

# Mortgage Loan Conduit & Securitization

Two Harbors Investment Corp. November 4, 2015

Two Harbors Investment Corp. is proud to present a webinar titled: Mortgage Loan Conduit and Securitization. Periodic webinars from Two Harbors will provide an opportunity to share more in-depth insights on various topics. We hope that these webinars help investors, analysts and the media develop a deeper understanding of Two Harbors and the residential mortgage and housing markets.

Margaret Field, Investor Relations, Two Harbors

## **WELCOMING REMARKS**

Thank you for joining us today. I'm Margaret Field, with Investor Relations for Two Harbors. We are pleased to launch the eighth segment in our webinar series titled, "Mortgage Loan Conduit & Securitization." Through our webinars we intend to share more in-depth insights on various topics to help investors develop a deeper understanding of the mortgage and housing markets as well as Two Harbors.

The accompanying presentation is available via download on Two Harbors' website, under the "Investors" and "Webinars" tabs. Please note that this webinar is pre-recorded. We encourage you to contact Investor Relations if you have questions or would like to discuss this topic further. Contact information can be found on Slide 21 of this presentation.

#### SAFE HARBOR

Please turn to slide 2. Before we begin, I would like to take a moment to remind you that remarks made during this webinar and the accompanying slide presentation may include forward-looking statements. Forward-looking statements reflect our views regarding future events and are typically associated with the use of words such as anticipate, target, expect, estimate, believe, assume, project, and should, or other similar words.

We caution investors not to rely unduly on forward-looking statements. They imply risks and uncertainties, and actual results may differ materially from expectations. We urge you to carefully consider the risks described in our filings with the SEC, which may be obtained on the SEC's website at <a href="https://www.sec.gov">www.sec.gov</a>. We do not undertake any obligation to update or correct any forward-looking statements if later events prove them to be inaccurate.

This presentation is not investment advice and does not constitute an offer or solicitation to buy or sell any security. This presentation is not intended to be, and you should not consider anything in this presentation to be, investment, accounting, tax or legal advice, and you should consult with your own financial advisors, accountants or attorneys regarding your individual circumstances or needs.

## MISSION-BASED STRATEGY

Turning to slide 4, by way of introduction, Two Harbors is a hybrid mortgage REIT traded on the New York Stock Exchange under the ticker symbol, "TWO," with a market capitalization of approximately \$3.2 billion. We utilize a relative value investment approach to identify the most attractive investment opportunities within the residential and commercial mortgage markets. Our hybrid model and investment approach enables us to dynamically shift our asset allocation based on changing market conditions in an effort to maximize stockholder returns. As the largest hybrid mortgage REIT, we manage an investment portfolio of more than \$14 billion. We are proud that our portfolio performance has enabled us to deliver a stockholder return of 114% since we commenced operations in late 2009.



# **OPPORTUNITY SET**

Please turn to slide 5. Two Harbors' portfolio is comprised of three strategies: a Rates strategy, which includes Agency RMBS, Agency derivatives and mortgage servicing rights; a Credit strategy, which consists of non-Agency RMBS, net economic interests in consolidated securitization trusts and prime jumbo residential mortgage loans; and, finally, commercial real estate loans. We will be focusing in this webinar on the Credit strategy and, in particular, our mortgage loan conduit.

# **WEBINAR OBJECTIVES**

Moving to slide 7, as background, securitization is a strategy that uses Credit Enhancement to transform illiquid, unrated financial assets, such as mortgages, into liquid, rated, securities. Essentially, this is a method of raising capital from investors and distributing capital to homeowners. Securitization provides capital to mortgage borrowers, a predictable and diverse risk profile for investors, and, importantly, liquidity to the housing market.

During this webinar we intend to provide an overview of securitization and address questions such as:

- What is a residential mortgage-backed security?
- How are RMBS created?
- What are the risk considerations and benefits of securitization?
- And, finally, we will provide an overview of Two Harbors' mortgage loan conduit.

Please note that securitization is a very complex subject and this webinar will be at a high level and will not be addressing all parts of securitization.

## **MORTGAGE-BACKED SECURITIES**

Please turn to slide 9. Bonds differ from stocks in that they are debt instruments -- similar to an "IOU" -- where the issuer is borrowing money from the purchaser. A mortgage backed security, or MBS, is a bond collateralized by a pool of mortgage loans. The projected principal and interest cash flows of the underlying mortgages are used to create tradeable securities sold to investors. MBS are created to provide returns to investors and increase the liquidity of mortgages. This is beneficial to homeowners as the MBS securitization process effectively transfers money from investors to lenders, resulting in generally lower mortgage rates.

There are a variety of mortgage types that can be used as collateral for MBS, including conforming, jumbo, and expanded credit. MBS are categorized based on the characteristics of the collateral and/or the securitization structure used. For today's webinar, we will be focusing on non-Agency residential mortgage-backed securities, or RMBS. These are securities that are not conforming, that is, they are not backed by Fannie Mae, Freddie Mac or Ginnie Mae.

## **CREATION OF NON-AGENCY RMBS**

Let's turn to slide 10 and take a high-level look at the securitization process, from loan creation to the issuance of MBS. Let's say that you want to buy a house and are taking out a mortgage from the bank to



help you buy the home. The bank originates a number of mortgages to individuals similar to you and then sells those mortgages to a secondary buyer. The bank then turns around and uses the proceeds from the sale of the mortgage to originate mortgages for another homeowner. And thus for the bank, the cycle of mortgage origination continues.

The secondary buyer, whom we will call the aggregator, will make a determination to do a securitization when they have an optimal amount of loans to pool together, and the loan characteristics of that pool meets the desired investment objectives of ultimate investors. Key loan characteristics include product types, loan-to-value ratios, geographic concentration, debt to income ratios, and credit scores.

When appropriate, the aggregator deposits the pooled mortgage loans into a trust, and the pool is structured into varying bonds that optimize cash flow and credit characteristics of the underlying loans. The trust, who is also the issuer of bonds, then sells these bonds to investors.

After the issuer sells the bonds from the trust, the monthly principal and interest payments made by the individual borrowers underlying the pool are collected and passed through to the investors and other stakeholders, such as mortgage servicers. Servicers are companies that manage the collection of mortgage payments and forward these payments to the trust. For performing this service, mortgage servicers are paid a portion of the cash-flows from the monthly mortgage payment. Our next webinar will focus on servicers and servicing.

To summarize this slide, the flow of capital in a securitization is cyclical, moving from the borrower to the lender, through the aggregator and trust, to the investors. This process can also be considered in reverse, whereby the investor pays the issuer for the bonds, the trust pays the depositor for the loans, the depositor pays the lender for the bundles of mortgages, and the lender then uses those funds to create new loans.

# SENIOR/SUBORDINATED BOND STRUCTURE

Let's talk a bit about the structure of a RMBS bond, as depicted on slide 11. The subordinated classes in the bond provide Credit Enhancement to the senior triple A classes. This means that the subordinate classes absorb the first losses to the collateral prior to losses being absorbed by the senior triple A classes. We will talk more about the role of Credit Enhancement in the securitization process momentarily. Each subordinated class provides credit support to all of the classes senior to it and therefore cash flows are dispersed according to waterfall sequence. The trust expenses are paid first, followed by the interest to the senior bonds, the principal to the senior bonds, and then, in order of priority, interest to the subordinated bonds and finally, in order of priority, principal to the subordinated bonds.

# **CREDIT RISK**

Turning to slide 12, let's review several risk considerations related to securitization and MBS. To begin, credit risk arises in securitization and relates to the potential for principal losses based on defaults on the underlying mortgages. Defaults, as you may know, result from the borrower missing several scheduled monthly payments. The servicer may elect to liquidate the loan in an attempt to recover the principal and interest due. Liquidation can take place through legal proceedings or negotiations.



Frequency of borrower defaults can be influenced by a number of factors including potential changes in home prices, the credit score of the loan borrower, the loan product type, the loan-to-value, the owner occupancy rate and life events.

The severity of the default is calculated by dividing the net loss resulting from a default by the current principal balance.

The aggregate losses on the RMBS are driven by default frequency and default severity.

# OTHER RISK CONSIDERATIONS AND DRIVERS

Other risks related to securitization include prepayments, liquidity and bankruptcy, as outlined on slide 13. Prepayment risk is the risk that principal will be repaid at a different rate than anticipated. For more on prepayments and drivers of prepayments, please see our two-part webinar. For more on hedging prepayments, please see our hedging webinar. Liquidity is another consideration with securitization and relates to the ability or ease with which assets can be traded. If there is a widening of spreads, a change in interest rates, or a limited investor universe for the securitized loans, just to name a few, there can be a lack of liquidity. One last consideration to call out is bankruptcy of the aggregator. If the proper protections aren't in place then the securitized assets could be clawed back by the aggregator, that is, the money that was distributed and the underlying collateral is taken back. To protect the trust assets a bankruptcy remote structure is utilized via a special purpose entity.

# THE ROLE OF CREDIT ENHANCEMENT

Turning to slide 14, let's take a little bit of a deeper dive into the securitization process and some of the key components, beginning with Credit Enhancement. Credit Enhancement is an important variable in the securitization of loans as it is designed to protect the triple A investor's principal against credit losses. As we discussed earlier, Credit Enhancement means that the subordinate classes absorb the first losses to the collateral prior to losses being absorbed by the senior triple A classes. While the type of Credit Enhancement is decided by the issuer and is a function of investor preference, the minimum size of Credit Enhancement is determined by Rating Agencies based on the ability of the loan pool to perform under a perceived worst-case scenario.

## THE INGREDIENTS OF A TRANSACTION RATING

Turning to slide 15, let's recall the slide where we talked about the senior and subordinated bond structure. On that slide, we referred to securities as being rated – but what does that really mean? Securities that are issued into the market are assigned ratings by companies called Rating Agencies. A security's rating is meant to indicate the likelihood that an investor will be paid back. Prior to MBS being marketed to investors, the Rating Agencies evaluate the transaction and there are a number of considerations that go into a bond rating, including:

The legal structure of the transaction.



- A review of the collateral in the transaction. This includes reviewing data points such as geographic concentration, loan-to-value, debt-to-income ratio, FICO scores, and making projections on the loans around prepayments, delinquencies and estimated losses, and recoveries. This also includes an extensive review of the diligence reports provided by third party reviewers that are hired by the aggregator to perform an evaluation of individual loans in the pool.
- Varying levels of due diligence are also completed on originators, servicers and aggregators. In
  particular, Rating Agencies are looking at origination strategies and the acquisition standards. If
  a single originator is greater than 15% of the loan pool, the Rating Agency will typically require a
  more in-depth review of that originator.
- Finally, the Rating Agencies look at the cash flow and structural features of the deal, including the strength of the representations and warranties and enforcement mechanisms.

# **BENEFITS OF SECURITIZATION**

Turning to slide 16, let's talk about the many benefits of securitization for borrowers, investors and issuers. A healthy securitization market provides continuous capital to borrowers and liquidity to the housing market. For borrowers, it lowers the cost of credit and increases credit availability as there is more liquidity and money available. For investors, securitization provides investment returns, a diversification of risk and more predictable performance on their investments. For issuers, securitization is an alternative to unsecured borrowing.

# TWO HARBORS' CONDUIT

At Two Harbors, we have built a best-in-class mortgage loan conduit and on slide 18, we have outlined the infrastructure of this business. We believe that we have an efficient and scalable program that allows us to respond quickly to a broad array of opportunities. From our loan acquisition method, through our seller approval process, to the diligence and oversight, we strive to be an industry leader.

## ILLUSTRATIVE SECURITIZATION ECONOMICS

Moving to slide 19, let's look at an illustrative securitization from an economic perspective, and what this means for our business.

Let's recall the slide from earlier in the presentation, where we went over deal structure. At Two Harbors, it is our intention to retain certain subordinate bonds in connection with each deal, given their attractive return profiles and their natural fit in our portfolio.

Let's take a look at a hypothetical \$1 billion securitization of 30-year, 4.0% coupon residential mortgage loans. This pool is structured with 3.5% passed through and 25 basis points allocated to MSR and IO, respectively. If we sell off the triple A's, the double A's and the single A's, you will see that the remaining pieces result in approximately \$40 million in market value. We retain the MSR, IO and



subordinate bonds, noted on this page, and apply roughly 1x debt-to-equity to the \$40 million of assets. This results in an equity investment of roughly \$20 million, unlevered returns of 6-8% and levered returns in the 12-16% range. It is important to note that at Two Harbors we have the ability to retain the triple A's when market conditions are such that it makes sense to do so. Through securitization, we are able to create attractively yielding assets for our portfolio at appealing returns.

## **EVOLUTION OF CONDUIT AT TWO HARBORS**

Turning to slide 20, it is our goal to bring innovative capital solutions to the U.S. real estate market. Since our prime jumbo program launched in 2013, we have completed 11 Agate Bay securitizations. From each of these securitizations we have retained subordinate and IO credit bonds, which replace our legacy non-Agency securities as that portfolio naturally pays down over time. This year we have completed 7 securitizations, meeting our stated goal of 6-10 securitizations throughout 2015. At September 30, 2015, we had a robust pipeline of approximately \$1.2 billion in unpaid principal balance. In 2015, we also launched an expanded credit program that targets a slightly different borrower than our prime jumbo program. We are very excited about the progress we have made on our mortgage loan conduit.

## **CONTACT INFORMATION**

Thank you for joining us for today's webinar. If you have any questions, please do not hesitate to reach out to the Investor Relations contact listed on this page.

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