMBS prices that underestimate a nascent housing recovery, a securitization market that remains broken, and a mortgage finance system where the government is the only true provider of credit. While the housing market has shown significant improvement, a full recovery cannot occur until the mortgage finance system stabilizes. In short, the RMBS market remains in flux, and we believe opportunities will continue to persist. We have invested in RMBS throughout this transitional period and believe our fundamentally-driven process will continue to generate strong returns in this complex and dynamic market. To better understand how Sankaty will take advantage of these opportunities, this paper will:

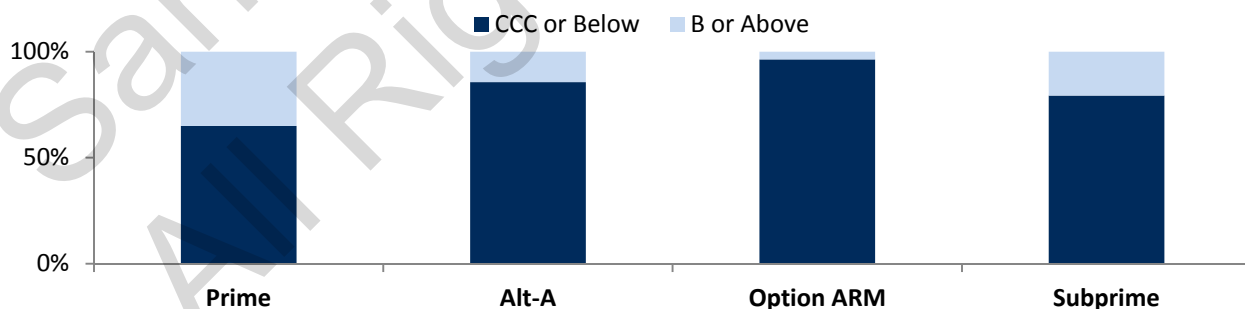
- Outline Sankaty's approach to investing in RMBS
- Review Sankaty's experience and performance investing in RMBS
- Discuss Sankaty's outlook for the RMBS market and the landscape of investment opportunities

## Evolution of the RMBS Market

After years of easy mortgage credit and double-digit home price appreciation, the housing bubble began to burst in 2006. Home prices plummeted, defaults spiked, foreclosure pipelines became overwhelmed, and the mortgage market ground to a halt, leading to the worst financial and economic crisis since the Great Depression. These losses crippled many traditional RMBS investors, and some could not return to the market. As the marginal buyer shifted from highly leveraged entities (ABS CDOs, SIVs, financial intermediaries, monoline insurers), to absolute return investors, the perceived risk and yield offered by RMBS increased substantially.

Another structural change in the market impacted investor suitability. The majority of non-agency securities emerged from the crisis with credit ratings of CCC or below. The rating agencies use a methodology that assesses the risk of a bond sustaining a loss, without regard to the magnitude of the loss. For example, if a bond were highly likely to lose 5 points (i.e., only repay 95% of principal), but extremely unlikely to lose more than 10 points, this bond would have a CCC credit rating. Economically, however, if an investor purchases this bond for 80% of principal balance, his or her risk of loss is remote. In short, the CCC rating overstates the risk of this security significantly, but many investors cannot hold CCC securities. While some investors have created solutions to address this issue<sup>1</sup>, others continue to struggle with the ramifications of low credit ratings despite market prices that more than fully compensate investors for the risk of loss. We believe that for investors who are agnostic to credit ratings, but focused on economic value, this disconnect creates opportunity.

**Figure 1: Percentage of Non-Agency RMBS Market by Rating**

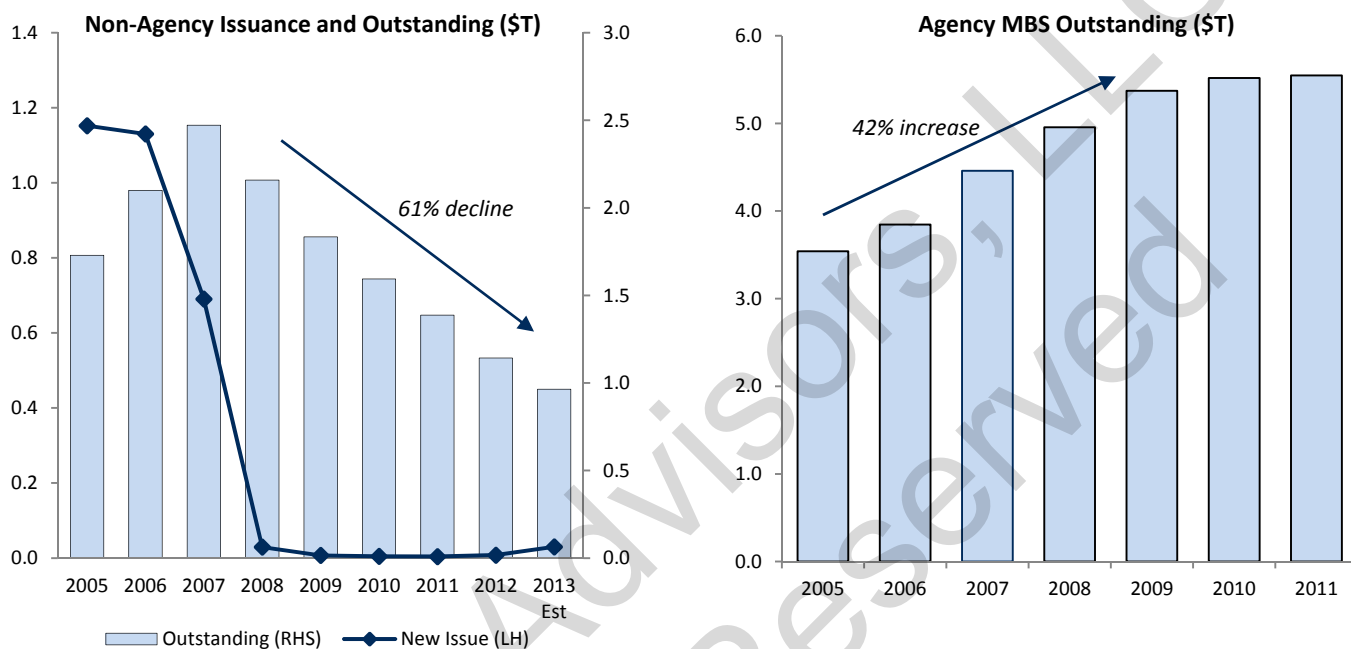


Source: Intex, S&P, Moody's, Fitch, Bank of America Merrill Lynch Global Research, March 2013.

<sup>1</sup>NAIC changed its risk methodology in 2009, moving from a ratings-based model to a model focused on expected losses. Insurance companies subsequently faced less punitive charges for CCC rated RMBS investments.

Following the housing crisis, credit standards have remained tight. Despite historically low interest rates, mortgage availability has been limited to borrowers with pristine credit or to those that meet government guidelines. Through the Fed's Quantitative Easing policies, the government buys most agency-backed RMBS issuance, which creates an incentive for lenders to make agency loans. However, given the uncertain regulatory environment, non-agency lending remains depressed. While the size of the agency RMBS market has ballooned, the non-agency market has shrunk by over 60%. Approximately \$1.5 trillion of mortgage risk has shifted from the non-agency market to the agency market since 2005.

**Figure 2: Size of the Non-Agency RMBS Market**

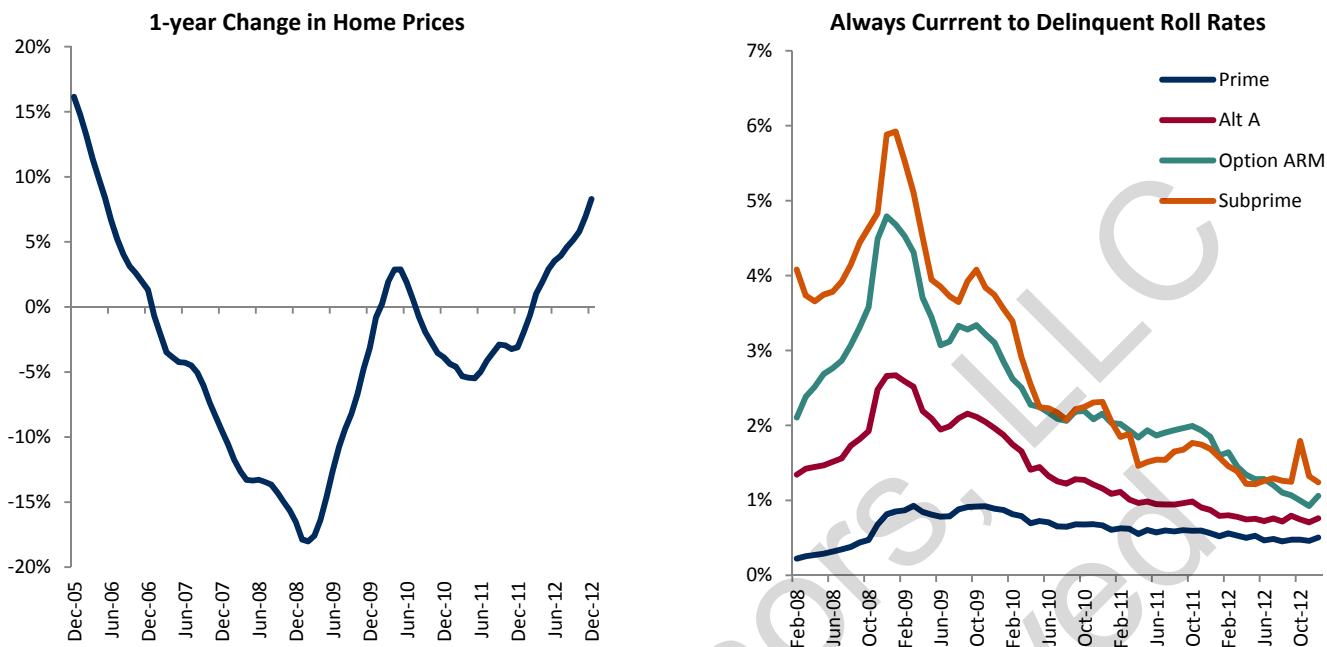


Source: Intex, Bank of America. New issuance excludes re-remics. SIFMA.

This lack of lending to non-agency borrowers creates two issues. First, many borrowers who are creditworthy, but do not meet tight agency guidelines, are unable to refinance their mortgages into historically low rates. Second, the amount of non-agency securities available to investors continues to shrink. These investors receive 15-20% of principal repaid each year plus coupons, which they typically would reinvest. However, the pool of assets to purchase is shrinking, leaving more capital to chase fewer assets. We believe this supply-demand imbalance will continue to support non-agency RMBS prices.

Today, the RMBS market faces both tailwinds and headwinds. On the positive side, the housing market has stabilized and is recovering. The impact of historically low mortgage rates and years of pent-up demand have overcome the supply of homes on the market. Real estate transactions have increased substantially, home prices are rising, and mortgage default rates are declining. The deep investor base and shrinking market size create a strong technical dynamic where demand outstrips supply of investible assets.

**Figure 3: Fundamental Recovery in U.S. Housing**



Source: Corelogic, LoanPerformance.

However, many obstacles remain. Today the government provides approximately 90% of all new mortgages, and non-agency securitization has not re-opened. Regulations governing mortgage lending remain uncertain, and investor lawsuits continue to emerge. As such, mortgage credit remains tight or unattainable for many borrowers. In addition, approximately 20% of existing borrowers owe more debt than their homes are worth, keeping default risk high and limiting borrowers' ability to refinance into lower mortgage rates. Finally, as markets and the economy recover, the inevitable rise in interest rates may mitigate the strength of a housing recovery as affordability suffers.

## Investment Process and Philosophy

Over our 15-year history, Sankaty has employed an industry-based fundamental investment strategy. We believe that a deeper understanding of an industry drives better decision making about individual companies and securities. We have applied this investment strategy successfully across a range of asset classes, including leveraged loans, high yield bonds, structured credit, and private debt.

When Sankaty began evaluating the non-agency RMBS market in 2005, most investors differentiated themselves solely by the technology they used. Complex models were built and refined to assess each individual borrower's likelihood of prepaying or defaulting. Industry level fundamental analysis was overshadowed by a false sense of safety in these models and their outputs. The RMBS investor base was dominated by software programmers rather than by investment professionals. As systematic leverage increased, Sankaty actively decided not to pursue any opportunities in the RMBS.

We believe that the credit crisis revealed the problems inherent in a model-based approach to RMBS investing. Macro and industry dynamics exposed the shortfalls of the complex models by underestimating the impact of an overheated housing market. As RMBS prices fell dramatically, we saw potential for an attractive entry point. Structured credit had been a core part of Sankaty's business since our inception in 1998, so adding personnel with experience structuring and trading RMBS was a logical expansion of our structured products team.

Despite the substantial price drops that occurred in 2007-2008, we waited for a more attractive entry point in 2009. When we began investing, we took lessons from our 15 years as fundamental corporate credit investors and

combined it with the skills we had honed as structured credit investors. Mirroring our approach to corporate credit, our basis for investing in RMBS starts first with an assessment of industry attractiveness, followed by issuer and security specific analysis.

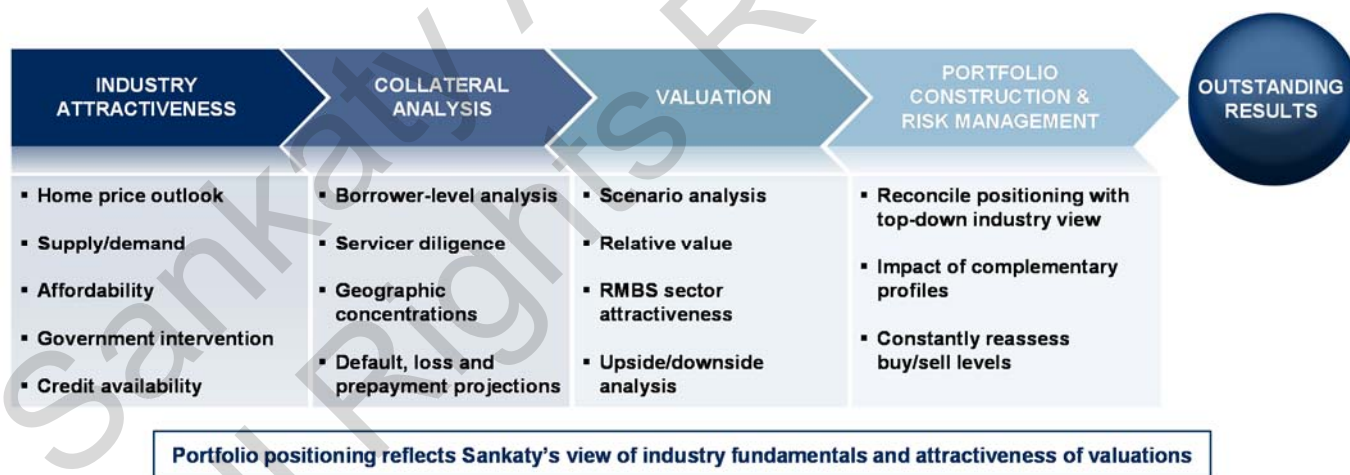
**Figure 4: Sankaty’s Investment Philosophy**



To assess industry attractiveness, Sankaty takes an integrated approach to the housing market. This includes evaluation of many different housing related assets including real estate loans, homebuilders, building supply companies, mortgage originators, and other financial companies. We apply a common sense diligence framework that includes visiting housing markets, touring foreclosed properties, keeping an open dialogue with realtors, government agencies, and developing an independent and fully integrated viewpoint on the industry.

While the analytical foundation for investing in RMBS is the same, the unique nature of RMBS securities requires some customization of the Sankaty investment philosophy.

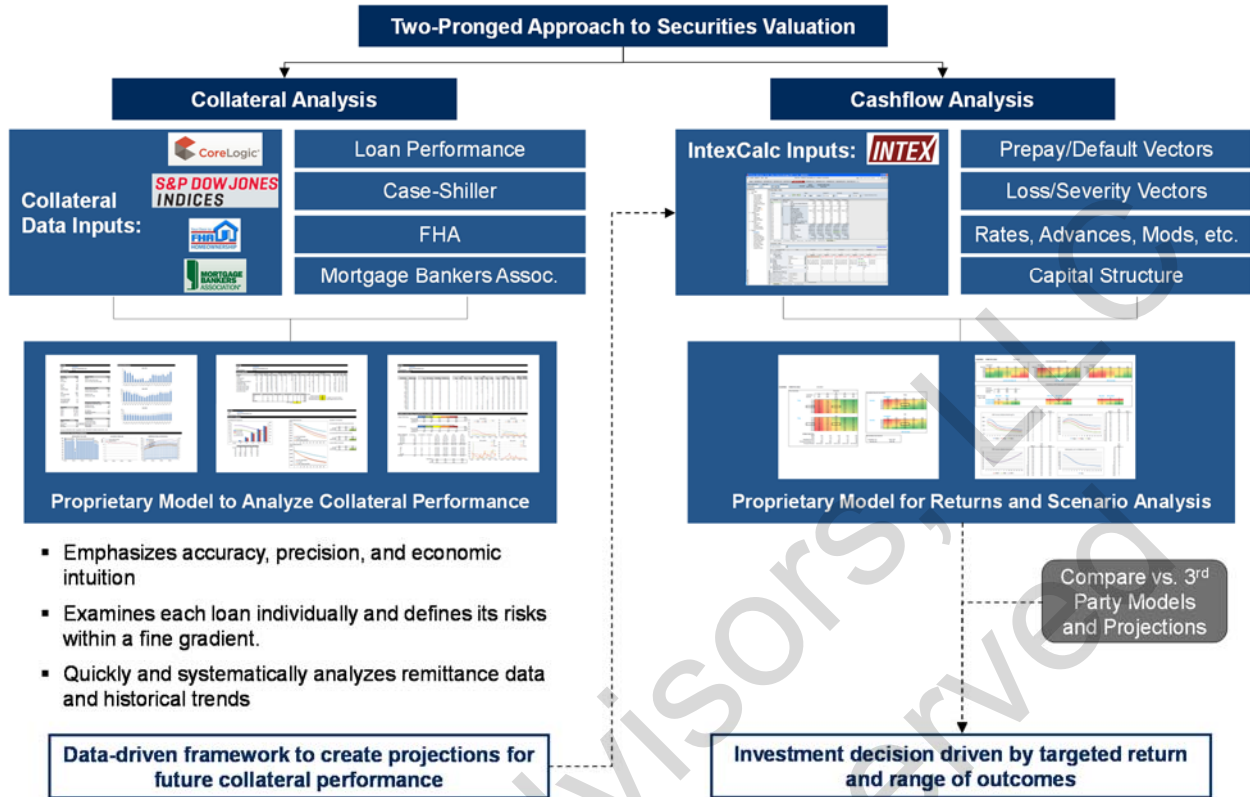
**Figure 5: Sankaty’s Investment Approach (Customized for RMBS)**



We believe that when digging deeper on specific investments, it is critical to have the best information and systems in place. While technology is no longer the key differentiator it once was believed to be, it is still necessary for evaluating the best information available and supplementing the fundamental analysis we conduct. To that end, Sankaty has created an infrastructure platform that combines the best in class information providers and systems, with proprietary analytics customized to meet our needs.



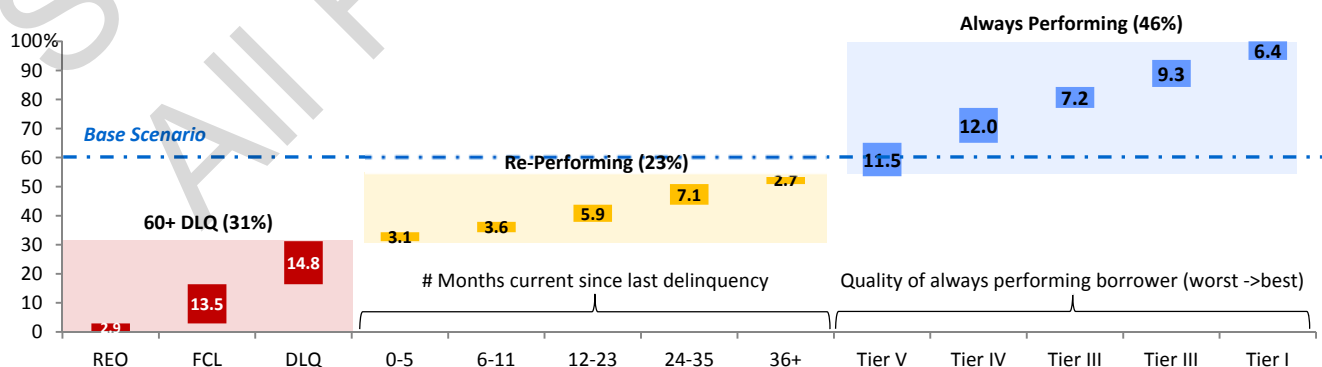
**Figure 6: Sankaty's RMBS Infrastructure**



We developed this infrastructure to efficiently analyze the intricacies of each mortgage pool. It also provides a consistent and scalable investment process.

When analyzing a mortgage pool it is critically important to start with accurate loan-level data, including each borrower's payment history, mortgage balance, and current property value. Risk of default must be analyzed down to the borrow level, including the presence of compounding risk factors (for example, a substantial payment shock for an underwater borrower). This loan-level analysis also helps identify borrowers who are more likely prepay their mortgage early. We project defaults, prepayments and severities by building a bottoms-up aggregation of scenarios from this detailed loan-level analysis, incorporating nuances like local foreclosure laws, servicer advance rates, future payment shocks and home price changes. We also benchmark loan performance by vintage and risk to understand how a particular borrower or pool has performed on a relative basis, and whether that performance is likely to continue. Detailed loan-level analysis of these many variables and their interaction is key to making good investment decisions.

**Figure 7: Sample Collateral Risk Stratification**

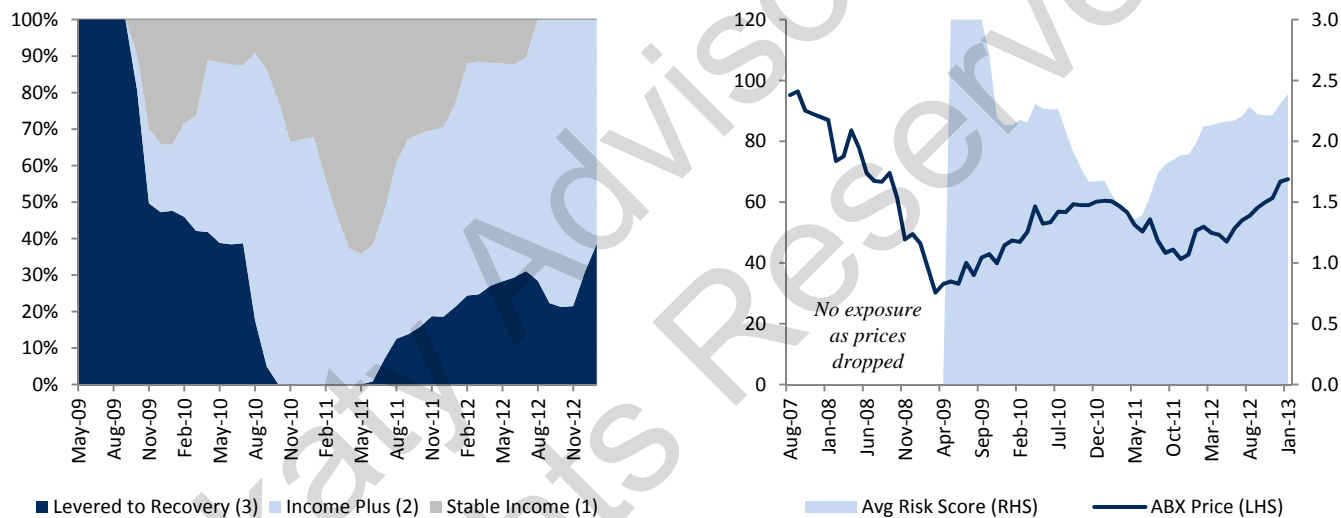


From an early stage investing in RMBS, we realized that categorization of RMBS securities by original borrower risk profile had shortfalls. First, borrower quality at origination was not a reliable indicator of borrower quality many years later. Second, the riskiness of the borrower did not fully incorporate the risk of the investment as it did not consider the bond's structure and return profile. For example, a bond with substantial credit enhancement that was secured by subprime borrowers may actually be safer than a bond without any credit enhancement secured by jumbo prime borrowers. To help address these shortfalls, we created three risk categories for RMBS investments:

1. **Stable Income:** Safest risk profile but limited upside if underlying collateral outperforms expectations. Low risk of loss. Risk score = 1.
2. **Income Plus:** Average risk profile, well insulated from losses, but fundamental outcome provides some upside to base case yield. Risk score = 2.
3. **Levered to Recovery:** Highest degree of upside/downside variation from base case yield. These assets capture the most upside to a recovery but also the most downside in a lagging market. Risk score = 3.

Our positioning within the RMBS portfolio reflects the relative attractiveness of each bucket. The key analytical driver is to reconcile what the market is pricing relative to our industry outlook.

**Figure 8: Allocations by Risk Basket Over Time**



Source: Sankaty analysis. Data as of January 31, 2013.

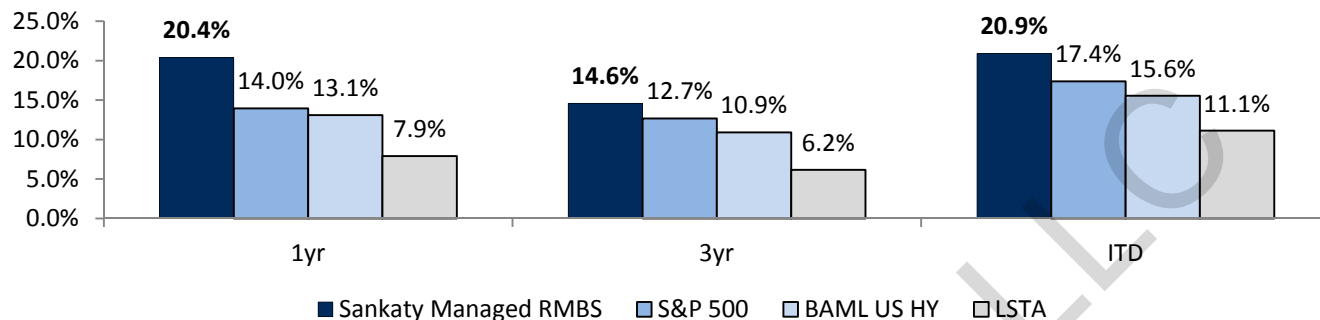
For example, in early 2009, while we did not expect an imminent recovery in the housing market, the Levered to Recovery assets were priced so low that they offered the best risk/return (our portfolio had an average risk score of 3.0). However, in late 2010 and early 2011, prices rallied enough that we repositioned to a more conservative exposure (average risk score of 1.4). In late 2011, as the European debt crisis escalated and the U.S. government debt was downgraded, RMBS prices fell so we again rotated the portfolio to capture more upside. As the housing market rebounded in 2012, we eliminated the remaining stable income assets, and added both Income Plus and Levered to Recovery assets. Today, our average risk score is 2.4, reflecting attractive opportunities in Income Plus and Levered to Recovery assets.

To summarize Sankaty's approach to investing in RMBS, we recognize the value of "best-in-class" technology, but only as a means to support solid fundamental analysis and investment decision making. We constantly review the value of different RMBS sectors, and weigh RMBS attractiveness relative to leveraged loans, high yield bonds, and other structured products. This valuation, combined with the top-down assessment of industry attractiveness and



deep analytical diligence performed on each bond, has enabled us to generate a strong track record investing in RMBS.

**Figure 9: Sankaty's RMBS Gross Returns**



*Data as of March 31, 2013. Inception is June 2009 when Sankaty began investing in the asset class. This performance information does not reflect the performance of any specific Sankaty fund. Past performance is not indicative of future results. Actual results may vary.*

Despite a keen focus on downside risk, Sankaty's RMBS portfolio has outperformed the public equity, high yield and leveraged loan markets over each time period. We strongly believe this is driven by our approach which combines Sankaty's proven fundamental industry-based investment approach to a market that is complex, inefficient and continues to offer attractive opportunities.

## Market Outlook and Current Opportunities

While the housing market has begun recovering, we believe that it is far from out of the woods. There are many reasons we expect continued improvements in the housing market:

1. Home prices are improving in most markets the equity position of borrowers and reducing default risk
2. The shadow inventory of homes has decreased substantially
3. Institutional capital is reaching distressed inventory ("Buy-to-rent" programs)
4. Liquidations have become more efficient: short sales have increased relative to foreclosure and real estate owned (REO) sales, and the price discount for distressed real estate has decreased substantially
5. The rate of new defaults is declining and the modification success rate is improving
6. Early progress on the regulatory front. While developments have been slow, they are moving in the right direction. We are also seeing early signs of the non-agency securitization market re-opening, which would improve credit availability to mortgage borrowers.

However, we believe that a full recovery cannot occur without a stabilization of the mortgage finance system. This includes a permanent resolution to the role of government and an open and functioning securitization market for non-agency mortgage borrowers. In addition, 20% of mortgage borrowers today owe more on their mortgage than the value of their home. These headwinds will stand in the way of a full recovery.

What does this mean for the current investment landscape? While the RMBS market is pricing in a stabilization of the housing market, a disconnect still exists between the assumptions embedded in RMBS prices and what actual results are.

**Figure 10: RMBS Variables Implied by Market Prices**

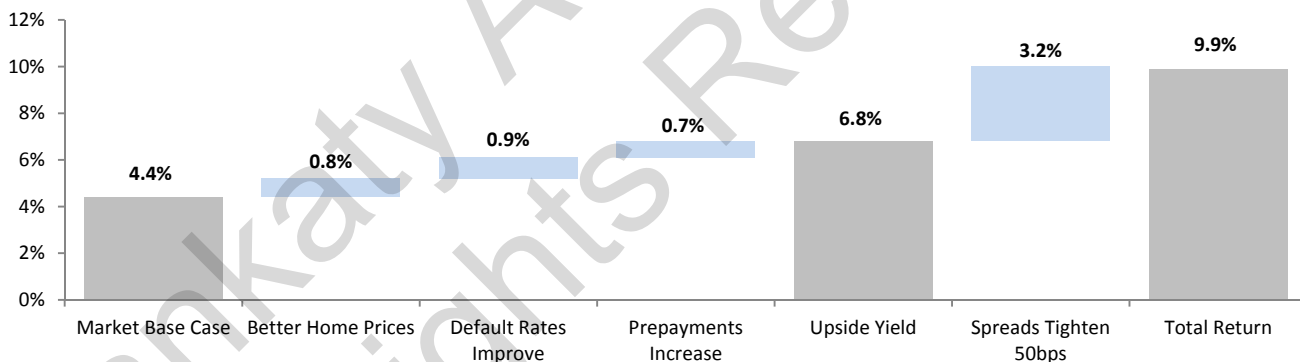
	Market Base Case	Last 12M Actual	Commentary
Home Prices	0-4% per year <sup>(1)</sup>	+8% <sup>(2)</sup>	<ul style="list-style-type: none"> <li>Peak affordability</li> <li>4 years of pent-up demand</li> <li>Growing institutional investor base</li> </ul>
Default Rates	No improvement	10-40% decrease <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Expect further decline as home prices, employment, and economy recover</li> </ul>
Prepayments	Decrease from current levels	Flat to increasing	<ul style="list-style-type: none"> <li>Increasing credit availability to non-agency borrowers and increasing home prices should boost prepayment rates</li> </ul>
Loan Modifications	All modified loans eventually default	6-20% decrease in re-default rates <sup>(4)</sup>	<ul style="list-style-type: none"> <li>More aggressive recent mods are likely to perform better than historical experience</li> </ul>

**Market assumptions remain conservative**

- (1) Source: Sankaty analysis.
- (2) Source: LoanPerformance.
- (3) Decrease in roll rates from Always Current to Delinquent. Source: LoanPerformance.
- (4) 12M recidivism rate changes Q1 2012 vs. Q3 2012. Source: Bank of America.

The chart above highlights that despite the recent rally in RMBS prices, there is still significant room to outperform the market’s assumptions. We believe that peeling back the conservative assumptions can substantially increase the potential return on investment.

**Figure 11: Sample Yield Profile and Upside**



Source: Sankaty analysis. Total return assumed over one year. Base Scenario: 36% Liquidation / 55% Severity / 2.5 CPR; Slow Recovery: 20% Liquidation / 40% Severity / 5 CPR. Past performance is not indicative of future results. Actual results may vary.

While we do not expect to repeat the returns we have seen over the last three years, we do believe RMBS remains attractive both on an absolute and on a relative basis. Interest rates are so low today that most fixed income investors face an asymmetric profile: 50 basis points higher yield on 10-year Treasuries can erase two years of return. Investment grade corporate bonds trade at an average price of 112 and face a similar loss if rates rise. High yield bonds offer all time low yields with most names trading above par and their next call price. Leveraged loans provide protection in a rising rate environment, but do not offer much upside as most loans are trading above par. Agency RMBS has been artificially inflated as the Fed purchases the majority of new issuance through its Quantitative Easing program that will inevitably end. We believe that non-agency RMBS stands out as the unique asset class that offers upside to a fundamentally recovering market, at a discounted price with embedded inflation protection.

Sankaty's fundamental approach to a complex asset class has led to attractive returns over the last three years. As the housing recovery continues, and the future of the mortgage finance evolves, we believe our approach will continue to deliver attractive returns.

Sankaty Advisors, LLC  
All Rights Reserved

*Please consider the following:*

*In this material Sankaty Advisors, LLC and Sankaty Advisors, Ltd., are collectively referred to as “Sankaty Advisors”, which are the credit affiliates of Bain Capital, LLC. This presentation expresses the good faith views of the author as of the date indicated and such views are subject to change without notice. The original version of this presentation on the date ascribed within may have been updated or modified for purposes of this posting. Sankaty Advisors has no duty or obligation to update the information contained herein. Further, Sankaty Advisors makes no representation, and it should not be assumed, that past investment performance is an indication of future results. Moreover, wherever there is the potential for profit there is also the possibility of loss.*

*The opinions and information contained in this presentation is being made available for educational purposes only and should not be used for any other purpose. The information contained herein does not constitute and should not be construed as an offering of advisory services or an offer to sell or solicitation to buy any securities or related financial instruments in any jurisdiction. Certain information contained herein concerning economic trends and performance is based on or derived from information provided by independent third-party sources. Sankaty Advisors believes that the sources from which such information has been obtained are reliable; however, it cannot guarantee the accuracy of such information and has not independently verified the accuracy or completeness of such information or the assumptions on which such information is based.*

*This presentation, including the information contained herein, may not be copied, reproduced, republished, or posted in whole or in part, in any form without the prior written consent of Sankaty Advisors. Any other person receiving this material should not rely upon its content.*