TWO HARBORS INVESTMENT CORP.
Form S-4/A
June 15, 2018

Use these links to rapidly review the document
TABLE OF CONTENTS
TABLE OF CONTENTS

Table of Contents

As filed with the Securities and Exchange Commission on June 15, 2018

Registration No. 333-225242

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1
TO

FORM S-4

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

TWO HARBORS INVESTMENT CORP.

(Exact Name of Registrant as Specified in Its Charter)

Maryland	**001-34506**	**27-0312904**
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

575 Lexington Avenue, Suite 2930
New York, New York 10022
(612) 629-2500
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Rebecca B. Sandberg
Vice President, General Counsel and Secretary
Two Harbors Investment Corp.
575 Lexington Avenue, Suite 2930
New York, New York 10022

Tel: (612) 629-2500
Fax: (612) 629-2501
(Address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

S. Gregory Cope **Stephen M. Gill** **Vinson & Elkins L.L.P** **2200 Pennsylvania Avenue NW** **Suite 500 West** **Washington, D.C. 20037-1701** **(202) 639-6500**	**Thomas A. Rosenbloom** **Executive Vice President Business Development, General Counsel, and Secretary** **CYS Investments, Inc.** **500 Totten Pond Road, 6th Floor** **Waltham, Massachusetts 02451** **(617) 639-0440**	**Scott M. Freeman** **Gabriel Saltarelli** **Sidley Austin LLP** **787 Seventh Ave** **New York, New York 10019** **(212) 839-5300**

Approximate date of commencement of proposed sale of the securities to the public:
As soon as practicable after this Registration Statement is declared effective and upon the satisfaction or waiver of all other conditions to consummation of the merger described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ý	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o Emerging growth company o

If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. o

If applicable, please an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) o

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) o

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the U.S. Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this joint proxy statement/prospectus is subject to completion and amendment. A registration statement relating to the securities described in this joint proxy statement/prospectus has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy these securities be accepted prior to the time the registration statement becomes effective. This joint proxy statement/prospectus shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities law of any such jurisdiction.

PRELIMINARY SUBJECT TO COMPLETION

DATED JUNE 15, 2018

JOINT PROXY STATEMENT/PROSPECTUS

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

[•], 2018

To the Stockholders of Two Harbors Investment Corp. and the Stockholders of CYS Investments, Inc.:

The board of directors (the "Two Harbors Board") of Two Harbors Investment Corp. ("Two Harbors") and the board of directors (the "CYS Board") of CYS Investments, Inc. ("CYS"), each a Maryland corporation, each have approved an Agreement and Plan of Merger, dated as of April 25, 2018 (the "Merger Agreement"), by and among Two Harbors, Eiger Merger Subsidiary LLC ("Merger Sub") and CYS, pursuant to which Merger Sub will merge with and into CYS, with CYS continuing as the surviving corporation (the "Merger"). As a result of the Merger, the surviving corporation will become an indirect, wholly owned subsidiary of Two Harbors. The closing of the Merger will occur as promptly as practicable following satisfaction of all closing conditions set forth in the Merger Agreement, and either Two Harbors or CYS may terminate the Merger Agreement if closing has not occurred by October 31, 2018. After the Merger, the combined company of Two Harbors and CYS will retain the name "Two Harbors Investment Corp." and its shares will continue to trade on the New York Stock Exchange under the symbol "TWO".

Pursuant to the terms and subject to the conditions set forth in the Merger Agreement, at the effective time of the Merger, each outstanding share of common stock, par value $0.01 per share, of CYS ("CYS Common Stock") will be converted into the right to receive from Two Harbors (a) a number of shares of common stock, par value $0.01 per share, of Two Harbors ("Two Harbors Common Stock") determined (to the nearest one-ten-thousandth) by dividing (i) CYS's adjusted book value per share, multiplied by 96.75%, by (ii) Two Harbors' adjusted book value per share, multiplied by 94.20%, each as calculated at a time and pursuant to certain calculation principles set forth in the Merger Agreement, and (b) $15,000,000 divided by the sum of the number of shares of CYS Common Stock issued and outstanding immediately prior to the effective time of the Merger (excluding any cancelled shares), including outstanding CYS restricted stock that will vest upon completion of the Merger pursuant to the Merger Agreement (less any shares surrendered for income tax purposes).

Based on the number of shares of CYS Common Stock outstanding on June 22, 2018, the record date for the Two Harbors special meeting, and an assumed exchange ratio of 0.4872 based on the adjusted book value per share of Two Harbors Common Stock and CYS Common Stock as of March 31, 2018, calculated in accordance with the Merger Agreement, we expect approximately [•] shares of Two Harbors Common Stock will be issued in connection with the Merger. The actual Exchange Ratio will be publicly announced at least five business days before each of the special meetings of stockholders described below.

In addition, each share of 7.75% Series A Cumulative Redeemable Preferred Stock, par value $0.01 per share, of CYS (the "CYS Series A Preferred Stock") will be converted into the right to receive one share of newly classified 7.75% Series D Cumulative Redeemable Preferred Stock, par value $0.01 per share, of Two Harbors (the "Two Harbors Series D Preferred Stock"), and each share of 7.50% Series B Cumulative Redeemable Preferred Stock, par value $0.01 per share, of CYS (the "CYS Series B Preferred Stock") will be converted into the right to receive one share of newly classified 7.50% Series E Cumulative Redeemable Preferred Stock, par value $0.01 per share, of Two Harbors (the "Two Harbors Series E Preferred Stock").

In connection with the Merger, PRCM Advisers LLC ("PRCM Advisers"), Two Harbors' external manager and a subsidiary of Pine River Capital Management L.P., has agreed to reduce the base management fee it charges Two Harbors with respect to the additional equity under management resulting from the Merger from 1.5% of stockholders' equity on an annualized basis to 0.75% through the first anniversary of Closing. PRCM Advisers will also make a one-time downward adjustment of $15,000,000 to the management fees payable by Two Harbors for the quarter in which the Merger closes as well as a downward adjustment to the management fees payable by Two Harbors of up to an additional $3.3 million to reimburse Two Harbors for certain transaction-related expenses.

Two Harbors and CYS will each hold a special meeting of their respective common stockholders. Two Harbors' special meeting will be held at 601 Carlson Parkway, 2nd Floor, Minnetonka, Minnesota 55305 on July 27, 2018, at 9:00 a.m., Central Time. CYS's special meeting will be held at 50 Rowes Wharf, Boston, Massachusetts 02110 on July 27, 2018, at 9:00 a.m., Eastern Time. The preferred stockholders of each of CYS and Two Harbors are not entitled to vote on

any of the matters to be considered and voted upon at the CYS special meeting or the Two Harbors special meeting, as applicable.

At the Two Harbors special meeting, the Two Harbors common stockholders will be asked to (i) consider and vote on a proposal to approve the issuance of shares of Two Harbors Common Stock in the Merger and upon any conversion (upon certain future changes of control of Two Harbors, if any) of the Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock to be issued in the Merger (the "Two Harbors Common Stock Issuance Proposal") and (ii) approve the adjournment of the Two Harbors special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Two Harbors Common Stock Issuance Proposal (the "Two Harbors Adjournment Proposal"). The Two Harbors Board has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the Merger and the issuance of shares of Two Harbors Common Stock (the "Two Harbors Common Stock Issuance"), are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. **The Two Harbors Board unanimously recommends that the Two Harbors common stockholders vote "FOR" the Two Harbors Common Stock Issuance Proposal and "FOR" the Two Harbors Adjournment Proposal**. Only those matters included in the Two Harbors Notice of Meeting may be considered and voted upon at the Two Harbors special meeting.

At the CYS special meeting, the CYS common stockholders will be asked to (i) consider and vote on a proposal to approve the Merger (the "Merger Proposal"), (ii) consider and vote on a non-binding advisory proposal to approve the compensation that may be paid or become payable to CYS's named executive officers that is based on or otherwise relates to the Merger (the "CYS Non-Binding Compensation Advisory Proposal"), and (iii) approve the adjournment of the CYS special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Merger Proposal (the "CYS Adjournment Proposal"). The CYS Board, acting upon the unanimous recommendation of a special committee of independent directors of CYS formed for the purpose of, among other things, evaluating and making a recommendation to the CYS Board with respect to the Merger Agreement and the other transactions contemplated therein, has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the merger of Merger Sub with and into CYS, are in the best interests of CYS and its stockholders, (ii) approved the Merger Agreement and declared that the transactions contemplated therein, including the Merger, are advisable, (iii) directed that the Merger and the other transactions contemplated by the Merger Agreement be submitted to the holders of CYS Common Stock for consideration at the CYS special meeting and (iv) recommended that the CYS common stockholders approve the Merger and the other transactions contemplated by the Merger Agreement.

The CYS Board unanimously recommends that the CYS common stockholders vote "FOR" the Merger Proposal, "FOR" the CYS Non-Binding Compensation Advisory Proposal and "FOR" the CYS Adjournment Proposal. Only those matters included in the CYS Notice of Meeting may be considered and voted upon at the CYS special meeting.

This joint proxy statement/prospectus provides detailed information about the special meetings of Two Harbors and CYS, the Merger Agreement, the Merger and other related matters. A copy of the Merger Agreement is included as Annex A to this joint proxy statement/prospectus. We encourage you to read this joint proxy statement/prospectus, the Merger Agreement and the other annexes to this joint proxy statement/prospectus carefully and in their entirety. **In particular, you should carefully consider the discussion in the section of this joint proxy statement/prospectus entitled "Risk Factors" beginning on page 42.** You may also obtain more information about each company from the documents they file with the Securities and Exchange Commission (the "SEC").

Whether or not you plan to attend the Two Harbors special meeting or the CYS special meeting, as applicable, please complete, date, sign and return, as promptly as possible, the enclosed proxy card in the accompanying reply envelope or authorize a proxy to vote your shares through the Internet or by telephone. You may also authorize a proxy to vote your shares over the Internet using the Internet address on the enclosed proxy card or by telephone using the toll-free number on the enclosed proxy card. If you authorize a proxy to vote your shares through the Internet or by telephone, you will be asked to provide the company number and control number from the enclosed proxy card. If you attend a special meeting and vote in person, your vote by ballot will revoke any proxy previously submitted.

Your vote is very important, regardless of the number of shares of stock you own. Whether or not you plan to attend the Two Harbors special meeting or the CYS special meeting, as applicable, please authorize a proxy to vote your shares of stock as promptly as possible to make sure that your shares of stock are represented at the applicable special meeting. Please note that the failure to vote, or authorize a proxy to vote, your shares of stock of CYS is the equivalent of a vote against the Merger Proposal.

Thank you in advance for your continued support.

Sincerely,

Thomas E. Siering Chief Executive Officer, President and Director Two Harbors Investment Corp.	Kevin E. Grant Chief Executive Officer, Chairman, President, Chief Investment Officer and Founder CYS Investments, Inc.

Neither the SEC nor any state securities regulatory agency has approved or disapproved of the securities to be issued in connection with the Merger or passed upon the adequacy or accuracy of this joint proxy statement/prospectus. Any representation to the contrary is a criminal offense.

This joint proxy statement/prospectus is dated [•], 2018, and is first being mailed to the stockholders of Two Harbors and the stockholders of CYS on or about [•], 2018.

Table of Contents

575 Lexington Avenue
Suite 2930
New York, New York 10022

NOTICE OF SPECIAL MEETING OF TWO HARBORS COMMON STOCKHOLDERS
TO BE HELD ON JULY 27, 2018

NOTICE IS HEREBY GIVEN that a special meeting of stockholders of Two Harbors Investment Corp., a Maryland corporation ("Two Harbors"), will be held at 601 Carlson Parkway, 2nd Floor, Minnetonka, Minnesota 55305 on July 27, 2018 at 9:00 a.m., Central Time, for the following purposes:

1. to consider and vote on a proposal to approve the issuance of shares of common stock, par value $0.01 per share, of Two Harbors ("Two Harbors Common Stock") pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), dated as of April 25, 2018, by and among Two Harbors, Eiger Merger Subsidiary LLC, a Maryland limited liability company, and CYS Investments, Inc., a Maryland corporation, as it may be amended from time to time, a copy of which is attached as Annex A to the joint proxy statement/prospectus accompanying this notice (the "Two Harbors Common Stock Issuance Proposal"); and

2. to consider and vote on a proposal to adjourn the special meeting, if necessary or appropriate, including to solicit additional proxies if there are not sufficient votes to approve the Two Harbors Common Stock Issuance Proposal (the "Two Harbors Adjournment Proposal").

Two Harbors will transact no other business at the Two Harbors special meeting or any adjournment or postponement thereof. Please refer to the attached joint proxy statement/prospectus for further information with respect to the business to be transacted at the Two Harbors special meeting. The board of directors of Two Harbors (the "Two Harbors Board") has fixed the close of business on June 22, 2018 as the record date for the determination of Two Harbors stockholders entitled to notice of, and to vote at, the Two Harbors special meeting or any adjournments or postponements thereof. Accordingly, only common stockholders at the close of business on that date are entitled to notice of, and to vote at, the Two Harbors special meeting and any adjournments or postponements thereof.

The Two Harbors Board has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the Merger and the issuance of shares of Two Harbors Common Stock (the "Two Harbors Common Stock Issuance"), are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. **The Two Harbors Board unanimously recommends that the Two Harbors common stockholders vote "FOR" the Two Harbors Common Stock Issuance Proposal and "FOR" the Two Harbors Adjournment Proposal.**

Your vote is very important, regardless of the number of shares of Two Harbors Common Stock you own. Whether or not you plan to attend the Two Harbors special meeting, please authorize a proxy to vote your shares as promptly as possible to make sure that your shares are represented at the Two Harbors special meeting. Properly executed proxy cards with no instructions indicated on the proxy card will be voted "**FOR**" the Two Harbors Common Stock Issuance Proposal and "**FOR**" the Two

Table of Contents

Harbors Adjournment Proposal. Even if you plan to attend the Two Harbors special meeting in person, we urge you to authorize a proxy as promptly as possible by (1) accessing the Internet website specified on your proxy card, (2) calling the toll-free number specified on your proxy card or (3) completing, signing, dating and returning the enclosed proxy card in the accompanying postage-paid envelope prior to the Two Harbors special meeting to ensure that your shares will be represented and voted at the Two Harbors special meeting. If you hold your shares of Two Harbors Common Stock in "street name," which means through a bank, broker or other nominee, please follow the instructions on the voting instruction card furnished to you by such record holder.

Please note that if you hold shares of stock in different accounts, it is important that you vote or authorize a proxy to vote the shares of stock represented by each account. If you attend the Two Harbors special meeting, you may revoke your proxy and vote in person, even if you have previously returned your proxy card or authorized a proxy to vote your shares through the Internet or by telephone. If your shares of Two Harbors Common Stock are held by a bank, broker or other nominee, and you plan to attend the Two Harbors special meeting in person, please bring to the special meeting your statement evidencing your beneficial ownership of your shares of Two Harbors Common Stock. Please carefully review the instructions in the enclosed joint proxy statement/prospectus and the enclosed proxy card or the information forwarded by your bank, broker or other nominee regarding each of these options.

This notice and the enclosed proxy statement/prospectus are first being mailed to Two Harbors stockholders on or about [•], 2018.

By Order of the Board of Directors,

Rebecca B. Sandberg
Vice President, General Counsel and Secretary

New York, New York
[•], 2018

Table of Contents

500 Totten Pond Road, 6th Floor
Waltham, Massachusetts 02451

NOTICE OF SPECIAL MEETING OF CYS COMMON STOCKHOLDERS TO BE HELD ON JULY 27, 2018

NOTICE IS HEREBY GIVEN that a special meeting of stockholders of CYS Investments, Inc., a Maryland corporation ("CYS") will be held at 50 Rowes Wharf, Boston, Massachusetts 02110 on July 27, 2018 at 9:00 a.m., Eastern Time, for the following purposes:

1. to consider and vote on a proposal (the "Merger Proposal") to approve the merger transaction in which CYS merges with and into Eiger Merger Subsidiary LLC, a Maryland limited liability company, ("Merger Sub") related to that certain Agreement and Plan of Merger (the "Merger Agreement"), dated as of April 25, 2018, among Two Harbors Investment Corp., a Maryland corporation, Merger Sub and CYS, as it may be amended from time to time, a copy of which is attached as Annex A to the joint proxy statement/prospectus accompanying this notice;

2. to consider and vote on a non-binding advisory proposal to approve the compensation that may be paid or become payable to CYS's named executive officers that is based on or otherwise relates to the Merger (the "CYS Non-Binding Compensation Advisory Proposal"); and

3. to consider and vote on a proposal to approve the adjournment of the CYS special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Merger Proposal (the "CYS Adjournment Proposal").

CYS will transact no other business at the special meeting or any adjournment or postponement thereof. These items of business are described in the enclosed joint proxy statement/prospectus. The CYS board of directors (the "CYS Board") has designated the close of business on June 22, 2018 as the record date for the purpose of determining the stockholders who are entitled to receive notice of, and to vote at, the CYS special meeting and any adjournments or postponements of the special meeting, unless a new record date is fixed in connection with an adjournment or postponement of the special meeting. Accordingly, only CYS common stockholders at the close of business on the record date are entitled to notice of the CYS special meeting and only CYS common stockholders are entitled to vote at the CYS special meeting and at any adjournment or postponement of the special meeting.

The CYS Board, acting upon the unanimous recommendation of a special committee of independent directors of CYS formed for the purpose of, among other things, evaluating and making a recommendation to the CYS Board with respect to the Merger Agreement and the other transactions contemplated therein, has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the merger of Merger Sub with and into CYS, are in the best interests of CYS and its stockholders, (ii) approved the Merger Agreement and declared that the transactions contemplated therein, including the Merger, are advisable, (iii) directed that the Merger and the other transactions contemplated by the Merger Agreement be submitted to the holders of CYS Common Stock for consideration at the CYS special meeting and (iv) recommended that the CYS common stockholders approve the Merger and the other transactions contemplated by the Merger Agreement. **The CYS Board unanimously recommends that the CYS common stockholders vote "FOR" the Merger Proposal, "FOR" the CYS Non-Binding Compensation Advisory Proposal and "FOR" the CYS Adjournment Proposal.**

Table of Contents

Your vote is very important, regardless of the number of shares of CYS you own. Whether or not you plan to attend the CYS special meeting, please authorize a proxy to vote your shares as promptly as possible to make sure that your shares are represented at the special meeting. Properly executed proxy cards with no instructions indicated on the proxy card will be voted "**FOR**" the Merger Proposal, "**FOR**" the CYS Non-Binding Compensation Advisory Proposal and "**FOR**" the CYS Adjournment Proposal. Even if you plan to attend the CYS special meeting in person, we request that you complete, sign, date and return the enclosed proxy card in the accompanying envelope prior to the special meeting to ensure that your shares will be represented and voted at the special meeting if you are unable to attend. If you hold your CYS shares in "street name," which means through a bank, broker or other nominee, you must obtain a legal proxy from this bank, broker or other nominee in order to vote in person at the CYS special meeting.

If you do not vote on the Merger Proposal, this will have the same effect as a vote by you against the approval of the Merger Proposal.

Please note that if you hold shares of stock in different accounts, it is important that you vote or authorize a proxy to vote the shares of stock represented by each account. If you attend the CYS special meeting, you may revoke your proxy and vote in person, even if you have previously returned your proxy card or authorized a proxy to vote your shares through the Internet or by telephone. If your CYS shares are held by a bank, broker or other nominee, and you plan to attend the CYS special meeting in person, please bring to the special meeting your statement evidencing your beneficial ownership of your CYS shares. Please carefully review the instructions in the enclosed joint proxy statement/prospectus and the enclosed proxy card or the information forwarded by your bank, broker or other nominee regarding each of these options.

By Order of the Board of Directors,

Thomas A. Rosenbloom
Executive Vice President of Business Development, General Counsel, and Secretary

Waltham, Massachusetts
[•], 2018

Table of Contents

ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Two Harbors and CYS from other documents that are not included in or delivered with this joint proxy statement/prospectus. This information is available to you without charge upon your request. To obtain timely delivery, you must request the information no later than five business days before the date of the applicable special meeting. You can obtain the documents incorporated by reference into this joint proxy statement/prospectus by requesting them from Two Harbors' or CYS's investor relations departments:

If you are a Two Harbors stockholder:

D.F. King & Co., Inc.
48 Wall Street, 22nd floor
New York, New York 10005
(866) 530-8623 (toll free)
two@dfking.com

or

575 Lexington Avenue
Suite 2930
New York, New York 10022
(612) 629-2500
Attention: Investor Relations

If you are a CYS stockholder:

Georgeson LLC
1290 Avenue of the Americas, 9th Floor
New York, New York 10104
866-300-8594 (toll free)

or

500 Totten Pond Road
6th Floor
Waltham, Massachusetts 02451
(617) 639-0440
Attention: Investor Relations

Investors may also consult Two Harbors' or CYS's website for more information concerning the Merger and other related transactions described in this joint proxy statement/prospectus. Two Harbors' website is www.twoharborsinvestment.com. CYS's website is www.cysinv.com. Each company's public filings are also available at www.sec.gov. The information contained on Two Harbors' and CYS's websites is not part of this joint proxy statement/prospectus and is not incorporated herein by reference. The references to Two Harbors' and CYS's websites are intended to be inactive textual references only.

If you would like to request any documents that are incorporated by reference into this joint proxy statement/prospectus, please do so by July 20, 2018 in order to receive them before the Two Harbors special meeting and by July 20, 2018 in order to receive them before the CYS special meeting.

For more information, see "Where You Can Find More Information and Incorporation by Reference" beginning on page 210.

ABOUT THIS DOCUMENT

This joint proxy statement/prospectus, which forms part of a registration statement on Form S-4 (Registration Statement No. 333-225242) filed by Two Harbors with the SEC, constitutes a prospectus of Two Harbors for purposes of the Securities Act of 1933, as amended (the "Securities Act"), with respect to (i) the shares of Two Harbors Common Stock to be issued to CYS common stockholders in exchange for shares of CYS Common Stock, (ii) the shares of Two Harbors Series D Preferred Stock to be issued to holders of CYS Series A Preferred Stock in exchange for shares of CYS Series A Preferred Stock and (iii) the shares of Two Harbors Series E Preferred Stock to be issued to holders of CYS Series B Preferred Stock in exchange for shares of CYS Series B Preferred Stock, in each case, pursuant to the Merger Agreement, as such agreement may be amended or modified from time to time. This joint proxy statement/prospectus also constitutes a proxy statement for each of Two Harbors and CYS for purposes of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In addition, it constitutes a notice of special meeting with respect to the Two Harbors special meeting and a notice of special meeting with respect to the CYS special meeting.

Table of Contents

You should rely only on the information contained or incorporated by reference in this joint proxy statement/ prospectus. No one has been authorized to provide you with information that is different from that contained in, or incorporated by reference into, this joint proxy statement/prospectus. This joint proxy statement/prospectus is dated [•], 2018, and you should not assume that the information contained in, or incorporated by reference into, this joint proxy statement/prospectus is accurate as of any date other than that date (or, in the case of documents incorporated by reference, their respective dates). Neither the mailing of this joint proxy statement/prospectus to Two Harbors stockholders or CYS stockholders nor the Two Harbors Common Stock Issuance to CYS common stockholders in the Merger pursuant to the Merger Agreement will create any implication to the contrary.

This joint proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction in which or to any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Information contained in this joint proxy statement/prospectus regarding Two Harbors has been provided by Two Harbors and information contained in this joint proxy statement/prospectus regarding CYS has been provided by CYS.

Table of Contents

TABLE OF CONTENTS

Table of Contents

Table of Contents

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETINGS AND THE MERGER

The following questions and answers are intended to address certain commonly asked questions regarding the Merger Agreement, the Merger and the Two Harbors and CYS special meetings. These questions and answers do not address all questions that may be important to you as a stockholder of Two Harbors or CYS. Please refer to the "Summary" beginning on page 17 and the more detailed information contained elsewhere in this joint proxy statement/prospectus and the annexes to this joint proxy statement/prospectus, which you should read carefully. Unless stated otherwise, all references in this joint proxy statement/prospectus to:

"Alternative Proposal" means any contract, proposal, offer or indication of interest relating to any transaction or series of related transactions involving any merger, amalgamation, share exchange, recapitalization, consolidation, acquisition, business combination of or involving Two Harbors and/or any of its subsidiaries, and any person, in which the consideration paid by Two Harbors or its subsidiaries was cash, voting stock of Two Harbors or other consideration valued at $500,000,000 or more.

"Barclays" refers to Barclays Capital Inc.

"Closing" refers to the closing of the Merger.

"Code" refers to the Internal Revenue Code of 1986, as amended.

"Combined Company" refers to Two Harbors and its subsidiaries after the closing of the Merger.

"Credit Suisse" refers to Credit Suisse Securities (USA) LLC.

"CYS" refers to CYS Investments, Inc., a Maryland corporation.

"CYS Adjournment Proposal" refers to the proposal to approve the adjournment of the CYS special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Merger Proposal.

"CYS Board" refers to the board of directors of CYS.

"CYS Bylaws" refers to CYS's Amended and Restated Bylaws, as amended from time to time.

"CYS Charter" refers to CYS's Articles of Amendment and Restatement, as amended or supplemented from time to time.

"CYS Common Stock" refers to each outstanding share of common stock, par value $0.01, per share, of CYS.

"CYS Non-Binding Compensation Advisory Proposal" refers to the non-binding advisory proposal to approve the compensation that may be paid or become payable to CYS's named executive officers that is based on or otherwise relates to the Merger.

"CYS Preferred Stock" refers to each outstanding share of CYS Series A Preferred Stock and CYS Series B Preferred Stock.

"CYS Restricted Stock" means CYS Common Stock that is subject to vesting, repurchase or other lapse restriction.

"CYS Series A Preferred Stock" refers to each outstanding share of 7.75% Series A Cumulative Redeemable Preferred Stock, par value $0.01 per share, of CYS.

"CYS Series B Preferred Stock" refers to each outstanding share of 7.50% Series B Cumulative Redeemable Preferred Stock, par value $0.01 per share, of CYS.

Table of Contents

"CYS Stock" refers to the CYS Common Stock, CYS Series A Preferred Stock and CYS Series B Preferred Stock, collectively.

"CYS Stock Plan" refers to the CYS 2013 Equity Incentive Plan.

"Determination Date" means the last day of the month immediately preceding the month in which the conditions to Closing are reasonably expected to be satisfied (other than the obtainment of the Two Harbors common stockholder approval or the CYS common stockholder approval and those conditions that by their nature are to be satisfied or waived at the Closing), or such other date as may be mutually agreed by the parties in their respective sole discretions.

"Exchange Ratio" refers to a quotient (rounded to the nearest one ten-thousandth) determined by dividing (i) (a) CYS adjusted book value per share, multiplied by (b) 96.75% by (ii) (a) Two Harbors adjusted book value per share, multiplied by (b) 94.20%, in each case as determined in accordance with the Merger Agreement.

"Fourth Amendment to the Management Agreement" refers to the Fourth Amendment to the Management Agreement between Two Harbors, Two Harbors Operating Company LLC and PRCM Advisers dated April 25, 2018.

"GAAP" refers to the accounting principles generally accepted in the United States of America.

"Granite Point" means Granite Point Mortgage Trust Inc.

"JMP" means JMP Securities LLC.

"Management Agreement" refers to the Management Agreement between Two Harbors, Two Harbors Operating Company LLC and PRCM Advisers dated October 28, 2009, as amended.

"Merger" refers to the merger of Merger Sub with and into CYS, with CYS continuing as the surviving corporation.

"Merger Agreement" refers to the Agreement and Plan of Merger, dated as of April 25, 2018, by and among Two Harbors, Merger Sub, and CYS, as it may be amended or modified from time to time, a copy of which is attached as Annex A to this joint proxy statement/prospectus.

"Merger Proposal" refers to the proposal to approve the Merger.

"Merger Sub" refers to Eiger Merger Subsidiary LLC, a Maryland limited liability company and an indirect wholly owned subsidiary of Two Harbors.

"NYSE" refers to the New York Stock Exchange.

"Per Share Cash Consideration" means $15,000,000 divided by the sum of the number of shares of CYS Common Stock issued and outstanding immediately prior to the effective time of the Merger (excluding any cancelled shares), including outstanding CYS Restricted Stock that will vest upon completion of the Merger (less any shares surrendered for income tax

purposes).

"Per Share Stock Consideration" means a number of shares of Two Harbors Common Stock equal to the Exchange Ratio.

"PRCM Advisers" refers to PRCM Advisers LLC, Two Harbors' external manager and a wholly owned subsidiary of Pine River.

"Pine River" refers to Pine River Capital Management L.P.

"REIT" refers to a real estate investment trust as defined in Section 856 of the Code.

"Two Harbors" refers to Two Harbors Investment Corp., a Maryland corporation.

Table of Contents

"Two Harbors Adjournment Proposal" refers to the proposal to approve the adjournment of the Two Harbors special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Two Harbors Common Stock Issuance Proposal.

"Two Harbors Board" refers to the board of directors of Two Harbors.

"Two Harbors Bylaws" refers to Two Harbors' Amended and Restated Bylaws, as amended from time to time.

"Two Harbors Charter" refers to Two Harbors' Articles of Amendment and Restatement, as amended or supplemented from time to time.

"Two Harbors Common Stock" refers to the common stock, par value $0.01 per share, of Two Harbors.

"Two Harbors Common Stock Issuance" refers to the issuance of shares of Two Harbors Common Stock to holders of CYS Common Stock, as contemplated by the Merger Agreement, and upon any conversion (upon certain future changes of control of Two Harbors, if any) of the Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock to be issued in the Merger.

"Two Harbors Common Stock Issuance Proposal" refers to the proposal to approve the Two Harbors Common Stock Issuance.

"Two Harbors Series A Preferred Stock" refers to each outstanding share of 8.125% Series A Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, $0.01 par value per share, of Two Harbors.

"Two Harbors Series B Preferred Stock" refers to each outstanding share of 7.625% Series B Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, $0.01 par value per share, of Two Harbors.

"Two Harbors Series C Preferred Stock" refers to each outstanding share of 7.25% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, $0.01 par value per share, of Two Harbors.

"Two Harbors Series D Preferred Stock" refers to the newly classified 7.75% Series D Cumulative Redeemable Preferred Stock, par value $0.01 per share, of Two Harbors.

"Two Harbors Series E Preferred Stock" refers to the newly classified 7.50% Series E Cumulative Redeemable Preferred Stock, par value $0.01 per share, of Two Harbors.

Q:

What is the proposed transaction for which I am being asked to vote?

A:

The CYS common stockholders are being asked to approve the Merger. The approval of the Merger by the CYS common stockholders is a condition to the effectiveness of the Merger.

The Two Harbors common stockholders are being asked to approve the Two Harbors Common Stock Issuance Proposal in connection with the Merger. The approval of the Two Harbors Common Stock Issuance Proposal by the Two Harbors common stockholders is a condition to the effectiveness of the Merger.

The CYS common stockholders are being asked to approve the CYS Non-Binding Compensation Advisory Proposal, and the CYS common stockholders and the Two Harbors common stockholders are also being asked to approve the CYS Adjournment Proposal and the Two Harbors Adjournment Proposal, respectively, if necessary. The approval of these proposals is not a condition to the effectiveness of the Merger.

Table of Contents

Q:

Why are Two Harbors and CYS proposing the Merger?

A:

The Two Harbors Board and the CYS Board have determined that the Merger will provide a number of significant strategic opportunities and benefits and will be in the best interests of their respective stockholders. At Closing, the Combined Company will have a larger capital base, which will support continued growth across Two Harbors' target assets and will position Two Harbors to take advantage of market opportunities as they arise. The Combined Company is expected to provide improved scale, liquidity and capital alternatives for Two Harbors stockholders as a result of the increased equity capitalization and the increased stockholder base of the Combined Company. The combination of Two Harbors and CYS is also expected to create cost efficiencies and decrease Two Harbors' other operating expense ratio by 30 to 40 basis points. To review the reasons for the Merger in greater detail, see "The Merger Recommendation of the Two Harbors Board and Its Reasons for the Merger" beginning on page 78 and "The Merger Recommendation of the CYS Board and Its Reasons for the Merger" beginning on page 81.

Q:

Were appraisals or valuations performed on the assets and liabilities of Two Harbors and CYS in connection with the Merger?

A:

Except for the valuation to be performed on an office property owned by CYS (representing less than 1% of CYS's total assets), no third-party appraisals or valuations on the assets and liabilities of Two Harbors and CYS were obtained in connection with the Merger.

Q:

What happens if the market price of Two Harbors Common Stock or CYS Common Stock changes before the Closing?

A:

Changes in the market price of Two Harbors Common Stock or the market price of CYS Common Stock at or prior to the effective time of the Merger will not change the number of shares of Two Harbors Common Stock that CYS common stockholders will receive because the Exchange Ratio is linked to Two Harbors' adjusted book value per share and CYS's adjusted book value per share as of the Determination Date, and not to the market price of either stock.

Q:

What happens if the adjusted book value per share of Two Harbors or the adjusted book value per share of CYS changes before the Determination Date?

A:

The value of the merger consideration received by CYS common stockholders will depend on the Exchange Ratio and the value of a share of Two Harbors Common Stock at the effective time of the Merger. The Exchange Ratio will be based on Two Harbors' adjusted book value per share and CYS's adjusted book value per share as of the Determination Date. These adjusted book value per share amounts may vary from their respective amounts as of March 31, 2018. As a result, the Exchange Ratio may also vary. As of March 31, 2018, the adjusted book values per share for Two Harbors and CYS, on a pro forma basis, would have been $15.63 and $7.41, respectively, representing an illustrative Exchange Ratio of 0.4872, with each share of CYS being exchanged for the right to receive 0.4872 shares of Two Harbors (plus the Per Share Cash Consideration). The actual Exchange Ratio for the Merger will be based on each of the parties' adjusted book values per share as of the Determination Date, and such Exchange Ratio will be publicly announced at least five business days prior to the special meetings.

Q:

Are there any conditions to completion of the Merger?

A:

Yes. In addition to the approvals of the Two Harbors common stockholders and the CYS common stockholders, as described herein, there are a number of conditions that must be satisfied or waived for the Merger to be consummated. For a description of all the conditions to the Merger, see "The Merger Agreement Conditions to Complete the Merger" beginning on page 141.

Table of Contents

The following questions and answers apply to Two Harbors stockholders only:

Q:

When and where is the Two Harbors special meeting?

A:

The special meeting of Two Harbors common stockholders will be held on July 27, 2018, at 601 Carlson Parkway, 2nd Floor, Minnetonka, Minnesota 55305, at 9:00 a.m., Central Time.

Q:

What matters will be voted on at the Two Harbors special meeting?

A:

Two Harbors common stockholders will be asked to consider and vote on the following proposals:

- the Two Harbors Common Stock Issuance Proposal; and
- the Two Harbors Adjournment Proposal.

Two Harbors will transact no other business at the Two Harbors special meeting or any adjournment or postponement thereof.

Q:

How does the Two Harbors Board recommend that I vote on the proposals?

A:

The Two Harbors Board has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. The Two Harbors Board unanimously recommends that the Two Harbors common stockholders vote "**FOR**" the Two Harbors Common Stock Issuance Proposal and "**FOR**" the Two Harbors Adjournment Proposal. For a more complete description of the recommendation of the Two Harbors Board, see "The Merger Recommendation of the Two Harbors Board and Its Reasons for the Merger" beginning on page 78.

Q:

What constitutes a quorum for the Two Harbors special meeting?

A:

The presence, in person or by proxy, of the holders of shares of Two Harbors Common Stock entitled to cast a majority of all the votes entitled to be cast at the Two Harbors special meeting will constitute a quorum at the Two Harbors special meeting. Two Harbors will include abstentions in the calculation of the number of shares considered to be present at the Two Harbors special meeting for purposes of determining the presence of a quorum at the Two Harbors special meeting. As of the close of business on June 22, 2018, the record date for the Two Harbors special meeting, there were [•] shares of Two Harbors Common Stock outstanding.

Q:

What vote is required for Two Harbors common stockholders to approve the Two Harbors Common Stock Issuance Proposal?

A:

Approval of the Two Harbors Common Stock Issuance Proposal will require that the number of votes cast for the Two Harbors Common Stock Issuance Proposal exceeds the number of votes cast against and abstaining from the Two Harbors Common Stock Issuance Proposal, provided a quorum is present.

Holders of Two Harbors preferred stock will not be entitled to vote on any matter at the Two Harbors special meeting.

Table of Contents

Q:

What vote is required for Two Harbors common stockholders to approve the Two Harbors Adjournment Proposal?

A:

Approval of the Two Harbors Adjournment Proposal will require that the number of votes cast for the Two Harbors Adjournment Proposal exceeds the number of votes cast against the Two Harbors Adjournment Proposal, provided a quorum is present.

Q:

How are votes counted?

A:

For the Two Harbors Common Stock Issuance Proposal, you may vote "**FOR**", "**AGAINST**" or "**ABSTAIN**". If you do not return your proxy card or otherwise authorize a proxy to vote your shares or attend the meeting in person, your shares will not be considered present for the purpose of determining the presence of a quorum and will have no effect on the Two Harbors Common Stock Issuance Proposal. Under NYSE rules, abstentions will be considered as votes cast and, accordingly, will have the same effect as votes "AGAINST" the Two Harbors Common Stock Issuance Proposal.

For the Two Harbors Adjournment Proposal, you may vote "**FOR**", "**AGAINST**" or "**ABSTAIN**". Abstentions and other shares not voted (whether by broker non-votes, if any, or otherwise) will not have an effect on the Two Harbors Adjournment Proposal, provided that a quorum is otherwise present.

Properly executed proxy cards with no instructions indicated on the proxy card will be voted "**FOR**" the Two Harbors Common Stock Issuance Proposal and "**FOR**" the Two Harbors Adjournment Proposal.

In addition, banks, brokers and other nominees that hold their customers' shares in street name may not vote their customers' shares on "non-routine" matters without instructions from their customers. As each of the proposals to be voted upon at the Two Harbors special meeting is considered "non-routine," such organizations do not have discretion to vote on any of the proposals. As a result, if you fail to provide your broker, bank or other nominee with any instructions regarding how to vote your shares of Two Harbors Common Stock, your shares of Two Harbors Common Stock will not be considered present at the Two Harbors special meeting and will not be voted on any of the proposals.

Q:

Who is entitled to vote at the Two Harbors special meeting?

A:

All holders of Two Harbors Common Stock as of the close of business on June 22, 2018, the record date for the Two Harbors special meeting, are entitled to vote at the Two Harbors special meeting, unless a new record date is fixed for any adjournment or postponement of the Two Harbors special meeting. As of the record date, there were [•] issued and outstanding shares of Two Harbors Common Stock. Each holder of Two Harbors Common Stock on the record date is entitled to one vote per share.

Holders of Two Harbors preferred stock will not be entitled to vote on any matter at the Two Harbors special meeting.

Q:

How will Two Harbors common stockholders be affected by the Merger and the Two Harbors Common Stock Issuance?

A:

After the Merger, each Two Harbors common stockholder will continue to own the shares of Two Harbors Common Stock that such stockholder held immediately prior to the Merger. As a result, each Two Harbors common stockholder will continue to own common stock in the Combined Company, which will be a larger company with more assets. However, because Two Harbors will be issuing new shares of Two Harbors Common Stock to CYS common stockholders in the Merger, each outstanding share of Two Harbors Common Stock immediately prior to the Merger will represent a smaller percentage of the aggregate number of shares of Two Harbors Common Stock outstanding after the Merger.

Table of Contents

Q:

Do the Two Harbors directors and executive officers and its external manager, PRCM Advisers, have any interests in the Merger?

A:

Yes. The Combined Company will continue to be managed by PRCM Advisers under the terms of the Management Agreement. Under the Management Agreement, PRCM Advisers provides the day-to-day management of Two Harbors' business, including providing Two Harbors with its executive officers and all other personnel necessary to support its operations. In exchange for its services, Two Harbors pays PRCM Advisers a management fee and reimburses it for certain expenses incurred by it and its affiliates in rendering management services to Two Harbors. Pine River is the parent of PRCM Advisers. Certain directors and executive officers of Two Harbors are partners and employees of Pine River.

Pursuant to the Management Agreement, Two Harbors pays PRCM Advisers a base management fee equal to 1.5% per annum of its stockholders' equity, which is calculated and payable quarterly in arrears. Following the Merger, Two Harbors stockholders' equity will include the additional equity attributable to the acquisition of CYS, thus the amount of the management fees payable to PRCM Advisers will also increase, which gives PRCM Advisers and its parent, Pine River (and therefore, Two Harbors' management), an incentive, not shared by Two Harbors stockholders, to negotiate and effect the Merger, possibly on terms less favorable to Two Harbors than would otherwise have been achieved. However, in connection with the Merger, PRCM Advisers has agreed to amend the Management Agreement to provide for: (i) a reduction in the base management fee PRCM Advisers charges Two Harbors with respect to the additional equity under management resulting from the Merger from 1.5% of stockholders' equity on an annualized basis to 0.75% through the first anniversary of the Closing; (ii) a one-time downward adjustment of $15,000,000 to the management fees payable by Two Harbors for the quarter in which the Merger closes; and (iii) a one-time downward adjustment of up to $3.3 million in the management fees payable by Two Harbors for the quarter in which the Merger occurs in order to reimburse Two Harbors for certain expenses it incurs in connection with the Merger. In the event the total amount of the management fee payable for the quarter referenced in clauses (ii) and (iii) above is less than the aggregate amount of the referenced downward adjustments (collectively, the "Adjustments"), PRCM Advisers will pay to Two Harbors in immediately available funds the difference between (i) such Adjustments and (ii) the base management fee payable to PRCM Advisers with respect to such quarter.

The Fourth Amendment to the Management Agreement between Two Harbors and PRCM Advisers was negotiated between related parties, and the terms, including fees and other amounts payable, may not be as favorable to Two Harbors as if it had been negotiated with an unaffiliated third party.

The following questions and answers apply to CYS common stockholders only:

Q:

What will I receive for my CYS Stock in the Merger?

A:

Under the terms of the Merger Agreement, each share of CYS Common Stock will be converted into the right to receive (i) the Per Share Cash Consideration and (ii) a number of shares of Two Harbors Common Stock based on the Exchange Ratio, which will be publicly announced at least five business days prior to the earlier of the CYS special meeting and the Two Harbors special meeting. Each share of CYS Series A Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series D Preferred Stock. Each share of CYS Series B Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series E Preferred Stock.

Table of Contents

Q:

How will I receive the merger consideration if the Merger is completed?

A:

For CYS stockholders, if you hold physical share certificates of CYS Common Stock or CYS Preferred Stock, you will be sent a letter of transmittal promptly after the Closing describing how you may exchange your shares for the merger consideration, and the exchange agent will forward to you the merger consideration to which you are entitled after receiving the proper documentation from you. If you hold your shares of CYS Common Stock or CYS Preferred Stock in uncertificated book-entry form, you are not required to take any specific actions to exchange your shares. After the consummation of the Merger, uncertificated shares of CYS Common Stock and CYS Preferred Stock will be automatically exchanged for the applicable merger consideration. For more information, see the section entitled "The Merger Agreement Exchange Procedures" beginning on page 127.

Q:

When and where is the CYS special meeting?

A:

The special meeting of CYS common stockholders will be held on July 27, 2018, at 50 Rowes Wharf, Boston, Massachusetts 02110, starting at 9:00 a.m., Eastern Time.

Q:

What matters will be voted on at the CYS special meeting?

A:

You will be asked to consider and vote on the following proposals:

the Merger Proposal;

the CYS Non-Binding Compensation Advisory Proposal; and

the CYS Adjournment Proposal.

CYS will transact no other business at the CYS special meeting or any adjournment or postponement thereof. Holders of CYS Preferred Stock will not be entitled to vote on any matter at the CYS special meeting.

Q:

How does the CYS Board recommend that I vote on the proposals?

A:

The CYS Board, acting upon the unanimous recommendation of a special committee of independent directors of CYS formed for the purpose of, among other things, evaluating and making a recommendation to the CYS Board with respect to the Merger Agreement and the other transactions contemplated therein, has unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the merger of Merger Sub with and into CYS, are in the best interests of CYS and its stockholders, (ii) approved the Merger Agreement and declared that the transactions contemplated therein, including the Merger, are advisable, (iii) directed that the Merger and the other transactions contemplated by the Merger Agreement be submitted to the holders of CYS Common Stock for consideration at the CYS special meeting and (iv) recommended that the CYS common stockholders approve the Merger and the other transactions contemplated by the Merger Agreement.

The CYS Board unanimously recommends that the CYS common stockholders vote "**FOR**" the Merger Proposal, "**FOR**" the CYS Non-Binding Compensation Advisory Proposal and "**FOR**" the CYS Adjournment Proposal. For a more complete description of the recommendation of the CYS Board, see "The Merger Recommendation of the CYS Board and Its Reasons for the Merger" beginning on page 81.

Q:

Do the CYS directors and executive officers have any interests in the Merger?

A:

Yes. In considering the CYS Board's recommendation for CYS stockholders to approve the Merger Proposal and the CYS Non-Binding Compensation Advisory Proposal, CYS stockholders

Table of Contents

should be aware that directors and executive officers of CYS have interests in the Merger that may be different from, or in addition to, the interests of CYS stockholders generally and that may present actual or potential conflicts of interests. These interests include:

- immediately prior to the effective time of the Merger, each outstanding award of CYS Restricted Stock granted pursuant to the CYS Stock Plan will automatically vest in full and any forfeiture restrictions applicable to such shares of CYS Restricted Stock shall immediately lapse. As a result, each share of CYS Restricted Stock (less any shares surrendered for income tax purposes) will be treated as a share of CYS Common Stock for all purposes of the Merger, including the right to receive the merger consideration; and

- continued indemnification and insurance coverage for the directors and executive officers of CYS in accordance with the Merger Agreement.

In addition, CYS maintains employment agreements with each of Messrs. Grant, DeCicco, Cleary, and Rosenbloom (the "Employment Agreements"), which provide for payments and other benefits if the individual's employment terminates for a qualifying event or circumstance, such as being terminated without "cause" or leaving employment for "good reason," as these terms are defined in the Employment Agreements. Upon the termination of such individual's employment by CYS or Two Harbors other than for cause, retirement or disability, or by such individual for good reason, the individual would be eligible to receive, among other benefits, (i) a lump sum severance payment equal to 2.5 in the case of Mr. Grant and 1.0 in the case of Messrs. DeCicco, Cleary and Rosenbloom, multiplied by the average of the sum of such individual's base salary and bonus earned during the shorter of (a) the three (3) fiscal years immediately preceding the year in which the termination of employment occurs or (b) the period of time beginning on the date of the individual's employment agreement and ending on the termination date of such individual's employment, (ii) a pro rata bonus for the year of termination, and (iii) certain benefit continuation rights for up to 24 months for Mr. Grant and up to 12 months for Messrs. DeCicco, Cleary, and Rosenbloom, following termination.

In connection with the approval of the execution of the Merger Agreement, the CYS Board approved an amendment to the Employment Agreements to clarify payment mechanics and timing of severance amounts that may become payable pursuant to the Employment Agreements following a qualifying termination of employment with CYS.

Upon Closing, each of James A. Stern and Karen Hammond, independent directors currently sitting on the CYS Board, will be appointed to the Two Harbors Board and each will be entitled to compensation pursuant to Two Harbors' independent director compensation program.

The CYS Board was aware of these interests and considered them, among other matters, when approving the Merger Agreement and the transactions contemplated thereby, including the Merger. For additional information, see "The Merger Interests of CYS's Directors and Executive Officers in the Merger" beginning on page 116.

Q:

What constitutes a quorum for the CYS special meeting?

A:

The CYS Bylaws provide that the presence in person or by proxy of CYS stockholders entitled to cast a majority of all the votes entitled to be cast at the meeting constitutes a quorum at each meeting of CYS stockholders. Abstentions will be counted for the purpose of determining a quorum.

Q:

What vote is required for CYS common stockholders to approve the Merger Proposal?

A:

Approval of the Merger Proposal will require the affirmative vote of the holders of at least a majority of all outstanding shares of CYS Common Stock entitled to vote on the Merger Proposal,

Table of Contents

which is the only vote of the holders of any class or series of shares of capital stock of CYS required for such approval, provided a quorum is present.

Holders of CYS Preferred Stock will not be entitled to vote on any matter at the CYS special meeting.

Q:

What vote is required for CYS common stockholders to approve the CYS Non-Binding Compensation Advisory Proposal?

A:

Approval of the CYS Non-Binding Compensation Advisory Proposal will require the affirmative vote of a majority of the votes cast on the matter by holders of CYS Common Stock, provided a quorum is present, which is the only vote of the holders of any class or series of shares of capital stock of CYS required for such approval.

Q:

What vote is required for CYS common stockholders to approve the CYS Adjournment Proposal?

A:

Approval of the CYS Adjournment Proposal will require the affirmative vote of a majority of the votes cast on the matter by holders of shares of CYS Common Stock, provided a quorum is present, which is the only vote of the holders of any class or series of shares of capital stock of CYS required for such approval.

Q:

How are votes counted?

A:

For the Merger Proposal, you may vote "**FOR**", "**AGAINST**" or "**ABSTAIN**". If you abstain or fail to return your proxy card, it will have the same effect as a vote "**AGAINST**" the Merger Proposal.

For the CYS Non-Binding Compensation Advisory Proposal, you may vote "**FOR**", "**AGAINST**" or "**ABSTAIN**". Abstentions and other shares not voted (whether by broker non-votes, if any, or otherwise) will not have an effect on the CYS Non-Binding Compensation Advisory Proposal, provided that a quorum is otherwise present.

For the CYS Adjournment Proposal, you may vote "**FOR**", "**AGAINST**" or "**ABSTAIN**". Abstentions and other shares not voted (whether by broker non-votes, if any, or otherwise) will not have an effect on the CYS Adjournment Proposal, provided that a quorum is otherwise present.

Properly executed proxy cards with no instructions indicated on the proxy card will be voted "**FOR**" the Merger Proposal, "**FOR**" the CYS Non-Binding Compensation Advisory Proposal and "**FOR**" the CYS Adjournment Proposal.

In addition, if your shares are held in the name of a bank, broker or other nominee, your bank, broker or other nominee will not vote your shares in the absence of specific instructions from you on how to vote your shares. These "broker non-votes" (if any) and abstentions will have the same effect as a vote against the Merger Proposal.

Q:

Who is entitled to vote at the CYS special meeting?

A:

All holders of CYS Common Stock as of the close of business on June 22, 2018, the record date for the CYS special meeting, are entitled to vote at the CYS special meeting, unless a new record date is fixed for any adjournment or postponement of the CYS special meeting. As of the record date, there were [•] issued and outstanding shares of CYS Common Stock. Each holder of CYS Common Stock on the record date is entitled to one vote per share. Holders of CYS Preferred Stock will not be entitled to vote on any matter at the CYS special meeting.

Table of Contents

Q:

How will CYS stockholders be affected by the Merger?

A:

Under the terms of the Merger Agreement, holders of CYS Common Stock will receive (i) the Per Share Cash Consideration and (ii) a number of shares of Two Harbors Common Stock for each share of CYS Common Stock owned by them immediately prior to the completion of the Merger based on the Exchange Ratio, which will be publicly announced at least five business days prior to the special meeting of CYS stockholders. As such, after the Merger is completed, CYS Common Stock will no longer be listed on the NYSE and will be deregistered under the Exchange Act, and former CYS common stockholders are expected to own in the aggregate approximately 30% of the Combined Company's fully diluted equity. Also as a result of the Merger, each share of CYS Series A Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series D Preferred Stock, and each share of CYS Series B Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series E Preferred Stock.

The following questions and answers apply to Two Harbors stockholders and CYS stockholders:

Q:

Have any Two Harbors common stockholders or CYS common stockholders already agreed to vote in favor of the proposals?

A:

To either Two Harbors' or CYS's knowledge, no Two Harbors common stockholder has entered into any agreement to vote any of their shares of Two Harbors Common Stock either in favor or against any proposal at the Two Harbors special meeting, and no CYS common stockholder has entered into any agreement to vote any of their shares of CYS Common Stock either in favor or against any proposal at the CYS special meeting.

Q:

What happens if I sell my stock before the special meetings?

A:

The record date for each company's special meeting is earlier than the date of each company's special meeting and the date that the Merger is expected to be completed. If you sell your stock after your company's record date but before the date of your company's special meeting, you will retain any right to vote at your company's special meeting, but, for CYS stockholders, you will have transferred your right to receive the merger consideration. For CYS stockholders, in order to receive the merger consideration, you must hold your stock through completion of the Merger.

Q:

What is the difference between a stockholder of record and a beneficial owner?

A:

If your shares of Two Harbors Common Stock or CYS Common Stock are registered directly in your name with Two Harbors' or CYS's transfer agent, respectively, you are considered the stockholder of record with respect to those shares.

If your shares of Two Harbors Common Stock or CYS Common Stock are held in a stock brokerage account, or by a bank, trustee or other nominee, you are considered the beneficial owner of shares held in "street name." As the beneficial owner, you have the right to direct your broker, bank, trustee or nominee on how to vote the shares that you beneficially own and you are also invited to attend the applicable special meeting. However, beneficial owners generally cannot vote their shares directly because they are not the stockholder of record; instead, beneficial owners must instruct the broker, bank, trustee or other nominee how to vote their shares.

Table of Contents

Q:

How do I vote?

A:

Stockholders of Record. If you are a stockholder of record of Two Harbors or CYS, you may have your shares of Two Harbors Common Stock or CYS Common Stock voted on the matters to be presented at the applicable special meeting in any of the following ways:

To authorize a proxy through the Internet, visit the website set forth on the proxy card you received. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

To authorize a proxy by telephone, dial the toll free telephone number set forth on the proxy card you received using a touch tone phone and follow the recorded instructions. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized by telephone or through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

To authorize a your proxy by mail, complete, date and sign each proxy card you receive and return it as promptly as practicable in the enclosed prepaid envelope. If you sign and return your proxy card, but do not mark the boxes showing how you wish to vote, your shares of common stock will be voted "**FOR**" the Two Harbors Common Stock Issuance Proposal, the Two Harbors Adjournment Proposal, the Merger Proposal, the CYS Non-Binding Compensation Advisory Proposal and the CYS Adjournment Proposal, as applicable.

If you intend to vote in person, please bring proper identification, together with proof that you are a record owner of shares of the applicable company.

Beneficial Owners. If your shares of Two Harbors or CYS are held in "street name," please refer to the instructions provided by your broker, bank, trustee or other nominee to see which of the above choices are available to you. Please note that if you are a holder in "street name" and wish to vote in person at the special meeting, you must obtain a legal proxy from broker, bank, trustee or other nominee. Please also see the question and answer referencing "street name" shares below.

Q:

What happens if I am both a Two Harbors common stockholder and a CYS common stockholder?

A:

If you are both a Two Harbors common stockholder and a CYS common stockholder, you are entitled to vote at the special meeting of each company. You will receive separate proxy cards for each company and must complete, sign and date each proxy card and return each proxy card in the appropriate preaddressed postage-paid envelope or, if available, by authorizing a proxy to vote your shares by one of the other methods specified in your proxy card or voting instruction card for each company.

Q:

If I am a beneficial owner of Two Harbors or CYS shares, will my broker, bank or other nominee vote my shares for me?

A:

No. If you hold your shares in a stock brokerage account or if your shares are held by a bank or other nominee (that is, in "street name"), you must provide your broker, bank or other nominee with instructions on how to vote your shares. Unless you instruct your broker, bank or other nominee to vote your shares held in street name, your shares will **NOT** be voted. You should follow the procedures provided by your bank, broker or nominee regarding the voting of your shares.

Table of Contents

Q:

How can I revoke or change my vote?

A:

You may revoke your proxy at any time before the vote is taken at the special meeting of the company of which you are a stockholder in any of the following ways:

- authorizing a later proxy by telephone or through the Internet prior to 11:59 p.m., Eastern Time, on July 26, 2018;
- filing with the Secretary of the applicable company, before the taking of the vote at the applicable company's special meeting, a written notice of revocation bearing a later date than the proxy card;
- duly executing a later dated proxy card relating to the same shares and delivering it to the Secretary of the applicable company before the taking of the vote at the applicable company's special meeting; or
- voting in person at the applicable company's special meeting.

Your attendance at the applicable company's special meeting does not automatically revoke your previously submitted proxy. If you have instructed your bank, broker or other nominee to vote your shares, the options described above for revoking your proxy do not apply. Instead, you must follow the directions provided by your bank, broker or other nominee to change your vote.

Q:

When is the Merger expected to be consummated?

A:

The Merger is expected to be consummated by the end of the third quarter of 2018, although Two Harbors and CYS cannot assure completion by any particular date, if at all. Because the Merger is subject to a number of conditions, including the approval of the Two Harbors Common Stock Issuance Proposal by the requisite vote of the Two Harbors common stockholders and the Merger Proposal by the requisite vote of the CYS common stockholders, the exact timing of the Merger cannot be determined at this time and Two Harbors and CYS cannot guarantee that the Merger will be completed at all.

Q:

Following the Merger, what percentage of Two Harbors Common Stock will current Two Harbors common stockholders and CYS common stockholders own?

A:

Following the completion of the Merger:

- the shares of Two Harbors Common Stock held by the current Two Harbors common stockholders are expected to represent in the aggregate approximately 70% of the Combined Company's fully diluted equity; and
- former CYS common stockholders are expected to own in the aggregate the remaining approximately 30% of the Combined Company's fully diluted equity.

Q:

What happens if the Merger is not completed?

A:

If the Two Harbors Common Stock Issuance Proposal or the Merger Proposal is not approved by Two Harbors common stockholders or CYS common stockholders, respectively, or if the Merger is not completed for any other reason, CYS common stockholders will not have their CYS Common Stock exchanged for Two Harbors Common Stock and cash in connection with the Merger. Instead, CYS and Two Harbors would remain separate companies. Under certain circumstances, Two Harbors may be required to pay CYS a termination fee or an expense amount, or CYS may be required to pay Two Harbors a termination fee or expense amount, as described

under "The Merger Agreement Termination Fees and Expenses" beginning on page 144.

Table of Contents

Q:

Am I entitled to exercise appraisal rights?

A:

No. Neither holders of Two Harbors Common Stock nor holders of CYS Common Stock will be entitled to appraisal rights.

Q:

Will Two Harbors have the same business strategy as CYS following the Merger?

A:

No. The Combined Company will follow Two Harbors' current business strategy of investing in, financing and managing Agency residential mortgage-backed securities, non-Agency securities, MSR and other financial assets. See "Description of Policies of Two Harbors" on page 199.

Q:

Will my dividend payments continue after the Merger?

A:

Following completion of the Merger, holders of Two Harbors Common Stock will be entitled to receive dividend or other distributions when, as and if declared by the Two Harbors Board out of funds legally available therefor.

Q:

Are there risks associated with the Merger that I should consider in deciding how to vote?

A:

Yes. There are a number of risks related to the Merger that are discussed in this joint proxy statement/ prospectus described in the section entitled "Risk Factors" beginning on page 42.

Q:

What are the material U.S. federal income tax consequences of the Merger to CYS common stockholders and Two Harbors common stockholders?

A:

Assuming that the Merger is completed as currently contemplated, Two Harbors and CYS expect that the receipt of (i) cash and Two Harbors Common Stock in exchange for CYS Common Stock, (ii) Two Harbors Series D Preferred Stock in exchange for CYS Series A Preferred Stock, or (iii) Two Harbors Series E Preferred Stock in exchange for CYS Series B Preferred Stock, as applicable, by U.S. stockholders pursuant to the Merger will be a taxable transaction for U.S. federal income tax purposes. Generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Common Stock will recognize gain or loss as a result of the Merger measured by the difference, if any, between (i) the sum of the fair market value of the Two Harbors Common Stock received and the amount of any cash received, and (ii) the stockholder's adjusted tax basis in its CYS Common Stock. In addition, generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Series A Preferred Stock or CYS Series B Preferred Stock will recognize gain or loss as a result of the Merger measured by the difference, if any, between (i) the fair market value of the Two Harbors Series D Preferred Stock or Two Harbors Series E Preferred Stock received, as applicable, and (ii) the stockholder's adjusted tax basis in its CYS Series A Preferred Stock or CYS Series B Preferred Stock, as applicable. Because the consideration to be given to stockholders of (i) CYS Common Stock consists primarily of Two Harbors Common Stock and (ii) CYS Series A Preferred Stock and CYS Series B Preferred Stock consists solely of Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock, respectively, U.S. stockholders of CYS Stock, may need to sell their Two Harbors stock received in the Merger, or raise cash from other sources, to pay any tax obligations resulting from the Merger. Generally, non-U.S. stockholders are not expected to be subject to U.S. federal income tax or U.S. federal withholding tax on any gain recognized from the Merger. See "Material U.S. Federal Income Tax Consequences Consequences of the Merger to Non-U.S. Stockholders of CYS Stock." Two Harbors and CYS anticipate that the Merger will have no material U.S. federal income tax consequences to Two Harbors stockholders who do not own any CYS Stock.

The tax consequences to you of the Merger will depend on your own situation. You should consult your tax advisor for a full understanding of the tax consequences to you of the Merger. For more

Table of Contents

information regarding the tax consequences of the Merger to CYS stockholders, please see "Material U.S. Federal Income Tax Consequences" beginning on page 149.

Q:

How can I obtain additional information about Two Harbors and CYS?

A:

Two Harbors and CYS each file annual, quarterly and current reports, proxy statements and other information with the SEC. Each company's filings with the SEC may be accessed on the Internet at http://www.sec.gov. Copies of the documents filed by Two Harbors with the SEC will be available free of charge on Two Harbors' website at https://www.twoharborsinvestment.com/ or by contacting Two Harbors Investor Relations at investors@twoharborsinvestment.com or at 612-629-2500. Copies of the documents filed by CYS with the SEC will be available free of charge on CYS's website at http://www.cysinv.com/home or by contacting CYS Investor Relations at ir@cysinv.com or at 617-639-0440. The information provided on each company's website is not part of this joint proxy statement/ prospectus and is not incorporated by reference into this joint proxy statement/prospectus. For a more detailed description of the information available and information incorporated by reference, please see "Where You Can Find More Information and Incorporation by Reference" on page 210.

Q:

What else do I need to do now?

A:

You are urged to read this joint proxy statement/prospectus carefully and in its entirety, including its annexes and the information incorporated by reference herein, and to consider how the Merger affects you. Even if you plan to attend your company's special meeting, please authorize a proxy to vote your shares by voting via the Internet, telephone or by completing, signing, dating and returning the enclosed proxy card. You can also attend your company's special meeting and vote, or change your prior proxy authorization, in person. If you hold your shares in "street name" through a bank, broker or other nominee, then you should have received this joint proxy statement/prospectus from that nominee, along with that nominee's proxy card which includes voting instructions and instructions on how to change your vote. Please see the question "How do I vote?" on page 12.

Q:

Will a proxy solicitor be used?

A:

Yes. Two Harbors has engaged D.F. King & Co., Inc. ("D.F. King"), to assist in the solicitation of proxies for the Two Harbors special meeting, and Two Harbors estimates it will pay D.F. King a fee of approximately $12,500. Two Harbors has also agreed to reimburse D.F. King for reasonable out-of-pocket expenses and disbursements incurred in connection with the proxy solicitation and to indemnify D.F. King against certain losses, costs and expenses. In addition to mailing proxy solicitation materials, Two Harbors' directors, officers and employees may also solicit proxies in person, by telephone or by any other electronic means of communication deemed appropriate. No additional compensation will be paid to Two Harbors' directors, officers or employees for such services.

CYS has engaged Georgeson LLC ("Georgeson") to assist in the solicitation of proxies for the CYS special meeting, and CYS estimates it will pay Georgeson a fee of approximately $12,500. CYS has also agreed to reimburse Georgeson for reasonable out-of-pocket expenses and disbursements incurred in connection with the proxy solicitation and to indemnify Georgeson against certain losses, costs and expenses. In addition to mailing proxy solicitation material, CYS's directors, officers and employees may also solicit proxies in person, by telephone or by any other electronic means of communication deemed appropriate. No additional compensation will be paid to CYS's directors, officers or employees for such services.

Table of Contents

Q:

Who can answer my questions?

A:

If you have any questions about the Merger or the other matters to be voted on at the Two Harbors special meeting or the CYS special meeting, how to submit your proxy, or need additional copies of this joint proxy statement/prospectus, the enclosed proxy card or voting instructions, you should contact:

If you are a Two Harbors stockholder:	If you are a CYS stockholder:
D.F. King & Co., Inc. 48 Wall Street, 22nd floor New York, New York 10005 (866) 530-8623 (toll free) two@dfking.com	Georgeson LLC 1290 Avenue of the Americas, 9th Floor New York, New York 10104 866-300-8594 (toll free)

Table of Contents

SUMMARY

The following summary highlights selected information in this joint proxy statement/prospectus and may not contain all the information that may be important to you with respect to the Merger Agreement, the Merger or the special meetings. Accordingly, you are encouraged to read this joint proxy statement/prospectus, including its annexes and the information incorporated by reference herein, carefully and in its entirety. Each item in this summary includes a page reference directing you to a more complete description of that topic. See also "Where You Can Find More Information and Incorporation by Reference" on page 210.

The Companies

Two Harbors Investment Corp. **(Page 53)**

Two Harbors Investment Corp.
575 Lexington Avenue
Suite 2930
New York, New York 10022
(612) 629-2500

Two Harbors is a Maryland corporation focused on investing in, financing and managing Agency residential mortgage-backed securities, or Agency RMBS, non-Agency securities, mortgage servicing rights, or MSR, and other financial assets, which Two Harbors collectively refers to as its target assets. Two Harbors operates as a REIT and is externally managed by PRCM Advisers.

Two Harbors Common Stock is listed on the NYSE, trading under the symbol "TWO".

Two Harbors' principal executive offices are located at 575 Lexington Avenue, Suite 2930, New York, New York 10022, and its telephone number is (612) 629-2500.

Eiger Merger Subsidiary LLC **(Page 54)**

Eiger Merger Subsidiary LLC
575 Lexington Avenue
Suite 2930
New York, New York 10022
(612) 629-2500

Merger Sub is a Maryland limited liability company that was formed on April 24, 2018 solely for the purpose of effecting the Merger. Upon Closing, the Merger will be consummated whereby Merger Sub will be merged with and into CYS, with CYS continuing as the surviving corporation. Merger Sub has not conducted any activities to date, except for activities incidental to its formation and activities undertaken in connection with the transactions contemplated by the Merger Agreement.

CYS Investments, Inc. (Page 54)

CYS Investments, Inc.
500 Totten Pond Road, 6th Floor
Waltham, Massachusetts 02451
(617) 639-0440

CYS is a specialty finance company created with the objective of achieving consistent risk-adjusted investment income. CYS seeks to achieve this objective by investing, on a leveraged basis, in residential mortgage pass-through securities for which the principal and interest payments are guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation or the Government National Mortgage Association, and collateralized by single-family residential mortgage

Table of Contents

loans ("Agency RMBS"). In addition, CYS's investment guidelines permit investments in collateralized mortgage obligations issued by a government agency or a government-sponsored entity that are collateralized by Agency RMBS, or CMOs, debt securities issued by the U.S. Department of the Treasury or a government-sponsored entity that are not backed by collateral but, in the case of government agencies, are backed by the full faith and credit of the U.S. government, or U.S. Treasury Securities, and, in the case of government sponsored entities, are backed by the integrity and creditworthiness of the issuer, or U.S. Agency Debentures and credit risk transfer securities, such as Structured Agency Credit Risk ("STACR") debt securities issued by Freddie Mac, Connecticut Avenue Securities ("CAS") issued by Fannie Mae and similar securities issued by a GSE where their cash flows track the credit risk performance of a notional reference pool of mortage loans.

CYS was formed as a Maryland corporation on January 3, 2006. CYS has elected to be taxed as a REIT for U.S. federal income tax purposes. The CYS Common Stock, CYS Series A Preferred Stock and CYS Series B Preferred Stock trade on the NYSE under the symbols "CYS", "CYS PrA" and "CYS PrB", respectively.

The Combined Company **(Page 54)**

The Combined Company will retain the name "Two Harbors Investment Corp." and will continue to be a Maryland corporation, which has elected to be taxed as a REIT under the Code. The Combined Company will be a publicly traded corporation, focused on investing in, financing and managing Agency RMBS, non-Agency securities, MSR, and other financial assets. The Combined Company is expected to have a pro forma equity market capitalization of approximately $4.0 billion and a total capitalization of approximately $4.9 billion based on the $15.76 per share closing price of Two Harbors Common Stock on June 13, 2018. Following the completion of the Merger, the Combined Company will continue to be externally managed by PRCM Advisers.

The business of the Combined Company will be operated through Two Harbors and its subsidiaries, which will include CYS and its subsidiaries. Upon completion of the Merger, the continuing Two Harbors common stockholders are expected to own in the aggregate approximately 70% of the Combined Company's fully diluted equity, and the former CYS common stockholders are expected to own in the aggregate the remaining approximately 30%. CYS preferred stockholders will continue to hold shares of preferred stock of Two Harbors with substantially similar terms following the Merger.

The common stock of the Combined Company will continue to be listed on the NYSE, trading under the symbol "TWO". The newly issued shares of Two Harbors Series D Preferred Stock will trade under the symbol "TWO PRD", and the newly issued shares of Two Harbors Series E Preferred Stock will trade under the symbol "TWO PRE".

The Combined Company's principal executive offices will be located at 575 Lexington Avenue, Suite 2930, New York, New York 10022, and its telephone number will be (612) 629-2500.

The Merger

The Merger Agreement **(Page 124)**

Two Harbors, Merger Sub and CYS have entered into the Merger Agreement attached as Annex A to this joint proxy statement/prospectus, which is incorporated herein by reference. Two Harbors and CYS encourage you to carefully read the Merger Agreement in its entirety because it is the principal document governing the Merger and the other transactions contemplated by the Merger Agreement.

Table of Contents

The Merger **(Page 66)**

Subject to the terms and conditions of the Merger Agreement, the Merger will be consummated whereby Merger Sub will merge with and into CYS, with CYS continuing as the surviving corporation. As a result of the Merger, CYS will be an indirect, wholly owned subsidiary of Two Harbors.

Upon completion of the Merger, the continuing Two Harbors common stockholders are expected to own in the aggregate approximately 70% of the Combined Company's fully diluted equity, and the former CYS common stockholders are expected to own in the aggregate the remaining approximately 30%. Once the Merger is consummated, the Combined Company will retain the name "Two Harbors Investment Corp.", will continue to be listed on the NYSE, and its shares will trade under the symbol "TWO".

Consideration for the Merger **(Page 125)**

Pursuant to the terms and subject to the conditions set forth in the Merger Agreement, at the effective time of the Merger, each outstanding share of CYS Common Stock will be converted into the right to receive from Two Harbors (a) a number of shares of Two Harbors Common Stock equal to the "Exchange Ratio," determined by dividing (i) (a) CYS adjusted book value per share, multiplied by (b) 96.75% by (ii) (a) Two Harbors adjusted book value per share, multiplied by (b) 94.20%, in each case as determined in accordance with the Merger Agreement (the "Per Share Stock Consideration") and (b) $15,000,000 divided by the sum of the number of shares of CYS Common Stock issued and outstanding immediately prior to the effective time of the Merger (excluding any cancelled shares), including outstanding CYS Restricted Stock that will vest upon completion of the Merger (less any shares surrendered for income tax purposes) (the "Per Share Cash Consideration") pursuant to the Merger Agreement.

Based on the number of shares of CYS Common Stock outstanding on March 31, 2018 and an assumed Exchange Ratio of 0.4872 based on the adjusted book value per share of Two Harbors Common Stock and CYS Common Stock as of March 31, 2018, calculated in accordance with the Merger Agreement, it is expected that approximately 75.7 million shares of Two Harbors Common Stock will be issued in connection with the Merger. The actual Exchange Ratio will be publicly announced at least five business days before the earlier of the special meetings of stockholders described below.

Also at the effective time of the Merger, each outstanding share of CYS Series A Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series D Preferred Stock, and each outstanding share of CYS Series B Preferred Stock will be converted into the right to receive one share of newly classified Two Harbors Series E Preferred Stock.

No fractional shares of Two Harbors Common Stock will be issued in the Merger, and the value of any fractional interests to which a holder would otherwise be entitled will be paid in cash.

Recommendation of the Two Harbors Board and Its Reasons for the Merger **(Page 78)**

On April 25, 2018, following careful consideration, the Two Harbors Board unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. Certain factors considered by the Two Harbors Board in reaching its decision to authorize, approve and adopt the

Table of Contents

Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement can be found in the section entitled "The Merger Recommendation of the Two Harbors Board and Its Reasons for the Merger" beginning on page 78.

The Two Harbors Board unanimously recommends that Two Harbors common stockholders vote "**FOR**" the Two Harbors Common Stock Issuance Proposal and "**FOR**" the Two Harbors Adjournment Proposal.

Recommendation of the CYS Board and Its Reasons for the Merger **(Page 81)**

On April 25, 2018, after careful consideration, the CYS Board, acting upon the unanimous recommendation of a special committee of independent directors of CYS formed for the purpose of, among other things, evaluating and making a recommendation to the CYS Board with respect to the Merger Agreement and the other transactions contemplated therein, unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the merger of Merger Sub with and into CYS, are in the best interests of CYS and its stockholders, (ii) approved the Merger Agreement and declared that the transactions contemplated therein, including the Merger, are advisable, (iii) directed that the Merger and the other transactions contemplated by the Merger Agreement be submitted to the holders of CYS Common Stock for consideration at the CYS special meeting and (iv) recommended that the CYS common stockholders approve the Merger and the other transactions contemplated by the Merger Agreement. Certain factors considered by the CYS Board in reaching its decision to approve the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement can be found in the section entitled "The Merger Recommendation of the CYS Board and Its Reasons for the Merger" beginning on page 81.

The CYS Board unanimously recommends that CYS stockholders vote "**FOR**" the Merger Proposal, "**FOR**" the CYS Non-Binding Compensation Advisory Proposal and "**FOR**" the CYS Adjournment Proposal.

Summary of Risk Factors Related to the Merger **(Page 42)**

You should carefully consider the following important risks, together with all of the other information included in this joint proxy statement/prospectus and the risks related to the Merger and the related transactions described under the section "Risk Factors" beginning on page 42, before deciding how to vote:

- The Merger is subject to a number of conditions which, if not satisfied or waived in a timely manner, would delay the Merger or adversely impact Two Harbors' and CYS's ability to complete the transaction.

- Failure to consummate the Merger as currently contemplated or at all could adversely affect the price of Two Harbors Common Stock or CYS Common Stock and the future business and financial results of Two Harbors and CYS.

- The Merger Agreement contains provisions that could discourage a potential competing acquirer of either Two Harbors or CYS or could result in any competing acquisition proposal being at a lower price than it might otherwise be.

- The pendency of the Merger could adversely affect Two Harbors' and CYS's business and operations.

- Following the Merger, the Combined Company may be unable to integrate Two Harbors' business and CYS's business successfully and realize the anticipated synergies or other expected benefits of the Merger on the anticipated timeframe or at all.

Table of Contents

Because the number of shares of Two Harbors Common Stock exchanged per share of CYS Common Stock is not fixed, any change in Two Harbors' adjusted book value per share or CYS's adjusted book value per share prior to setting the Exchange Ratio will affect the number of shares of Two Harbors Common Stock issued by Two Harbors and received by CYS common stockholders at the Closing.

The Merger and related transactions are subject to Two Harbors common stockholder approval and CYS common stockholder approval.

Two Harbors common stockholders and CYS common stockholders will be diluted by the Merger.

If the Merger is not consummated by October 31, 2018, either Two Harbors or CYS may terminate the Merger Agreement.

The market price of Two Harbors Common Stock may decline as a result of the Merger and the market price of Two Harbors Common Stock after the consummation of the Merger may be affected by factors different from those affecting the price of Two Harbors Common Stock or the price of CYS Common Stock before the Merger.

An adverse judgment in any litigation challenging the Merger may prevent the Merger from becoming effective or from becoming effective within the expected timeframe.

Following the Merger, the Combined Company may not pay dividends at or above the rate currently paid by Two Harbors or CYS.

The Combined Company will have a significant amount of indebtedness and may need to incur more in the future.

The Combined Company is expected to incur substantial expenses related and unrelated to the Merger.

The historical and unaudited pro forma condensed combined financial information included elsewhere in this joint proxy statement/prospectus may not be representative of the Combined Company's results after the Merger, and accordingly, you have limited financial information on which to evaluate the Combined Company following the Merger.

The Merger is expected to be taxable to U.S. stockholders of CYS Stock; however, the cash received by CYS stockholders in the Merger might not be sufficient to pay such tax.

Two Harbors would incur adverse tax consequences if it or CYS failed to qualify as a REIT for U.S. federal income tax purposes.

The Two Harbors Special Meeting (Page 56)

Date, Time and Place. The special meeting of Two Harbors common stockholders will be held at 601 Carlson Parkway, 2nd Floor, Minnetonka, Minnesota 55305 on July 27, at 9:00 a.m., Central Time.

Purpose. At the Two Harbors special meeting, Two Harbors common stockholders will be asked to consider and vote upon the Two Harbors Common Stock Issuance Proposal and the Two Harbors Adjournment Proposal.

Record Date; Voting Rights. Two Harbors common stockholders at the close of business on June 22, 2018 are entitled to vote at the Two Harbors special meeting and any adjournments or postponements thereof. Each holder of Two Harbors Common Stock on the record date is entitled to one vote per share.

Table of Contents

Quorum. The presence, in person or by proxy, of the holders of shares of Two Harbors Common Stock entitled to cast a majority of all votes entitled to be cast at the Two Harbors special meeting, will constitute a quorum at the Two Harbors special meeting. Abstentions will be counted for the purpose of determining a quorum.

Required Vote. Approval of the Two Harbors Common Stock Issuance Proposal requires that the number of votes cast for the Two Harbors Common Stock Issuance Proposal exceeds the number of votes cast against and abstaining from the Two Harbors Common Stock Issuance Proposal, assuming a quorum is present. Approval of the Two Harbors Adjournment Proposal also requires that the number of votes cast for the Two Harbors Adjournment Proposal exceeds the number of votes cast against the Two Harbors Adjournment Proposal. Holders of Two Harbors preferred stock will not be entitled to vote on any matter at the Two Harbors special meeting.

As of the close of business on the record date for the Two Harbors special meeting, the directors and executive officers of Two Harbors owned approximately [•]% of the outstanding shares of Two Harbors Common Stock entitled to vote at the Two Harbors special meeting. Two Harbors currently expects that Two Harbors' directors and executive officers will vote their shares of Two Harbors Common Stock in favor of the Two Harbors Common Stock Issuance Proposal as well as the other proposals to be considered at the Two Harbors special meeting, although none of them are obligated to do so.

Your vote as a Two Harbors common stockholder is very important. Accordingly, please sign and return the enclosed proxy card whether or not you plan to attend the Two Harbors special meeting in person.

The CYS Special Meeting (Page 61)

Date, Time and Place. The special meeting of CYS stockholders will be held at 50 Rowes Wharf, Boston, Massachusetts 02110, on July 27, 2018 at 9:00 a.m., Eastern Time.

Purpose. At the CYS special meeting, the CYS common stockholders will be asked to approve the Merger Proposal, the CYS Non-Binding Compensation Advisory Proposal and the CYS Adjournment Proposal.

Record Date; Voting Rights. CYS stockholders at the close of business on June 22, 2018 are entitled to receive this notice and CYS common stockholders are entitled to vote at the CYS special meeting and any adjournments or postponements thereof. Each holder of record of CYS Common Stock on the record date is entitled to one vote per share.

Quorum. The presence, in person or by proxy of the holders of shares of CYS Common Stock entitled to cast a majority of all the votes entitled to be cast at the CYS special meeting, will constitute a quorum at the CYS special meeting. Abstentions will be counted for the purpose of determining a quorum.

Required Vote. Approval of the Merger Proposal requires the affirmative vote of the holders of a majority of the outstanding shares of CYS Common Stock entitled to vote on the Merger Proposal. Approval of the CYS Non-Binding Compensation Advisory Proposal requires, provided a quorum is present, the affirmative vote of a majority of the votes cast on the matter by holders of shares of CYS Common Stock at the CYS special meeting. Approval of the CYS Adjournment Proposal requires, provided a quorum is present, the affirmative vote of a majority of the votes cast on the matter by holders of shares of CYS Common Stock at the meeting.

As of the close of business on the record date for the CYS special meeting, the directors and executive officers of CYS owned approximately [•]% of the outstanding CYS Common Stock

Table of Contents

entitled to vote at the CYS special meeting. CYS currently expects that the CYS directors and officers will vote their shares of CYS Common Stock in favor of the Merger Proposal, although none of them are obligated to do so.

Opinion of Two Harbors' Financial Advisor (Page 84)

In connection with the Merger, the Two Harbors Board received a written opinion, dated April 25, 2018, from JMP, as to the fairness, from a financial point of view and as of the date of the opinion, to Two Harbors of the Per Share Stock Consideration (as defined in the Merger Agreement) to be paid by Two Harbors as part of the merger consideration. The full text of JMP's written opinion, which is attached to this joint proxy statement/prospectus as Annex B sets forth the assumptions made, procedures followed, matters considered and limitations on the review undertaken. **JMP's opinion was directed and addressed to the Two Harbors Board (in its capacity as such) in connection with its consideration of the Merger. JMP's opinion did not address the underlying decision of the Two Harbors Board to proceed with or effect the Merger or the relative merits of the Merger as compared to any alternative strategy or transaction that might exist for Two Harbors. JMP's opinion does not constitute a recommendation as to how the Two Harbors Board or any Two Harbors common stockholder should act or vote with respect to the Merger or any other matter.**

Opinion of CYS's Financial Advisor, Barclays Capital Inc. (Page 92)

Barclays was engaged to act as a financial advisor to the CYS board in connection with a potential transaction involving CYS. At the CYS board meeting on April 25, 2018, Barclays rendered its oral opinion (which was subsequently confirmed in writing) to the CYS board that, as of such date and based upon and subject to the qualifications, limitations and assumptions set forth in the written opinion, the merger consideration to be offered to the holders of CYS common stock in the merger was fair, from a financial point of view, to such holders.

The full text of Barclays' written opinion, dated as of April 25, 2018, is attached to this joint proxy statement/prospectus as Annex C and incorporated by reference herein. Barclays' written opinion sets forth, among other things, the assumptions made, procedures followed, factors considered and limitations upon the review undertaken by Barclays in rendering its opinion. You are encouraged to read the opinion carefully in its entirety. The summary of Barclays' opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion. Barclays' opinion is addressed to the CYS board, addresses only the fairness, from a financial point of view, of the merger consideration to be offered to the holders of CYS common stock and does not constitute a recommendation to any stockholder of CYS as to how such stockholder should vote with respect to the merger or any other matter.

For more information, see "The Merger Opinion of CYS's Financial Advisor, Barclays Capital Inc." beginning on page 92 and Annex C.

Opinion of CYS's Financial Advisor, Credit Suisse Securities (USA) LLC (Page 101)

CYS has engaged Credit Suisse to act as a financial advisor to CYS in connection with the proposed merger. In connection with this engagement, Credit Suisse delivered an opinion, dated April 25, 2018, to the CYS board as to the fairness, from a financial point of view and as of the date of such opinion, of the merger consideration to be received by holders of CYS common stock (other than excluded holders (as defined below)) pursuant to the merger agreement. For purposes of Credit Suisse's analyses and opinion, the term "excluded holders" refers to, collectively, CYS, Two Harbors, Merger Sub and any of their respective wholly owned subsidiaries.

Table of Contents

The full text of Credit Suisse's written opinion, dated April 25, 2018, is attached to this joint proxy statement/prospectus as Annex D and sets forth, among other things, the assumptions made, procedures followed, matters considered and limitations and qualifications on the review undertaken by Credit Suisse in connection with such opinion. The description of Credit Suisse's opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of Credit Suisse's opinion. Credit Suisse's opinion was provided to the CYS board (in its capacity as such) for its information in connection with its evaluation of the merger consideration from a financial point of view and did not address any other terms, aspects or implications of the proposed merger, the relative merits of the proposed merger or related transactions as compared to alternative transactions or strategies that might be available to CYS or the underlying business decision of the CYS board or CYS to proceed with the proposed merger or related transactions. Credit Suisse's opinion does not constitute advice or a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the proposed merger or otherwise.

For more information, see "The Merger Opinion of CYS's Financial Advisor, Credit Suisse Securities (USA) LLC" beginning on page 101 and Annex D.

Directors and Management of Two Harbors After the Merger (Page 115)

Following the consummation of the Merger, the number of directors on the Two Harbors Board will be increased to eleven, and will include all of the current nine directors of the Two Harbors Board and two additional independent directors from the CYS Board: James A. Stern and Karen Hammond. Each of the executive officers of Two Harbors immediately prior to the effective time of the Merger will continue as an executive officer of the Combined Company following the effective time of the Merger.

Interests of Two Harbors Directors and Executive Officers in the Merger (Page 115)

In considering the recommendation of the Two Harbors Board to approve the Two Harbors Common Stock Issuance, Two Harbors common stockholders should be aware that directors and executive officers of Two Harbors have certain interests in the Merger that may be different from, or in addition to, the interests of Two Harbors common stockholders generally and that may present actual or potential conflicts of interests. The Two Harbors Board was aware of these interests and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the transactions contemplated thereby.

The Combined Company will continue to be managed by PRCM Advisers under the terms of the Management Agreement. Under the Management Agreement, PRCM Advisers provides the day-to-day management of Two Harbors' business, including providing Two Harbors with its executive officers and all other personnel necessary to support its operations. In exchange for its services, Two Harbors pays PRCM Advisers a management fee as well as reimburses it for certain expenses incurred by it and its affiliates in rendering management services to Two Harbors. Pine River is the parent of PRCM Advisers. Certain directors and executive officers of Two Harbors are partners and employees of Pine River.

Pursuant to the Management Agreement, Two Harbors pays PRCM Advisers a base management fee equal to 1.5% per annum of its stockholders' equity, which is calculated and payable quarterly in arrears. Following the Merger, Two Harbors stockholders' equity will include the additional equity attributable to the acquisition of CYS, thus the amount of the management fees payable to PRCM Advisers will also increase, which gives PRCM Advisers and its parent, Pine River (and therefore, Two Harbors' management), an incentive, not shared by Two Harbors stockholders, to negotiate and effect the Merger, possibly on terms less favorable to Two Harbors than would otherwise have been achieved. However, in connection with the Merger, PRCM Advisers has agreed to amend the Management

Table of Contents

Agreement to provide for: (i) a reduction in the base management fee PRCM Advisers charges Two Harbors with respect to the additional equity under management resulting from the Merger from 1.5% of stockholders' equity on an annualized basis to 0.75% through the first anniversary of the Closing; (ii) a one-time downward adjustment of $15,000,000 to the management fees payable by Two Harbors for the quarter in which the Merger closes; and (iii) a one-time downward adjustment of up to $3.3 million in the management fees payable by Two Harbors for the quarter in which the Merger occurs in order to reimburse Two Harbors for certain expenses it incurs in connection with the Merger. In the event the total amount of the management fee payable for the quarter referenced in clauses (ii) and (iii) above is less than the aggregate amount of the Adjustments, PRCM Advisers will pay to Two Harbors in immediately available funds the difference between (i) such Adjustments and (ii) the base management fee payable to PRCM Advisers with respect to such quarter.

The Fourth Amendment to the Management Agreement between Two Harbors and PRCM Advisers was negotiated between related parties, and the terms, including fees and other amounts payable, may not be as favorable to Two Harbors as if it had been negotiated with an unaffiliated third party.

For additional information, see "The Merger Interests of Two Harbors' Directors and Executive Officers in the Merger" beginning on page 115.

Interests of CYS's Directors and Executive Officers in the Merger (Page 116)

In considering the CYS Board's recommendation for CYS stockholders to approve the Merger Proposal and the CYS Non-Binding Compensation Advisory Proposal, CYS stockholders should be aware that directors and executive officers of CYS have interests in the Merger that may be different from, or in addition to, the interests of CYS stockholders generally and that may present actual or potential conflicts of interests. These interests include:

- immediately prior to the effective time of the Merger, each outstanding award of CYS Restricted Stock granted pursuant to the CYS Stock Plan will automatically vest in full and any forfeiture restrictions applicable to such shares of CYS Restricted Stock shall immediately lapse. As a result, each share of CYS Restricted Stock (less any shares surrendered for income tax purposes) will be treated as a share of CYS Common Stock for all purposes of the Merger, including the right to receive the merger consideration; and

- continued indemnification and insurance coverage for the directors and executive officers of CYS in accordance with the Merger Agreement.

In addition, CYS maintains Employment Agreements with each of Messrs. Grant, DeCicco, Cleary, and Rosenbloom, which provide for payments and other benefits if the individual's employment terminates for a qualifying event or circumstance, such as being terminated without "cause" or leaving employment for "good reason," as these terms are defined in the Employment Agreements. Upon the termination of such individual's employment by CYS or Two Harbors other than for cause, or by such individual for good reason, the individual would be eligible to receive, among other benefits, (i) a lump sum severance payment equal to 2.5 in the case of Mr. Grant and 1.0 in the case of Messrs. DeCicco, Cleary, and Rosenbloom, multiplied by the average of the sum of such individual's base salary and bonus earned during the shorter of (a) the three (3) fiscal years immediately preceding the year in which the termination of employment occurs or (b) the period of time beginning on the date of the individual's employment agreement and ending on the termination date of such individual's employment, (ii) a pro rata bonus for the year of termination, and (iii) certain benefit continuation rights for up to 24 months for Mr. Grant and up to 12 months for Messrs. DeCicco, Cleary, and Rosenbloom, following termination. In addition, under the agreement, such individuals are eligible to receive a "gross-up" payment, if applicable, related to any excise taxes imposed under Section 4999 of the Code.

Table of Contents

Upon Closing, each of James A. Stern and Karen Hammond, independent directors from the CYS Board, will be appointed to the Two Harbors Board and will be entitled to compensation pursuant to Two Harbors' independent director compensation program.

In connection with the approval of the execution of the Merger Agreement, the CYS Board approved an amendment to the Employment Agreements to clarify payment mechanics and timing of severance amounts that may become payable pursuant to the Employment Agreements following a qualifying termination of employment with CYS.

Treatment of CYS Restricted Stock

Pursuant to the Merger Agreement, immediately prior to the effective time of the Merger, each outstanding award of shares of CYS Restricted Stock granted pursuant to the CYS Stock Plan will automatically vest in full and any forfeiture restrictions applicable to such shares of CYS Restricted Stock shall immediately lapse. As a result, each share of CYS Restricted Stock (less any shares surrendered for income tax purposes) will be treated as a share of CYS Common Stock for all purposes of the Merger, including the right to receive the merger consideration.

Fourth Amendment to the Management Agreement (Page 148)

In connection with the Merger Agreement, the Management Agreement was amended pursuant to the Fourth Amendment to the Management Agreement so as to (a) reduce PRCM Advisers' base management fee with respect to the additional equity under management resulting from the Merger and the transactions contemplated by the Merger Agreement to 0.75% from the effective time of the Merger through the first anniversary of such effective time and (b) for the fiscal quarter in which the Closing occurs, make a one-time downward adjustment of $15 million to the management fees payable by Two Harbors for such quarter to offset the Per Share Cash Consideration payable to stockholders of CYS, plus up to an additional $3.3 million downward adjustment for certain transaction-related expenses.

Conditions to Complete the Merger (Page 141)

A number of conditions must be satisfied or, to the extent permitted by law, waived before the Merger can be consummated. These include, among others:

- the approval of the Merger Proposal by CYS common stockholders;
- the approval of the Two Harbors Common Stock Issuance Proposal by Two Harbors common stockholders;
- effectiveness of the registration statement on Form S-4, of which this joint proxy statement/prospectus constitutes a part, and no stop order suspending the effectiveness of the Form S-4 having been initiated or threatened by the SEC;
- no injunction or law prohibiting the Merger;
- approval for listing on the NYSE of the shares of Two Harbors Common Stock, Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock to be issued in the Merger or reserved therefor, subject to official notice of issuance;
- accuracy of each party's representations, subject in most cases to materiality or material adverse effect qualifications;
- the absence of a material adverse effect on either Two Harbors or CYS;
- material performance and compliance with each party's covenants; and

Table of Contents

the receipt of tax opinions relating to the REIT status of each of Two Harbors and CYS.

Regulatory Approvals Required for the Merger (Page 120)

Two Harbors and CYS are not aware of any material federal or state regulatory requirements that must be complied with, or approvals that must be obtained, in connection with the Merger or the other transactions contemplated by the Merger Agreement.

Listing of Two Harbors Common Stock and Deregistration of CYS Common Stock (Page 122)

It is a condition to the completion of the Merger that the shares of Two Harbors Common Stock issuable in connection with the Merger be approved for listing on the NYSE, subject to official notice of issuance. After the Merger is completed, the CYS Common Stock will no longer be listed on the NYSE and will be deregistered under the Exchange Act.

Accounting Treatment (Page 120)

Each of Two Harbors and CYS prepare their financial statements in accordance with GAAP. The Merger will be accounted for as an asset acquisition, with Two Harbors treated as the acquirer. For more information, see "Accounting Treatment" beginning on page 120.

Comparison of Rights of Two Harbors Common Stockholders and CYS Common Stockholders (Page 195)

Holders of CYS Common Stock will have different rights following the effective time of the Merger because they will hold shares of Two Harbors Common Stock instead of shares of CYS Common Stock, and there are differences between the governing documents of Two Harbors and CYS. For more information regarding the differences in rights of Two Harbors common stockholders and CYS common stockholders, see "Comparison of Rights of Two Harbors Common Stockholders and CYS Common Stockholders" beginning on page 195.

Appraisal Rights (Page 121)

Neither holders of Two Harbors Common Stock nor holders of CYS Common Stock will be entitled to appraisal rights.

No Solicitation; Change in Recommendations (Page 138)

From and after the date of the Merger Agreement until the effective time of the Merger or if earlier, the termination of the Merger Agreement, each of Two Harbors and CYS will not, and will cause its subsidiaries and will instruct its representatives not to, among other things, directly or indirectly:

initiate, solicit or knowingly encourage the making of a Competing Proposal (as defined in "The Merger Agreement Competing Proposals" beginning on page 138);

engage in any discussions or negotiations with any person with respect to a Competing Proposal or furnish any non-public information regarding Two Harbors or CYS or any of their subsidiaries, as applicable, or access to the properties, assets or employees of Two Harbors or CYS or any of their subsidiaries, as applicable, to any person in connection with or in response to any Competing Proposal;

enter into any binding or nonbinding letter of intent or agreement in principle, or other agreement providing for a Competing Proposal (other than certain confidentiality agreements);

Table of Contents

withdraw, modify or qualify, or propose publicly to withdraw, modify or qualify, in a manner adverse to the other party, the Two Harbors board recommendation or the CYS board recommendation, as applicable, or publicly recommend the approval or adoption of, or publicly approve or adopt, any Competing Proposal;

fail to include the Two Harbors board recommendation or the CYS board recommendation, as applicable, in this joint proxy statement or any amendment or supplement thereto; or

fail publicly to reaffirm without qualification the Two Harbors board recommendation or the CYS board recommendation, as applicable, within five business days after the written request of the other party following a Competing Proposal that has been publicly announced (or such fewer number of days as remain prior to the Two Harbors special meeting or CYS special meeting, as applicable, as it may be adjourned or postponed).

Notwithstanding the restrictions set forth above, at any time prior to obtaining the applicable approval of their stockholders at their respective stockholder meetings, each of Two Harbors and CYS may, directly or indirectly through one or more of its representatives, engage in discussions or negotiations with any person with respect to a Competing Proposal or furnish non-public information regarding Two Harbors or CYS or any of their subsidiaries, or access to the properties, assets or employees of Two Harbors or CYS or any of their subsidiaries, to any person in connection with or in response to a Competing Proposal, in either case, if certain conditions are met and such proposal is reasonably expected to lead to a Superior Proposal.

At any time prior to obtaining the applicable approval of their stockholders at their respective stockholder meetings, each of Two Harbors and CYS may effect a change in its board recommendation (i) in response to a *bona fide* written Competing Proposal from a third party that was not solicited at any time following the execution of the Merger Agreement and did not arise from a material breach of the obligations set forth in certain provisions of the Merger Agreement, if the Two Harbors Board or the CYS Board, as applicable, so chooses, and (ii) if the Two Harbors Board or the CYS Board, as applicable, determines in good faith, after consultation with outside legal counsel, that the failure to take such action would be inconsistent with its legal duties under applicable law and Two Harbors or CYS, as applicable, have given notice to the other party that it intends to effect a change in its board recommendation. Additionally, CYS may terminate the Merger Agreement, if prior to taking such action, among other things, the CYS Board determines in good faith after consultation with its financial advisors and outside legal counsel that such CYS Competing Proposal is a CYS Superior Proposal and the CYS Board has approved, and concurrently with the termination thereunder, CYS enters into, a definitive agreement providing for the implementation of such CYS Superior Proposal.

For more information regarding what constitutes a "Competing Proposal" and what constitutes a "CYS Superior Proposal," see "The Merger Agreement Competing Proposals" beginning on page 138.

Termination of the Merger Agreement (Page 143)

The Merger Agreement may be terminated at any time before the effective time of the Merger by the mutual written consent of Two Harbors and CYS.

The Merger Agreement may also be terminated prior to the effective time of the Merger by either Two Harbors or CYS if:

any governmental entity of competent jurisdiction has issued a final and non-appealable order, decree, ruling or injunction or taken any other action permanently restraining, enjoining or otherwise prohibiting the consummation of the Merger, or if there shall have been adopted prior to the effective time of the Merger any law that permanently makes the consummation of the Merger illegal or otherwise permanently prohibited;

Table of Contents

the Merger has not been consummated on or before 5:00 p.m. New York, New York time, on October 31, 2018 (the "End Date") (provided that this termination right will not be available to any party whose breach of any representation, warranty, covenant or agreement contained in this Agreement has been the cause of or resulted in the failure of the Merger to occur on or before such date);

the other party breaches any of its representations, warranties, covenants or other agreements (other than a breach of its non-solicitation covenant), if such breach resulted in a failure of a closing condition, and such breach cannot be or has not been cured within 30 days (or, if earlier, the End Date), provided that the other party may not terminate if such other party is similarly in breach;

the other party commits a willful and material breach of its non-solicitation covenant;

Two Harbors common stockholders have failed to approve the issuance of shares of Two Harbors Common Stock in connection with the Merger, or CYS common stockholders have failed to approve Merger and the other transactions contemplated by the Merger Agreement, as applicable; or

the other party's board of directors has effected a change in its board recommendation prior to the time that such party has obtained the applicable approval of its stockholders at its respective stockholder meeting.

In addition to the termination rights set forth above, CYS may also terminate the Merger Agreement upon entering into a definitive agreement providing for the implementation of a CYS Superior Proposal.

For more information regarding termination of the Merger Agreement, see "The Merger Agreement Termination of the Merger Agreement" beginning on page 143.

Termination Fees and Expenses (Page 144)

Generally, all fees and expenses incurred in connection with the Merger and the other transactions contemplated by the Merger Agreement will be paid by the party incurring those fees and expenses; provided that, in certain circumstances, Two Harbors may be obligated to pay to CYS a termination fee of $51.8 million or an expense amount equal to $20.6 million, or CYS may be obligated to pay to Two Harbors a termination fee of $43.2 million or an expense amount equal to $8.6 million.

For further discussion of the termination fees, see "The Merger Agreement Termination Fees and Expenses" beginning on page 144.

Litigation Relating to the Merger (Page 123)

Four putative class action lawsuits have been filed by purported stockholders of CYS. The first suit, styled as *Fran Stone v. CYS Investments, Inc., et al.*, No. 1:18-cv-11156 (the "Stone Lawsuit"), was filed in the United States District Court for the District of Massachusetts on June 1, 2018 and asserts claims against CYS, certain of its directors, Merger Sub and Two Harbors (collectively, the "Stone Defendants"). The second suit, styled as *Jordan Rosenblatt v. CYS Investments, Inc., et al.*, No.1:18-cv-11220 (the "Rosenblatt Lawsuit"), was filed in the United States District Court for the District of Massachusetts on June 11, 2018 and asserts claims against the Stone Defendants and certain additional CYS directors not named in the Stone Lawsuit (collectively, the "Rosenblatt Defendants"). The third suit, styled as *Peter Enzinna v. CYS Investments, Inc., et al.*, No. 1:18-cv-11238 (the "Enzinna Lawsuit"), was filed in the United States District Court for the District of Massachusetts on June 13, 2018 and asserts claims against CYS and certain of its directors (collectively, the "Enzinna Defendants"). The fourth suit, styled as *Arthur Ruscher v. CYS Investments, Inc., et al.*,

Table of Contents

No. 1:18-cv-01763 (the "Ruscher Lawsuit" and, with the Stone, Rosenblatt, and Enzinna Lawsuits, the "Lawsuits"), was filed in the United States District Court for the District of Maryland on June 14, 2018 and asserts claims against the Enzinna Defendants (the "Ruscher Defendants").

The Lawsuits allege that the defendants violated Section 14(a) of the Exchange Act and Rule 14a-9 promulgated thereunder and/or Section 20(a) of the Exchange Act by disseminating and/or causing to be disseminated an allegedly materially incomplete and misleading registration statement.

The Stone Lawsuit seeks, among other things: preliminary and permanent injunctive relief preventing the Stone Defendants from filing with the SEC (or otherwise disseminating) an amendment to the registration statement or consummating the Merger, in each case unless and until the Stone Defendants disclose additional information identified in the complaint; rescission of the Merger or rescissory damages if the Merger is consummated prior to entry of final judgment by the court; an accounting of any damages suffered as a result of the Stone Defendants' alleged wrongdoing; and litigation costs (including attorneys' and expert fees and expenses). The Rosenblatt Lawsuit seeks, among other things: preliminary and permanent injunctive relief preventing the Rosenblatt Defendants from proceeding with, consummating, or closing the Merger; rescission of the Merger or rescissory damages if the Merger is consummated prior to entry of final judgment by the court; the filing of an amendment to the registration statement that does not contain any untrue statements of material fact and that states all material facts required in it or necessary to make the statements contained therein not misleading; a declaration that the Rosenblatt Defendants violated Section 14(a) and/or Section 20(a) of the Exchange Act and Rule 14a-9 promulgated thereunder; and litigation costs (including attorneys' and expert fees and expenses). The Enzinna Lawsuit seeks, among other things: preliminary and permanent injunctive relief preventing the Enzinna Defendants from proceeding with, consummating, or closing the Merger unless and until the Enzinna Defendants disclose additional information identified in the complaint; rescission of the Merger or rescissory damages if the Merger is consummated prior to entry of final judgment by the court; a declaration that the Enzinna Defendants violated Section 14(a) and/or Section 20(a) of the Exchange Act and Rule 14a-9 promulgated thereunder; and litigation costs (including attorneys' and expert fees and expenses). The Ruscher Lawsuit seeks, among other things: injunctive relief preventing the Ruscher Defendants from proceeding with, consummating, or closing the Merger unless and until the Ruscher Defendants disclose additional information identified in the complaint; an accounting of any damages suffered as a result of the Ruscher Defendants' alleged wrongdoing; and litigation costs (including attorneys' and expert fees and expenses).

Two Harbors and CYS believe that the claims asserted in the Lawsuits are without merit and intend to defend vigorously against the Lawsuits.

For more information, see "Litigation Relating to the Merger" on page 123.

Material U.S. Federal Income Tax Consequences (Page 149)

Assuming that the Merger is completed as currently contemplated, CYS and Two Harbors expect that the receipt of (i) cash and Two Harbors Common Stock in exchange for CYS Common Stock, (ii) Two Harbors Series D Preferred Stock in exchange for CYS Series A Preferred Stock, or (iii) Two Harbors Series E Preferred Stock in exchange for CYS Series B Preferred Stock, as applicable, by U.S. stockholders pursuant to the Merger will be a taxable transaction for U.S. federal income tax purposes. Generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Common Stock will recognize gain or loss as a result of the Merger measured by the difference, if any, between (i) the sum of the fair market value of the Two Harbors Common Stock received and the amount of any cash received, and (ii) the stockholder's adjusted tax basis in its CYS Common Stock. In addition, generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Series A Preferred Stock or CYS Series B Preferred Stock will recognize gain or loss as a result of the Merger measured by the

Table of Contents

difference, if any, between (i) the fair market value of the Two Harbors Series D Preferred Stock or Two Harbors Series E Preferred Stock received, as applicable, and (ii) the stockholder's adjusted tax basis in its CYS Series A Preferred Stock or CYS Series B Preferred Stock, as applicable. Because the consideration to be given to stockholders of (i) CYS Common Stock consists primarily of Two Harbors Common Stock and (ii) CYS Series A Preferred Stock and CYS Series B Preferred Stock consists solely of Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock, respectively, U.S. stockholders of CYS Stock may need to sell their Two Harbors stock received in the Merger, or raise cash from other sources, to pay any tax obligations resulting from the Merger. Generally, non-U.S. stockholders are not expected be subject to U.S. federal income tax or U.S. federal withholding tax on any gain recognized from the Merger. See "Material U.S. Federal Income Tax Consequences Consequences of the Merger to Non-U.S. Stockholders of CYS Stock." CYS and Two Harbors anticipate that the Merger will have no material U.S. federal income tax consequences to Two Harbors stockholders who do not own any CYS stock.

The tax consequences to you of the Merger will depend on your own situation. You should consult your tax advisor for a full understanding of the tax consequences to you of the Merger. For more information regarding the U.S. federal income tax consequences of the Merger to CYS stockholders, please see "Material U.S. Federal Income Tax Consequences of the Merger" beginning on page 149.

Description of Two Harbors Capital Stock (Page 178)

As of June 13, 2018, 175,468,801 shares of Two Harbors Common Stock were issued and outstanding and 5,750,000 shares of Two Harbors Series A Preferred Stock, 11,500,000 shares of Two Harbors Series B Preferred Stock, and 11,800,000 shares of Two Harbors Series C Preferred Stock, were issued and outstanding. Based on an assumed exchange ratio of 0.4872 based on book values as of March 31, 2018, upon consummation of the Merger, the Combined Company would be expected to have approximately 251.1 million shares of Two Harbors Common Stock, 5,750,000 shares of Two Harbors Series A Preferred Stock, 11,500,000 shares of Two Harbors Series B Preferred Stock, 11,800,000 shares of Two Harbors Series C Preferred Stock, 3,000,000 shares of newly classified Two Harbors Series D Preferred Stock and 8,000,000 shares of newly classified Two Harbors Series E Preferred Stock issued and outstanding.

Voting rights are generally vested in the holders of the Two Harbors Common Stock, and such holders are entitled to receive dividends on such Two Harbors Common Stock if, as and when authorized by the Two Harbors Board, and declared by Two Harbors out of assets legally available therefor.

Selected Historical Financial Information of Two Harbors

The following selected historical financial information for each of the years during the five-year period ended December 31, 2017 and the selected balance sheet data as of December 31 for each of the years in the five-year period ended December 31, 2017, have been derived from Two Harbors' audited consolidated financial statements.

The selected historical financial information as of March 31, 2018 and for the three months ended March 31, 2018 and 2017 have been derived from Two Harbors' unaudited interim consolidated financial statements included in Two Harbors' Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, which is incorporated herein by reference. The following selected historical financial information as of March 31, 2017 has been derived from Two Harbors' unaudited interim consolidated financial statements not included or incorporated herein by reference.

You should read the selected historical financial information presented below together with the consolidated financial statements and the related notes thereto and management's discussion and analysis of financial condition and results of operations of Two Harbors included in Two Harbors' Annual Report on Form 10-K for the year ended December 31, 2017 and its Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, which are incorporated herein by reference. See also "Where You Can Find More Information and Incorporation by Reference" on page 210.

Table of Contents

TWO HARBORS SELECTED FINANCIAL DATA

(in thousands, except per share data)	For the three months ended March 31,		For the year ended December 31,				
	2018 unaudited	2017 unaudited	2017	2016	2015	2014	2013
Statement of comprehensive income data:							
Interest income:							
Available-for-sale securities	$ 190,716	$ 135,327	$ 631,853	$ 414,050	$ 458,515	$ 506,268	$ 507,180
Trading securities					8,676	12,913	5,963
Residential mortgage loans held-for-investment in securitization trusts		31,628	102,886	133,993	95,740	41,220	19,220
Residential mortgage loans held-for-sale	307	398	1,704	23,037	28,966	16,089	22,185
Other	2,996	1,801	8,646	4,000	982	717	1,043
Total interest income	194,019	169,154	745,089	575,080	592,879	577,207	555,591
Interest expense:							
Repurchase agreements	86,580	32,256	210,430	88,850	72,653	76,177	89,470
Collateralized borrowings in securitization trusts		25,386	82,573	97,729	57,216	26,760	10,937
Federal Home Loan Bank advances	4,458	8,793	36,911	26,101	11,921	4,513	
Revolving credit facilities	804	429	2,341	604			
Convertible senior notes	4,718	3,821	17,933				
Total interest expense	96,560	70,685	350,188	213,284	141,790	107,450	100,407
Net interest income	97,459	98,469	394,901	361,796	451,089	469,757	455,184
Other-than-temporary impairments:							
Total other-than-temporary impairment losses	(94)		(789)	(1,822)	(535)	(392)	(1,662)
Other income (loss):							
(Loss) gain on investment securities	(20,671)	(52,352)	(34,695)	(107,374)	363,379	87,201	(54,430)
Servicing income	71,190	39,773	209,065	143,579	127,398	128,160	11,795
Gain (loss) on servicing asset	71,807	(14,565)	(91,033)	(83,531)	(99,584)	(128,388)	13,881
Gain (loss) on interest rate swaps and swaption agreements	150,545	9,927	(9,753)	45,371	(210,621)	(345,647)	245,229
Gain (loss) on other derivative instruments	8,053	(27,864)	(70,159)	99,379	(5,049)	(17,529)	95,345
Other income (loss)	1,058	9,496	30,141	9,964	(7,686)	35,836	(19,011)
Total other income (loss)	281,982	(35,585)	33,566	107,388	167,837	(240,367)	292,809
Expenses:							
Management fees	11,708	9,808	40,472	39,261	49,116	48,803	41,707
Servicing expenses	14,554	5,298	35,289	32,119	28,028	25,925	3,761
Securitization deal costs				6,152	8,971	4,638	4,153
Other operating expenses	14,492	13,764	54,160	56,605	56,764	56,231	37,259
Restructuring charges				2,990			
Total expenses	40,754	28,870	129,921	137,127	142,879	135,597	86,880
Income from continuing operations before income taxes	338,593	34,014	297,757	330,235	475,512	93,401	659,451
Provision for (benefit from) income taxes	3,784	(24,517)	(10,482)	12,314	(16,560)	(73,738)	84,411
Net income from continuing operations	334,809	58,531	308,239	317,921	492,072	167,139	575,040

Income from discontinued operations, net of tax		13,454	44,146	35,357	138		3,999
Net income	334,809	71,985	352,385	353,278	492,210	167,139	579,039
Income from discontinued operations attributable to non-controlling interest			3,814				
Net income attributable to Two Harbors Investment Corp.	334,809	71,985	348,571	353,278	492,210	167,139	579,039
Dividends on preferred stock	13,747		25,122				
Net income attributable to common stockholders	$ 321,062	$ 71,985	$ 323,449	$ 353,278	$ 492,210	$ 167,139	$ 579,039
Basic per common share data:							
Net income from continuing operations per weighted average common share	$ 1.83	$ 0.33	$ 1.62	$ 1.83	$ 2.70	$ 0.91	$ 3.28
Income from discontinued operations per weighted average common share		0.08	0.23	0.20			0.02
Net income per weighted average common share	$ 1.83	$ 0.41	$ 1.85	$ 2.03	$ 2.70	$ 0.91	$ 3.30
Weighted average number of shares of common stock outstanding	175,145,964	174,281,965	174,433,999	174,036,852	182,623,869	183,005,928	175,180,914
Diluted per common share data:							
Net income from continuing operations per weighted average common share	$ 1.69	$ 0.33	$ 1.60	$ 1.83	$ 2.70	$ 0.91	$ 3.28
Income from discontinued operations per weighted average common share		0.08	0.21	0.20			0.02
Net income per weighted average common share	$ 1.69	$ 0.41	$ 1.81	$ 2.03	$ 2.70	$ 0.91	$ 3.30

Table of Contents

(in thousands, except per share data)	For the three months ended March 31, 2018 unaudited	For the three months ended March 31, 2017 unaudited	For the year ended December 31, 2017	2016	2015	2014	2013
Weighted average number of shares of common stock outstanding	192,818,531	174,281,965	188,133,341	174,036,852	182,623,869	183,005,928	175,496,194
Dividends declared per common share	$ 0.47	$ 0.50	$ 2.01	$ 1.86	$ 2.08	$ 2.08	$ 2.34
Comprehensive income:							
Net income	$ 334,809	$ 71,985	$ 352,385	$ 353,278	$ 492,210	$ 167,139	$ 579,039
Other comprehensive (loss) income, net of tax:							
Unrealized (loss) gain on available-for-sale securities	(344,777)	73,762	135,586	(159,834)	(496,728)	411,054	(251,723)
Other comprehensive (loss) income	(344,777)	73,762	135,586	(159,834)	(496,728)	411,054	(251,723)
Comprehensive (loss) income	(9,968)	145,747	487,971	193,444	(4,518)	578,193	327,316
Comprehensive income attributable to non-controlling interest			3,814				
Comprehensive (loss) income attributable to Two Harbors Investment Corp.	(9,968)	145,747	484,157	193,444	(4,518)	578,193	327,316
Dividends on preferred stock	13,747		25,122				
Comprehensive (loss) income attributable to common stockholders	$ (23,715)	$ 145,747	$ 459,035	$ 193,444	$ (4,518)	$ 578,193	$ 327,316

	As of March 31, 2018 unaudited	As of March 31, 2017 unaudited	As of December 31, 2017	2016	2015	2014	2013
Balance sheet data:							
Available-for-sale securities	$ 21,059,377	$ 17,318,697	$ 21,220,819	$ 13,116,171	$ 7,825,320	$ 14,341,102	$ 12,256,727
Mortgage servicing rights	$ 1,301,023	$ 747,580	$ 1,086,717	$ 693,815	$ 493,688	$ 452,006	$ 514,402
Total assets	$ 24,077,165	$ 24,270,844	$ 24,789,313	$ 20,112,056	$ 14,575,772	$ 21,084,309	$ 17,173,862
Repurchase agreements	$ 19,148,679	$ 13,640,720	$ 19,451,207	$ 8,865,184	$ 4,948,926	$ 12,932,463	$ 12,250,450
Federal Home Loan Bank advances	$ 865,024	$ 3,571,762	$ 1,215,024	$ 4,000,000	$ 3,785,000	$ 2,500,000	$
Total stockholders' equity	$ 3,467,685	$ 3,602,561	$ 3,571,424	$ 3,401,111	$ 3,576,561	$ 4,068,042	$ 3,854,995

Selected Historical Financial Information of CYS

The following selected historical financial information for each of the years during the five-year period ended December 31, 2017 and the selected balance sheet data as of December 31 for each of the years in the five-year period ended December 31, 2017 have been derived from CYS's audited consolidated financial statements. The selected historical financial information for the three months ended March 31, 2018 and the selected balance sheet data as of March 31, 2018 have been derived from CYS's unaudited interim consolidated financial statements. The

"Key Performance Metrics" have been derived from CYS's underlying books and records.

You should read the selected historical financial information presented below together with the consolidated financial statements and the related notes thereto and management's discussion and analysis of financial condition and results of operations of CYS included in CYS's Annual Report on Form 10-K for the year ended December 31, 2017, and its Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, which are incorporated herein by reference. See also "Where You Can Find More Information and Incorporation by Reference" on page 210.

Table of Contents

CYS SELECTED FINANCIAL DATA

(In thousands, except per share numbers)	For the three months ended March 31, 2018	For the three months ended March 31, 2017	For the year ended December 31, 2017	2016	2015	2014**	2013**
Income Statement Data:							
Interest income:							
Agency RMBS	$ 85,986	$ 73,227	$ 304,421	$ 291,097	$ 328,286	$ 301,996	$ 330,430
Other	2,692	86	6,362	3,440	2,909	15,080	1,481
Total interest income	88,678	73,313	310,783	294,537	331,195	317,076	331,911
Interest expense:							
Repurchase agreements	41,117	21,221	114,616	70,230	40,700	33,825	52,763
FHLBC Advances				4,049	5,429		
Total interest expense	41,117	21,221	114,616	74,279	46,129	33,825	52,763
Net interest income	47,561	52,092	196,167	220,258	285,066	283,251	279,148
Other income (loss):							
Net realized gain (loss) on investments	(71,191)	(66,044)	(114,737)	19,463	13,652	132,563	(595,116)
Net unrealized gain (loss) on investments	(166,009)	63,478	94,463	(132,500)	(129,764)	233,763	(314,530)
Net unrealized gain (loss) on FHLBC Advances				(1,299)	1,299		
Other income	39	47	163	1,361	867	269	120
Net realized and unrealized gain (loss) on investments, FHLBC Advances and other income	(237,161)	(2,519)	(20,111)	(112,975)	(113,946)	366,595	(909,526)
Interest rate hedge expense, net	(2,508)	(8,327)	(29,550)	(55,798)	(100,110)	(90,812)	(93,497)
Net realized and unrealized gain (loss) on derivative instruments	89,468	(1,012)	57,750	(11,483)	(54,932)	(110,542)	269,128
Net gain (loss) on derivative instruments	86,960	(9,339)	28,200	(67,281)	(155,042)	(201,354)	175,631
Total other income (loss)	(150,201)	(11,858)	8,089	(180,256)	(268,988)	165,241	(733,895)
Expenses:							
Compensation and benefits	3,192	3,776	13,759	12,934	12,121	14,105	12,599
General, administrative and other	2,676	2,438	9,236	10,677	8,722	8,778	8,436
Total expenses	5,868	6,214	22,995	23,611	20,843	22,883	21,035
Net income (loss)	$ (108,508)	$ 34.020	$ 181,261	$ 16,391	$ (4,765)	$ 425,609	$ (475,782)
Dividend on preferred stock	(5,203)	(5,203)	(20,812)	(20,812)	(20,813)	(20,812)	(15,854)

Net income (loss) available to common stockholders	$	(113,711)	$	28,817	$	160,449	$	(4,421)	$	(25,578)	$	404,797	$	(491,636)
Net income (loss) per common share basic & diluted	$	(0.74)	$	0.19	$	1.05	$	(0.04)	$	(0.17)	$	2.50	$	(2.90)
Dividends per common share	$	0.22	$	0.25	$	1.00	$	1.01	$	1.10	$	1.24	$	1.32

Table of Contents

(In thousands, except per share numbers)	For the three months ended March 31, 2018	For the three months ended March 31, 2017	For the year ended December 31, 2017	2016	2015	2014**	2013**
Key Balance Sheet Metrics							
Average settled Debt Securities(1)	$ 11,701,609	$ 10,819,433	$ 11,233,526	$ 11,781,920	$ 12,962,340	$ 12,198,178	$ 14,813,725
Average total Debt Securities(2)	$ 13,185,053	$ 12,485,920	$ 12,701,093	$ 13,212,278	$ 14,223,921	$ 13,910,227	$ 17,806,279
Average repurchase agreements and FHLBC Advances(3)	$ 10,215,763	$ 9,264,522	$ 9,697,163	$ 10,290,967	$ 11,395,383	$ 10,559,856	$ 12,836,246
Average Debt Securities liabilities(4)	$ 11,699,207	$ 10,931,009	$ 11,164,730	$ 11,721,325	$ 12,656,964	$ 12,271,905	$ 15,828,800
Average stockholders' equity(5)	$ 1,480,291	$ 1,539,245	$ 1,561,583	$ 1,704,701	$ 1,856,455	$ 1,922,938	$ 2,145,397
Average common shares outstanding(6)	155,198	151,572	152,700	151,522	156,686	161,950	170,803
Leverage ratio (at period end)(7)	8.06:1	7.15:1	7.33:1	7.06:1	6.77:1	6.44:1	6.97:1
Liquidity as % of stockholders' equity(8)	61%	69%	65%	61%	66%	67%	63%
Hedge ratio(9)	101%	99%	99%	92%	94%	90%	91%
Book value per common share (at period end)(10)	$ 7.41	$ 8.26	$ 8.38	$ 8.33	$ 9.36	$ 10.50	$ 9.24
Weighted-average amortized cost of Agency RMBS and U.S. Treasuries(11)	$ 102.95	103.26	$ 102.92	$ 103.78	$ 103.69	$ 103.98	$ 102.57

(In thousands, except per share numbers)	For the three months ended March 31, 2018	For the three months ended March 31, 2017	For the year ended December 31, 2017	2016	2015	2014**	2013**
Key Performance Metrics*							
Average yield on settled Debt Securities(12)	3.02%	2.71%	2.77%	2.50%	2.56%	2.60%	2.24%
Average yield on total Debt Securities including Drop Income(13)	2.80%	2.65%	2.68%	2.48%	2.56%	2.72%	2.39%
Average cost of funds(14)	1.61%	0.92%	1.18%	0.72%	0.40%	0.32%	0.41%
Average cost of funds and hedge(15)	1.71%	1.28%	1.49%	1.26%	1.28%	1.18%	1.14%
Adjusted average cost of funds and hedge(16)	1.49%	1.08%	1.29%	1.11%	1.16%	1.02%	0.92%
Interest rate spread net of hedge(17)	1.31%	1.43%	1.28%	1.24%	1.28%	1.42%	1.10%
Interest rate spread net of hedge including Drop Income(18)	1.31%	1.57%	1.39%	1.37%	1.40%	1.70%	1.47%
Operating expense ratio(19)	1.59%	1.61%	1.47%	1.39%	1.12%	1.19%	0.98%
Total stockholder return on common equity(20)	(8.95)%	2.16%	12.61%	(0.21)%	(0.38)%	27.06%	(20.66)%
CPR (weighted-average experienced 1-month)(21)	7.1%	8.1%	8.6%	12.1%	10.4%	7.9%	11.6%

(1) The average settled Debt Securities is calculated by *averaging* the month end cost basis of settled Debt Securities during the period.

Table of Contents

(2)

The average total Debt Securities is calculated by *averaging* the month end cost basis of total Debt Securities and unsettled Debt Securities (inclusive of TBA Derivatives) during the period.

(3)

The average repurchase agreements and FHLBC Advances are calculated by *averaging* the month-end repurchase agreements and FHLBC Advances balances during the period.

(4)

The average Debt Securities liabilities are calculated by *adding* the average month-end repurchase agreements and FHLBC Advances balances plus average unsettled Debt Securities (inclusive of TBA Derivatives) during the period.

(5)

The average stockholders' equity is calculated by *averaging* the month-end stockholders' equity during the period.

(6)

The average common shares outstanding is calculated by *averaging* the daily common shares outstanding during the period.

(7)

The leverage ratio is calculated by *dividing* (i) CYS's repurchase agreements and FHLBC Advances balance plus payable for securities purchased *minus* receivable for securities sold, *plus* or *minus* the net TBA Derivatives positions by (ii) stockholders' equity.

(8)

Liquidity as % of stockholders' equity is calculated by dividing unencumbered liquid assets by stockholders' equity.

(9)

The hedge ratio for the period is calculated by *dividing* the combined total Interest Rate Swaps, Swaptions and Interest Rate Caps notional amount by total repurchase agreements and FHLBC Advances balances.

(10)

Book value per common share is calculated by *dividing* total stockholders' equity *less* the liquidation value of preferred stock at period end by common shares outstanding at period end.

(11)

The weighted-average amortized cost of Agency RMBS and U.S. Treasuries is calculated using the weighted-average amortized cost by security *divided* by the current face at period end.

(12)

The average yield on settled Debt Securities for the period is calculated by *dividing* total interest income by average settled Debt Securities.

(13)

Average yield on total Debt Securities including Drop Income for the period is calculated by *dividing* total interest income *plus* Drop Income by average total Debt Securities. Drop Income was $29.9 million, $32.9 million, $32.6 million, $60.7 million and $94.5 million for the years ended December 31, 2017, 2016, 2015, 2014 and 2013, respectively. Drop Income is a component of CYS's net realized and unrealized gain (loss) on investments and derivative instruments in the Consolidated Statements of Operations. Drop Income is the difference between the spot price and the forward-settlement price for the same security on the trade date.

(14)

The average cost of funds for the period is calculated by *dividing* repurchase agreement and FHLBC Advances interest expense by average repurchase agreements and FHLBC Advances for the period.

(15)

The average cost of funds and hedge for the period is calculated by *dividing* repurchase agreement and FHLBC Advances interest expense and interest rate hedge expense, net by average repurchase agreements and FHLBC Advances.

(16)

The adjusted average cost of funds and hedge for the period is calculated by *dividing* repurchase agreement and FHLBC Advances interest expense and interest rate hedge expense, net by average Debt Securities liabilities.

(17)

The interest rate spread net of hedge for the period is calculated by *subtracting* average cost of funds and hedge from average yield on settled Debt Securities.

Table of Contents

(18) The interest rate spread net of hedge including Drop Income for the period is calculated by *subtracting* adjusted average cost of funds and hedge from average yield on total Debt Securities including Drop Income.

(19) The operating expense ratio for the period is calculated by *dividing* operating expenses by average stockholders' equity.

(20) The total stockholder return on common equity is calculated as the change in book value *plus* dividend distributions on common stock *divided* by book value at the beginning of the period.

(21) CPR represents the weighted-average 1-month CPR of CYS's Agency RMBS during the period.

* All percentages are annualized except total stockholder return on common equity.

** Previously reported under specialized accounting, ASC 946 Financial Services Investment Companies. See Notes to consolidated financial statements, in CYS's Form 10-K for the year ended December 31, 2017 and Form 10-Q for the quarterly period ended March 31, 2018.

(in thousands, except per share numbers)	As of March 31, 2018	As of March 31, 2017	As of December 31, 2017	2016	2015	2014	2013
Balance Sheet Data:							
Investments in securities, at fair value	$ 11,535,960	$ 11,060,851	$ 12,634,654	$ 12,648,731	$ 13,027,707	$ 14,601,507	$ 13,858,848
Total assets	12,930,261	11,240,918	13,145,582	13,245,268	14,330,704	14,895,863	14,633,064
Repurchase agreements and other debt	10,084,643	9,015,594	10,089,917	9,691,544	11,086,477	11,289,559	11,206,950
Stockholders' equity	1,426,945	1,527,670	1,574,247	1,535,719	1,694,614	1,975,168	1,768,656
Book value per common share	$ 7.41	$ 8.26	$ 8.38	$ 8.33	$ 9.36	$ 10.50	$ 9.24

(in thousands, except per share numbers)	For the three months ended March 31, 2018	For the three months ended March 31, 2017	For the year ended December 31, 2017	2016	2015	2014	2013
Non-GAAP Reconciliation:							
Net income (loss) available to common stockholders	$ (113,711)	$ 28,817	$ 160,449	$ (4,421)	$ (25,578)	$ 404,797	$ (491,636)
Net realized (gain) loss on investments	71,191	66,044	114,737	(19,463)	(13,652)	(132,563)	595,116
Net unrealized (gain) loss on investments	166,009	(63,478)	(94,463)	132,500	129,764	(233,763)	314,530
Net realized and unrealized (gain) loss on derivative instruments	(89,468)	1,012	(57,750)	11,483	54,932	110,542	(269,128)
Net unrealized (gain) loss on FHLBC Advances				1,299	(1,299)		
Core Earnings	$ 34,021	$ 32,395	$ 122,973	$ 121,398	$ 144,167	$ 149,013	$ 148,882

Table of Contents

Selected Unaudited Pro Forma Condensed Combined Financial Statements (Page 212)

The following table shows summary unaudited pro forma condensed combined financial information about the combined financial condition and operating results of Two Harbors and CYS after giving effect to the Merger. The unaudited pro forma financial information assumes that the Merger is accounted for as an asset acquisition with Two Harbors as the acquiring entity. The unaudited pro forma condensed combined balance sheet data gives effect to the Merger as if it had occurred on March 31, 2018. The unaudited pro forma condensed combined statements of operations data gives effect to the Merger as if it had occurred on January 1, 2017. The summary unaudited pro forma condensed combined financial information listed below has been derived from and should be read in conjunction with (1) the more detailed unaudited pro forma condensed combined financial statements, including the notes thereto, appearing elsewhere in this joint proxy statement/prospectus and (2) the historical consolidated financial statements and related notes of both Two Harbors and CYS, incorporated herein by reference. See "Unaudited Pro Forma Condensed Combined Financial Statement" beginning on page 212 and "Where You Can Find More Information and Incorporation by Reference" beginning on page 210.

Table of Contents

	As of, or for the Three Months Ended, March 31, 2018 (in thousands, except for per share data)			
	Two Harbors Historical(1)	CYS Historical(1)	Pro Forma Adjustments	Two Harbors Pro Forma
Statement of Comprehensive Income (Loss) Data:				
Interest income	$ 194,019	$ 88,678	$	$ 282,697
Interest expense	96,560	41,117		137,677
Net interest income	97,459	47,561		145,020
Other-than-temporary impairment losses	(94)			(94)
Other income (loss)	281,982	(150,201)	167,039	298,820
Expenses	40,754	5,868		46,622
Provision for income taxes	3,784			3,784
Net income (loss)	334,809	(108,508)	167,039	393,340
Dividends on preferred stock	13,747	5,203		18,950
Net income (loss) attributable to common stockholders	$ 321,062	$ (113,711)	$ 167,039	$ 374,390
Per Share Data:				
Net income (loss) per weighted average common share basic	$ 1.83	$ (0.74)	$ 0.40	$ 1.49
Net income (loss) per weighted average common share diluted	$ 1.69	$ (0.74)	$ 0.46	$ 1.41
Weighted average number of shares of common stock outstanding basic	175,145,964	154,230,144	(78,517,301)	250,858,807
Weighted average number of shares of common stock outstanding diluted	192,818,531	154,230,144	(78,517,301)	268,531,374
Comprehensive loss:				
Net income (loss)	$ 334,809	$ (108,508)	$ 167,039	$ 393,340
Other comprehensive loss, net of tax:				
Unrealized loss on available-for-sale securities	(344,777)		(167,039)	(511,816)
Other comprehensive loss	(344,777)		(167,039)	(511,816)
Comprehensive loss	(9,968)	(108,508)		(118,476)
Dividends on preferred stock	13,747	5,203		18,950
Comprehensive loss attributable to common stockholders	$ (23,715)	$ (113,711)	$	$ (137,426)
Balance sheet data:				
Available-for-sale securities	$ 21,059,377	$ 11,535,960	$	$ 32,595,337
Mortgage servicing rights	$ 1,301,023	$	$	$ 1,301,023
Total assets	$ 24,077,165	$ 12,930,261	$ (15,000)	$ 36,992,426
Repurchase agreements	$ 19,148,679	$ 10,084,643	$	$ 29,233,322
Federal Home Loan Bank advances	$ 865,024	$	$	$ 865,024
Total liabilities	$ 20,609,480	$ 11,503,316	$ 21,061	$ 32,133,857
Total stockholders' equity	$ 3,467,685	$ 1,426,945	$ (36,061)	$ 4,858,569

(1)

The historical financial information of Two Harbors and CYS is derived from their respective Quarterly Reports filed on Form 10-Q for the three months ended March 31, 2018. Certain historical CYS amounts have been reclassified to conform to Two Harbors' financial statement presentation.

Table of Contents

	For the year ended December 31, 2017 (in thousands, except for per share data)			
	Two Harbors Historical(1)	CYS Historical(1)	Pro Forma Adjustments	Two Harbors Pro Forma
Statement of Comprehensive Income Data:				
Interest income	$ 745,089	$ 310,783	$	$ 1,055,872
Interest expense	350,188	114,616		464,804
Net interest income	394,901	196,167		591,068
Other-than-temporary impairment losses	(789)			(789)
Other income (loss)	33,566	8,089	(93,490)	(51,835)
Expenses	129,921	22,995		152,916
Benefit from income taxes	(10,482)			(10,482)
Net income (loss) from continuing operations	308,239	181,261	(93,490)	396,010
Income from discontinued operations, net of tax	44,146			44,146
Net income (loss)	352,385	181,261	(93,490)	440,156
Income from discontinued operations attributable to non-controlling interest	3,814			3,814
Net income (loss) attributable to Two Harbors or CYS (as applicable)	348,571	181,261	(93,490)	436,342
Dividends on preferred stock	25,122	20,812		45,934
Net income (loss) attributable to common stockholders	$ 323,449	$ 160,449	$ (93,490)	$ 390,408
Per Share Data:				
Net income (loss) per weighted average common stock basic	$ 1.85	$ 1.05	$ (1.34)	$ 1.56
Net income (loss) per weighted average common stock diluted	$ 1.81	$ 1.05	$ (1.32)	$ 1.54
Weighted average number of shares of common stock outstanding basic	174,433,999	151,757,485	(76,044,642)	250,146,842
Weighted average number of shares of common stock outstanding diluted	188,133,341	151,757,485	(76,044,642)	263,846,184
Comprehensive income:				
Net income (loss) attributable to Two Harbors or CYS (as applicable)	$ 348,571	$ 181,261	$ (93,490)	$ 436,342
Other comprehensive income, net of tax:				
Unrealized gain on available-for-sale securities	135,586		93,490	229,076
Other comprehensive income	135,586		93,490	229,076
Comprehensive income	484,157	181,261		665,418
Dividends on preferred stock	25,122	20,812		45,934
Comprehensive income attributable to common stockholders	$ 459,035	$ 160,449	$	$ 619,484

(1)

The historical financial information of Two Harbors and CYS is derived from their respective Annual Reports on Form 10-K for the year ended December 31, 2017. Certain historical CYS amounts have been reclassified to conform to Two Harbors' financial statement presentation.

Unaudited Comparative Per Share Information (Page 177)

The following table sets forth for the year ended December 31, 2017 and as of, and for the three months ended, March 31, 2018, selected per share information for Two Harbors Common Stock on a historical and pro forma combined basis and for CYS Common Stock on a historical and pro forma equivalent basis. Except for the historical information for the year ended December 31, 2017, the

Table of Contents

information in the table is unaudited. You should read the table below together with the historical consolidated financial statements and related notes thereto of Two Harbors and CYS contained in Two Harbors' Annual Report on Form 10-K for the year ended December 31, 2017, CYS's Annual Report on Form 10-K for the year ended December 31, 2017, and each of Two Harbors' and CYS's respective Quarterly Reports on Form 10-Q for the quarter ended March 31, 2018, all of which are incorporated herein by reference into this joint proxy statement/prospectus. See "Where You Can Find More Information and Incorporation by Reference" beginning on page 210.

The Two Harbors pro forma combined amounts were calculated using the methodology as described above under the heading "Unaudited Pro Forma Condensed Combined Financial Statements," and are subject to all the assumptions, adjustments and limitations described thereunder. The unaudited pro forma condensed combined balance sheet data gives effect to the Merger as if it occurred on March 31, 2018. The unaudited pro forma condensed combined statements of operations data gives effect to the Merger as if it occurred on January 1, 2017. The unaudited pro forma condensed combined financial statements are not necessarily indicative of what the actual financial position and operating results would have been had the Merger occurred on March 31, 2018 or January 1, 2017, respectively, nor do they purport to represent Two Harbors' future financial position or operating results. The CYS pro forma equivalent amounts were calculated by multiplying the Two Harbors pro forma combined amounts by the assumed Exchange Ratio of 0.4872 based on the adjusted book value per share of Two Harbors Common Stock and CYS Common Stock as of March 31, 2018, calculated in accordance with the Merger Agreement.

	CYS Historical	Two Harbors Historical	Pro Forma Combined	Pro Forma Equivalent CYS Share
For the year ended December 31, 2017				
Net income per weighted share of common stock, basic	$ 1.05	$ 1.85	$ 1.56	$ 0.76
Net income per weighted share of common stock, diluted	$ 1.05	$ 1.81	$ 1.54	$ 0.75
Dividends declared per share	$ 1.00	$ 2.01(1)	(2)	(2)
For the quarter ended March 31, 2018				
Net income (loss) per weighted share of common stock, basic	$ (0.74)	$ 1.83	$ 1.49	$ 0.73
Net income (loss) per weighted share of common stock, diluted	$ (0.74)	$ 1.69	$ 1.41	$ 0.69
Dividends declared per share	$ 0.22	$ 0.47	(2)	(2)
As of March 31, 2018				
Net book value per share of common stock	$ 7.41	$ 15.63	$ 15.36(3)	$ 7.48

(1) Excludes the special dividend of Granite Point common stock of $3.67 per common share.

(2) Pro forma dividends per share of common stock are not presented as the dividend policy for the Combined Company will be determined by the Two Harbors board following the completion of the Merger. It is anticipated that the initial per share dividend for the first full quarter following Closing will be $0.47.

(3) Net book value per share of common stock for Pro Forma Combined does not reflect approximately $9.0 million of compensation related expenses (i.e., non-executive severance, retention, etc.) which will be recognized subsequent to the Closing in accordance with GAAP.

Table of Contents

RISK FACTORS

In addition to other information included elsewhere in this joint proxy statement/prospectus and in the annexes to this joint proxy statement/prospectus, including the matters addressed in the section entitled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 51, you should carefully consider the following risk factors in deciding whether to vote for the Two Harbors Common Stock Issuance Proposal or the Merger Proposal. In addition, you should read and consider the risks associated with the businesses of each of Two Harbors and CYS. These risks can be found in the Annual Report on Form 10-K for the year ended December 31, 2017 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 of CYS and the Annual Report on Form 10-K for the year ended December 31, 2017 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 of Two Harbors, which reports are incorporated by reference into this joint proxy statement/prospectus, including particularly the sections therein titled "Risk Factors" and "Tax Risks". You should also read and consider the other information in this joint proxy statement/prospectus and the other documents incorporated by reference into this joint proxy statement/prospectus. Please also see "Where You Can Find More Information and Incorporation by Reference" on page 210.

Risks Related to the Merger

The Merger is subject to a number of conditions which, if not satisfied or waived in a timely manner, would delay the Merger or adversely impact Two Harbors' and CYS's ability to complete the transaction.

The completion of the Merger is subject to the satisfaction or waiver of a number of conditions. In addition, under circumstances specified in the Merger Agreement, Two Harbors or CYS may terminate the Merger Agreement. In particular, completion of the Merger requires (i) the approval of the Merger Proposal by the CYS common stockholders, and (ii) the approval of the Two Harbors Common Stock Issuance Proposal by Two Harbors common stockholders. While it is currently anticipated that the Merger will be completed shortly after the later of the CYS special meeting to approve the Merger Proposal and the Two Harbors special meeting to approve the Two Harbors Common Stock Issuance Proposal, there can be no assurance that the conditions to Closing will be satisfied in a timely manner or at all, or that an effect, event, circumstance, occurrence, development or change will not transpire that could delay or prevent these conditions from being satisfied. Accordingly, Two Harbors and CYS cannot provide any assurances with respect to the timing of the Closing, whether the Merger will be completed at all and when the CYS stockholders would receive the consideration for the Merger, if at all.

Failure to consummate the Merger as currently contemplated or at all could adversely affect the price of Two Harbors Common Stock or CYS Common Stock and the future business and financial results of Two Harbors and/or CYS.

Completion of the Merger is subject to the satisfaction or waiver of a number of conditions, including approval by the Two Harbors common stockholders of the Two Harbors Common Stock Issuance Proposal and approval by the CYS common stockholders of the Merger Proposal. Two Harbors and CYS cannot guarantee when or if these conditions will be satisfied or that the Merger will be successfully completed. The consummation of the Merger may be delayed, the Merger may be consummated on terms different than those contemplated by the Merger Agreement, or the Merger may not be consummated at all. If the Merger is not completed, or is completed on different terms than as contemplated by the Merger Agreement, Two Harbors and CYS could be adversely affected and subject to a variety of risks associated with the failure to consummate the Merger, or to consummate the Merger as contemplated by the Merger Agreement, including the following:

- the Two Harbors stockholders and the CYS stockholders may be prevented from realizing the anticipated benefits of the Merger;

Table of Contents

- the market price of Two Harbors Common Stock or CYS Common Stock could decline significantly;
- reputational harm due to the adverse perception of any failure to successfully consummate the Merger;
- Two Harbors and CYS being required, under certain circumstances, to pay to the other party a termination fee or expense amount;
- incurrence of substantial costs relating to the proposed Merger, such as legal, accounting, financial advisor, filing, printing and mailing fees; and
- the attention of Two Harbors' and CYS's management and employees may be diverted from their day-to-day business and operational matters as a result of efforts relating to attempting to consummate the Merger.

Any delay in the consummation of the Merger or any uncertainty about the consummation of the Merger on terms other than those contemplated by the Merger Agreement, or if the Merger is not completed, could materially adversely affect the business, financial results and stock price of Two Harbors and CYS.

The Merger Agreement contains provisions that could discourage a potential competing acquirer of either Two Harbors or CYS or could result in any competing acquisition proposal being at a lower price than it might otherwise be.

The merger agreement contains provisions that, subject to limited exceptions, restrict the ability of each of Two Harbors and CYS to solicit, initiate, knowingly encourage or facilitate any Competing Proposal. With respect to any written, bona fide Competing Proposal received by either Two Harbors or CYS, the other party generally has an opportunity to offer to modify the terms of the Merger Agreement in response to such proposal before the Two Harbors Board or CYS Board, as the case may be, or committee thereof, may withdraw or modify its recommendation to their respective stockholders in response to such Competing Proposal. In the event that either party's board of directors withdraws or modifies its recommendation, the other party may terminate the Merger Agreement, in which case CYS may be required to pay to Two Harbors a termination fee of $43.2 million or Two Harbors may be required to pay to CYS a termination fee of $51.8 million, payable by the party whose board withdrew or modified its recommendation. Similarly, such termination fees may be payable in certain circumstances if the Merger Agreement is terminated because of a failure to obtain stockholder approval following the announcement of a competing acquisition proposal. See "The Merger Agreement Competing Proposals" beginning on page 138, "The Merger Agreement Termination of the Merger Agreement" beginning on page 143 and "The Merger Agreement Termination Fees and Expenses" beginning on page 144.

These provisions could discourage a potential competing acquirer that might have an interest in acquiring all or a significant part of Two Harbors or CYS from considering or proposing a competing acquisition, even if the potential competing acquirer was prepared to pay consideration with a higher per share cash value than that market value proposed to be received or realized in the Merger, or might result in a potential competing acquirer proposing to pay a lower price than it might otherwise have proposed to pay because of the added expense of the termination fee or expense amount that may become payable in certain circumstances under the Merger Agreement.

The pendency of the Merger could adversely affect Two Harbors' and CYS's business and operations.

In connection with the pending Merger, some of the parties with whom Two Harbors or CYS does business may delay or defer decisions, which could negatively impact Two Harbors' or CYS's revenues, earnings, cash flows and expenses, regardless of whether the Merger is completed. In addition, under

Table of Contents

the Merger Agreement, Two Harbors and CYS are each subject to certain restrictions on the conduct of its respective business prior to completing the Merger. These restrictions may prevent Two Harbors or CYS from pursuing certain strategic transactions, acquiring and disposing assets, undertaking certain capital projects, undertaking certain financing transactions and otherwise pursuing other actions that are not in the ordinary course of business, even if such actions could prove beneficial. These restrictions may impede Two Harbors' or CYS's growth which could negatively impact its respective revenue, earnings and cash flows. Additionally, the pendency of the Merger may make it more difficult for Two Harbors or CYS to effectively retain and incentivize key personnel.

Because the number of shares of Two Harbors Common Stock exchanged per share of CYS Common Stock is not fixed, any change in Two Harbors' adjusted book value per share or CYS's adjusted book value per share prior to the Determination Date will affect the number of shares of Two Harbors Common Stock issued by Two Harbors and received by CYS common stockholders at the Closing.

The number of shares of Two Harbors Common Stock to be received by CYS stockholders will be based on the Exchange Ratio to be determined by dividing 96.75% of the CYS adjusted book value per share by 94.20% of the Two Harbors adjusted book value per share. As defined in the Merger Agreement as "Company Adjusted Book Value Per Share" and "Parent Adjusted Book Value Per Share," as applicable, adjusted book value per share for each company means (i) such company's total consolidated common stockholders' equity after giving pro forma effect to any dividends or other distributions for which the record date is after the exchange ratio but prior to the Closing and as modified for potential transaction-related adjustments, divided by (ii) each respective company's number of shares of common stock issued and outstanding, including shares issuable upon the vesting of restricted stock (less any shares surrendered for income tax purposes). Changes in the adjusted book value per share of either Two Harbors or CYS prior to the Determination Date will affect the consideration that CYS stockholders will receive on the date of Closing.

Changes in Two Harbors' adjusted book value per share and CYS's adjusted book value per share may result from a variety of factors (some of which may be beyond the control of Two Harbors and CYS), including the following factors:

- changes in interest rates;
- changes in prepayment rates of mortgages;
- the occurrence, extent and timing of credit losses within Two Harbors' and CYS's respective portfolios;
- exposure to adjustable-rate and negative amortization mortgage loans;
- the state of the credit markets and other general economic conditions, particularly as they affect the price of earning assets and the credit status of borrowers;
- the concentration of the credit risks to which Two Harbors and CYS are exposed;
- legislative and regulatory actions affecting Two Harbors' and CYS's businesses;
- the availability and cost of Two Harbors' and CYS's target assets;
- the availability and cost of financing for Two Harbors' and CYS's target assets, including repurchase agreement financing, lines of credit, revolving credit facilities and, with respect to Two Harbors, financing through the Federal Home Loan Bank of Des Moines;
- declines in home prices;

increases in payment delinquencies and defaults on the mortgages;

Table of Contents

changes in liquidity in the market for real estate securities, the re-pricing of credit risk in the capital markets, inaccurate ratings of securities by rating agencies, rating agency downgrades of securities, and increases in the supply of real estate securities available-for-sale; and

other factors beyond the control of either Two Harbors or CYS, including those described or referred to elsewhere in this "Risk Factors" section.

Two Harbors' adjusted book value per share and CYS's adjusted book value per share at the Determination Date may vary from their respective adjusted book values per share on March 31, 2018, the date used to determine the illustrative Exchange Ratio of 0.4872 used in this joint proxy statement/prospectus and on the dates of Two Harbors' and CYS's special meetings. As a result, the market value of the consideration for the Merger represented by the Exchange Ratio may also vary. Therefore, Two Harbors common stockholders cannot be sure of the Exchange Ratio or the market value of the consideration that will be paid to CYS common stockholders upon completion of the Merger, and CYS common stockholders cannot be sure of the Exchange Ratio or the market value of the consideration they will receive upon completion of the Merger. Neither Two Harbors nor CYS has the right to terminate the Merger Agreement based on an increase or decrease in their respective adjusted book value per share or the market price of Two Harbors Common Stock.

The Merger and related transactions are subject to Two Harbors common stockholder approval and CYS common stockholder approval.

The Merger cannot be completed unless (i) CYS common stockholders approve the Merger Proposal by the affirmative vote of the holders of at least a majority of all outstanding shares of CYS Common Stock entitled to vote on the Merger Proposal and (ii) Two Harbors common stockholders approve the Two Harbors Common Stock Issuance Proposal by the affirmative vote of a majority of the votes cast on such proposal, provided a quorum is present. Pursuant to the guidance of the NYSE, abstentions with regard to the Two Harbors Common Stock Issuance Proposal will have the effect of a vote against such proposal. If stockholder approval is not obtained from either CYS common stockholders or Two Harbors common stockholders, the Merger and related transactions cannot be completed.

Two Harbors common stockholders and CYS common stockholders will be diluted by the Merger.

The Merger will dilute the ownership position of Two Harbors common stockholders and result in CYS common stockholders having an ownership stake in the Combined Company that is smaller than their current stake in CYS. Following the Two Harbors Common Stock Issuance, Two Harbors and CYS estimate that current Two Harbors common stockholders will own in the aggregate approximately 70% of outstanding Two Harbors Common Stock immediately after the Merger, and CYS common stockholders will own in the aggregate approximately 30% of outstanding Two Harbors Common Stock immediately after the Merger. Consequently, Two Harbors common stockholders and CYS common stockholders, as a general matter, will have less influence over the Combined Company's management and policies after the effective time of the Merger than they currently exercise over the management and policies of Two Harbors and CYS, respectively.

If the Merger is not consummated by October 31, 2018, Two Harbors or CYS may terminate the Merger Agreement.

Either Two Harbors or CYS may terminate the Merger Agreement under certain circumstances, including if the Merger has not been consummated by October 31, 2018. However, this termination right will not be available to a party if that party failed to fulfill its obligations under the Merger Agreement and that failure was the cause of, or resulted in, the failure to consummate the Merger on or before such date.

Table of Contents

The market price of Two Harbors Common Stock may decline as a result of the Merger and the market price of Two Harbors Common Stock after the consummation of the Merger may be affected by factors different from those affecting the price of Two Harbors Common Stock or the price of CYS Common Stock before the Merger.

The market price of Two Harbors Common Stock may decline as a result of the Merger if the Combined Company does not achieve the perceived benefits of the Merger or the effect of the Merger on the Combined Company's financial results is not consistent with the expectations of financial or industry analysts.

In addition, upon consummation of the Merger, Two Harbors stockholders and CYS stockholders will own interests in the Combined Company operating an expanded business with a different mix of assets, risks and liabilities. Two Harbors current stockholders and CYS's current stockholders may not wish to continue to invest in the Combined Company, or for other reasons may wish to dispose of some or all of their shares of Two Harbors Common Stock. If, following the effective time of the Merger, a large amount of Two Harbors Common Stock is sold, the price of Two Harbors Common Stock could decline.

Further, the Combined Company's results of operations, as well as the market price of Two Harbors Common Stock after the Merger may be affected by factors in addition to those currently affecting Two Harbors' or CYS's results of operations and the market prices of Two Harbors Common Stock and CYS Common Stock, particularly the increase in the Combined Company's leverage compared to that in place for Two Harbors and CYS today, and other differences in assets and capitalization. Accordingly, Two Harbors' and CYS's historical market prices and financial results may not be indicative of these matters for the Combined Company after the Merger.

An adverse judgment in any litigation challenging the Merger may prevent the Merger from becoming effective or from becoming effective within the expected timeframe.

It is possible that Two Harbors stockholders or CYS stockholders may file lawsuits challenging the Merger or the other transactions contemplated by the Merger Agreement, which may name Two Harbors, CYS, Two Harbors Board and/or the CYS Board as defendants. The outcome of such lawsuits cannot be assured, including the amount of costs associated with defending these claims or any other liabilities that may be incurred in connection with the litigation of these claims. If plaintiffs are successful in obtaining an injunction prohibiting the parties from completing the Merger on the agreed-upon terms, such an injunction may delay the consummation of the Merger in the expected timeframe, or may prevent the Merger from being consummated altogether. Whether or not any plaintiff's claim is successful, this type of litigation may result in significant costs and divert management's attention and resources, which could adversely affect the operation of Two Harbors' business and/or CYS's business.

Risks Related to the Combined Company Following the Merger

Following the Merger, the Combined Company may be unable to integrate Two Harbors' business and CYS's business successfully and realize the anticipated synergies and other expected benefits of the Merger on the anticipated timeframe or at all.

The Merger involves the combination of two companies that currently operate as independent public companies. The Combined Company expects to benefit from the elimination of duplicative costs associated with supporting a public company platform and operating the respective businesses, and the resulting economies of scale. These savings are not expected to be realized until full integration, which is not expected to occur until 2019. The Combined Company will be required to devote significant management attention and resources to the integration of Two Harbors' and CYS's business practices

Table of Contents

and operations. The potential difficulties the Combined Company may encounter in the integration process include, but are not limited to, the following:

- the inability to successfully combine Two Harbors' and CYS's business in a manner that permits the Combined Company to achieve the cost savings anticipated to result from the Merger, which would result in the anticipated benefits of the Merger not being realized in the timeframe currently anticipated or at all;
- the complexities associated with integrating personnel from the two companies;
- the complexities of combining two companies with different histories, cultures, geographic footprints and portfolio assets;
- difficulties or delays in redeploying the capital acquired in connection with the Merger into the target assets of the Combined Company;
- potential unknown liabilities and unforeseen increased expenses, delays or conditions associated with the Merger; and
- performance shortfalls as a result of the diversion of management's attention caused by completing the Merger and integrating the companies' operations.

For all these reasons, you should be aware that it is possible that the integration process could result in the distraction of the Combined Company's management, the disruption of the Combined Company's ongoing business or inconsistencies in its operations, services, standards, controls, policies and procedures, any of which could adversely affect the Combined Company's ability to deliver investment returns to stockholders, to maintain relationships with its key stakeholders and employees, to achieve the anticipated benefits of the Merger, or could otherwise materially and adversely affect its business and financial results.

Following the Merger, the Combined Company may not pay dividends at or above the rate currently paid by Two Harbors or CYS.

Following the Merger, the Combined Company's stockholders may not receive dividends at the same rate that they did as Two Harbors stockholders or CYS stockholders prior to the Merger for various reasons, including the following:

- the Combined Company may not have enough cash to pay such dividends due to changes in its cash requirements, capital spending plans, cash flow or financial position;
- decisions on whether, when and in what amounts to make any future dividends will remain at all times entirely at the discretion of the Combined Company's board of directors, which reserves the right to change its dividend practices at any time and for any reason; and
- the amount of dividends that the Combined Company's subsidiaries may distribute to the Combined Company may be subject to restrictions imposed by state law and restrictions imposed by the terms of any current or future indebtedness that these subsidiaries may incur.

The Combined Company's stockholders will have no contractual or other legal right to dividends that have not been declared by its board of directors.

The Combined Company will have a significant amount of indebtedness and may need to incur more in the future.

The Combined Company will have substantial indebtedness following completion of the Merger. In addition, in connection with executing its business strategies following the Merger, the Combined Company expects to evaluate the possibility of investing in additional target assets and making other

Table of Contents

strategic investments, and it may elect to finance these endeavors by incurring additional indebtedness. The amount of such indebtedness could have material adverse consequences for the Combined Company, including:

- hindering its ability to adjust to changing market, industry or economic conditions;
- limiting its ability to access the capital markets to raise additional equity or refinance maturing debt on favorable terms or to fund acquisitions or emerging businesses;
- limiting the amount of free cash flow available for future operations, acquisitions, dividends, stock repurchases or other uses;
- making it more vulnerable to economic or industry downturns, including interest rate increases; and
- placing it at a competitive disadvantage compared to less leveraged competitors.

Moreover, to respond to competitive challenges, the Combined Company may be required to raise substantial additional capital to execute its business strategy. The Combined Company's ability to arrange additional financing will depend on, among other factors, its financial position and performance, as well as prevailing market conditions and other factors beyond its control. If the Combined Company is able to obtain additional financing, its credit ratings could be further adversely affected, which could further raise its borrowing costs and further limit its future access to capital and its ability to satisfy its obligations under its indebtedness.

The Combined Company is expected to incur substantial expenses related and unrelated to the Merger.

Two Harbors and CYS have incurred substantial legal, accounting, financial advisory and other costs, and the management teams of Two Harbors and CYS have devoted considerable time and effort in connection with the Merger. Two Harbors and CYS may incur significant additional costs in connection with the completion of the Merger or in connection with any delay in completing the Merger or termination of the Merger Agreement, in addition to the other costs already incurred. If the Merger is not completed, Two Harbors and CYS will separately bear certain fees and expenses associated with the Merger without realizing the benefits of the Merger. If the Merger is completed, the Combined Company expects to incur substantial expenses in connection with integrating the business, operations, network, systems, technologies, policies and procedures of the two companies. The fees and expenses may be significant and could have an adverse impact on the Combined Company's results of operations.

Although Two Harbors and CYS have assumed that a certain level of transaction and integration expenses would be incurred, there are a number of factors beyond the control of either Two Harbors or CYS that could affect the total amount or the timing of the integration expenses. Many of the expenses that will be incurred, by their nature, are difficult to estimate accurately at the present time. As a result, the transaction and integration expenses associated with the Merger could, particularly in the near term, exceed the savings that the Combined Company expects to achieve from the elimination of duplicative expenses and the realization of economies of scale and cost savings related to the integration of the businesses following the completion of the Merger.

The historical and unaudited pro forma condensed combined financial information included elsewhere in this joint proxy statement/prospectus may not be representative of the Combined Company's results after the Merger, and accordingly, you have limited financial information on which to evaluate the Combined Company following the Merger.

The unaudited pro forma condensed combined financial information included elsewhere in this joint proxy statement/prospectus has been presented for informational purposes only and is not

Table of Contents

necessarily indicative of the financial position or results of operations that actually would have occurred had the Merger been completed as of the date indicated, nor is it indicative of the future operating results or financial position of the Combined Company following the Merger. The unaudited pro forma condensed combined financial information does not reflect future events that may occur after the Merger. The unaudited pro forma condensed combined financial information presented elsewhere in this joint proxy statement/prospectus is based in part on certain assumptions regarding the Merger that Two Harbors and CYS believe are reasonable under the circumstances. Neither Two Harbors nor CYS can assure you that the assumptions will prove to be accurate over time.

The Merger will be taxable to U.S. stockholders of CYS Stock and stockholders of CYS Common Stock will receive limited cash, if any, with which to pay any tax.

Assuming that the Merger is completed as currently contemplated, CYS and Two Harbors expect that the receipt of (i) cash and Two Harbors Common Stock in exchange for CYS Common Stock, (ii) Two Harbors Series D Preferred Stock in exchange for CYS Series A Preferred Stock, or (iii) Two Harbors Series E Preferred Stock in exchange for CYS Series B Preferred Stock, as applicable, by U.S. stockholders pursuant to the Merger will be a taxable transaction for U.S. federal income tax purposes. Generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Common Stock will recognize gain or loss as a result of the Merger measured by the difference, if any, between (i) the sum of the fair market value of the Two Harbors Common Stock received and the amount of any cash received, and (ii) the stockholder's adjusted tax basis in its CYS Common Stock. In addition, generally, for U.S. federal income tax purposes, U.S. stockholders of CYS Series A Preferred Stock or CYS Series B Preferred Stock will recognize gain or loss as a result of the Merger measured by the difference, if any, between (i) the fair market value of the Two Harbors Series D Preferred Stock or Two Harbors Series E Preferred Stock received, as applicable, and (ii) the stockholder's adjusted tax basis in its CYS Series A Preferred Stock or CYS Series B Preferred Stock, as applicable. Because the consideration to be given to stockholders of (i) CYS Common Stock consists primarily of Two Harbors Common Stock and (ii) CYS Series A Preferred Stock and CYS Series B Preferred Stock consists solely of Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock, respectively, U.S. stockholders of CYS Stock may need to sell their shares of Two Harbors Stock received in the Merger, or raise cash from other sources, to pay any tax obligations resulting from the Merger. Generally, non-U.S. stockholders are not expected be subject to U.S. federal income tax or U.S. federal withholding tax on any gain recognized from the Merger. See "Material U.S. Federal Income Tax Consequences Consequences of the Merger to Non-U.S. Stockholders of CYS Stock."

Two Harbors would incur adverse tax consequences if it or CYS failed to qualify as a REIT for U.S. federal income tax purposes.

Two Harbors has assumed, based on public filings, that CYS has qualified and will continue to qualify as a REIT for U.S. federal income tax purposes prior to the Merger and that Two Harbors will be able to continue to qualify as a REIT following the Merger. In addition, as a condition of the Merger, Two Harbors expects to receive an opinion of Vinson & Elkins L.L.P. ("Vinson & Elkins") to the effect that CYS has qualified as a REIT for U.S. federal income tax purposes commencing with its taxable year ended December 31, 2006. However, if CYS has failed or fails to qualify as a REIT, Two Harbors and Merger Sub generally would succeed to or incur significant tax liabilities (including the significant tax liability that would result from the deemed sale of assets by CYS pursuant to the Merger), and Two Harbors could possibly lose its REIT status should disqualifying activities continue after the acquisition.

REITs are subject to a range of complex organizational and operational requirements. As a REIT, Two Harbors must distribute with respect to each year at least 90% of its REIT taxable income to its stockholders. Other restrictions apply to its income and assets. Two Harbors' REIT status is also

Table of Contents

dependent upon the ongoing qualification of subsidiary entities as REITs, as a result of its substantial ownership interest in those entities.

For any taxable year that Two Harbors fails to qualify as a REIT and is unable to avail itself of certain savings provisions set forth in the Code, it would be subject to U.S. federal income tax at the regular corporate rates on all of its taxable income, whether or not it makes any distributions to its stockholders. Those taxes would reduce the amount of cash available for distribution to its stockholders or for reinvestment and would adversely affect Two Harbors' earnings. As a result, Two Harbors' failure to qualify as a REIT during any taxable year could have a material adverse effect upon Two Harbors and its stockholders. Furthermore, unless certain relief provisions apply, Two Harbors would not be eligible to elect REIT status again until the fifth taxable year that begins after the first year for which it failed to qualify.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus and the annexes to this joint proxy statement/prospectus contain forward looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act, and Section 21E of the Exchange Act.

These forward-looking statements are predictions and generally can be identified by use of statements that include phrases such as "may," "believe," "expect," "anticipate," "intend," "estimate," "project," "target," "goal," "plan," "should," "will," "predict," "potential," "likely," or other words, phrases or expressions of similar import, or the negative or other words or expressions of similar meaning, and statements regarding the benefits of the Merger or the other transactions contemplated by the Merger Agreement or the future financial condition, results of operations and business of Two Harbors, CYS or the Combined Company. Without limiting the generality of the preceding sentence, certain information contained in the sections "The Merger Background of the Merger," "The Merger Recommendation of the Two Harbors Board and Its Reasons for the Merger," "The Merger Recommendation of the CYS Board and Its Reasons for the Merger," "The Merger Certain Two Harbors Unaudited Prospective Financial Information," and "The Merger Certain CYS Unaudited Prospective Financial Information" constitute forward-looking statements.

Two Harbors and CYS base these forward-looking statements on particular assumptions that they have made in light of their industry experience, as well as their perception of historical trends, current conditions, expected future developments and other factors that they believe are appropriate under the circumstances. The forward-looking statements are necessarily estimates reflecting the judgment of Two Harbors' and CYS's respective management and involve a number of known and unknown risks, uncertainties and other factors which may cause actual results, performance, or achievements of Two Harbors, CYS or the Combined Company to be materially different from those expressed or implied by the forward-looking statements. In addition to other factors and matters contained in this joint proxy statement/prospectus, including those disclosed under "Risk Factors" beginning on page 42, these forward-looking statements are subject to risks, uncertainties and other factors, including, among others:

- the ability of Two Harbors and CYS to obtain the required stockholder approvals to consummate the Merger;
- the satisfaction or waiver of other conditions in the Merger Agreement;
- the risk that the Merger or the other transactions contemplated by the Merger Agreement may not be completed in the time frame expected by the parties or at all;
- the occurrence of any event, change or other circumstances that could give rise to the termination of the Merger Agreement and that a termination under certain circumstances could require Two Harbors to pay CYS or CYS to pay Two Harbors a termination fee or expense amount, as described under "The Merger Agreement Termination Fees and Expenses" beginning on page 144;
- the ability of Two Harbors to successfully integrate pending transactions and implement its operating strategy, including the Merger;
- adverse changes in residential real estate and the residential real estate capital markets;
- financing risks;
- the outcome of current and future litigation, including any legal proceedings that may be instituted against Two Harbors, CYS or others related to the Merger Agreement;
- regulatory proceedings or inquiries;

51

Table of Contents

changes in laws or regulations or interpretations of current laws and regulations that impact Two Harbors' or CYS's business, assets or classification as a REIT; and

other risks detailed in filings made by each of Two Harbors and CYS with the SEC, including the Annual Report on Form 10-K for the year ended December 31, 2017 and the Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 filed by Two Harbors with the SEC and incorporated herein by reference and the Annual Report on Form 10-K for the year ended December 31, 2017, and the Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 filed by CYS and incorporated herein by reference. See also "Where You Can Find More Information and Incorporation by Reference" on page 210 of this joint proxy statement/prospectus.

Although Two Harbors and CYS believe that the assumptions underlying the forward-looking statements contained herein are reasonable, any of the assumptions could be inaccurate, and therefore there can be no assurance that such statements included in this joint proxy statement/prospectus will prove to be accurate. As you read and consider the information in this joint proxy statement/prospectus, you are cautioned to not place undue reliance on these forward-looking statements. These statements are not guarantees of performance or results and speak only as of the date of this joint proxy statement/prospectus, in the case of forward-looking statements contained in this joint proxy statement/prospectus, or the dates of the documents incorporated by reference or attached as annexes to this joint proxy statement/prospectus, in the case of forward-looking statements made in those documents. Neither Two Harbors nor CYS undertakes any obligation to update or revise any forward-looking statements, whether as a result of new information or developments, future events, or otherwise, except as required by law.

In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by Two Harbors, CYS or any other person that the results or conditions described in such statements or the objectives and plans of Two Harbors or CYS will be achieved. In addition, Two Harbors' and CYS's qualification as a REIT involves the application of highly technical and complex provisions of the Code.

All forward-looking statements, expressed or implied, included in this joint proxy statement/prospectus are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward-looking statements that Two Harbors, CYS or persons acting on their behalf may issue.

Table of Contents

THE COMPANIES

Two Harbors Investment Corp.

Two Harbors Investment Corp.
575 Lexington Avenue
Suite 2930
New York, New York 10022
(612) 629-2500

Two Harbors is a Maryland corporation focused on investing in, financing and managing Agency RMBS, non-Agency securities, MSR and other financial assets, which Two Harbors collectively refers to as its target assets. Two Harbors operates as a REIT and is externally managed by PRCM Advisers.

Two Harbors was incorporated on May 21, 2009 and commenced operations as a publicly traded company on October 28, 2009, upon completion of a merger with Capitol Acquisition Corp. which became its wholly owned indirect subsidiary as a result of the merger.

Two Harbors' objective is to provide attractive risk-adjusted total return to its stockholders over the long term, primarily through dividends and secondarily through capital appreciation. Two Harbors selectively acquires and manages an investment portfolio of its target assets, which is constructed to generate attractive returns through market cycles. Two Harbors focuses on asset selection and implements a relative value investment approach across various sectors within the mortgage market. Two Harbors' target assets include the following:

Agency RMBS, meaning RMBS whose principal and interest payments are guaranteed by the Government National Mortgage Association, the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation;

non-Agency securities that are not issued or guaranteed by the Government National Mortgage Association, the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation;

MSR; and

other financial assets comprising approximately 5% to 10% of the portfolio.

Two Harbors seeks to deploy moderate leverage as part of its investment strategy. Two Harbors generally finances its Agency RMBS and non-Agency securities through short- and long-term borrowings structured as repurchase agreements and advances from the FHLB. Two Harbors also finances its MSR through repurchase agreements and revolving credit facilities.

Two Harbors has elected to be treated as a REIT for U.S. federal income tax purposes. To qualify as a REIT, Two Harbors is required to meet certain investment and operating tests and annual distribution requirements. Two Harbors generally will not be subject to U.S. federal income taxes on its taxable income to the extent that it annually distributes all of its net taxable income to stockholders, does not participate in prohibited transactions and maintains its intended qualification as a REIT. However, certain activities that Two Harbors may perform may cause Two Harbors to earn income which will not be qualifying income for REIT purposes. Two Harbors has designated certain of its subsidiaries as taxable REIT subsidiaries, as defined in the Code, to engage in such activities, and Two Harbors may form additional taxable REIT subsidiaries in the future. Two Harbors also operates its business in a manner that will permit it to maintain its exemption from registration under the Investment Company Act of 1940, as amended (the "1940 Act").

Shares of Two Harbors Common Stock are listed on the NYSE, trading under the symbol "TWO".

Table of Contents

Two Harbors' principal executive offices are located at 575 Lexington Avenue, Suite 2930, New York, New York 10022, and its telephone number is (612) 629-2500.

Eiger Merger Subsidiary LLC

Eiger Merger Subsidiary LLC
575 Lexington Avenue
Suite 2930
New York, New York 10022
(612) 629-2500

Merger Sub is a Maryland limited liability company that was formed on April 24, 2018 solely for the purpose of effecting the Merger. Upon Closing, Merger Sub will be merged with and into CYS, with CYS continuing as the surviving corporation. Merger Sub has not conducted any activities to date, except for activities incidental to its formation and activities undertaken in connection with the transactions contemplated by the Merger Agreement.

CYS Investments, Inc.

CYS Investments, Inc.
500 Totten Pond Road, 6th Floor
Waltham, Massachusetts 02451
(617) 639-0440

CYS is a specialty finance company created with the objective of achieving consistent risk-adjusted investment income. CYS seeks to achieve this objective by investing, on a leveraged basis, in Agency RMBS. In addition, CYS's investment guidelines permit investments in collateralized mortgage obligations issued by a government agency or a government-sponsored entity that are collateralized by Agency RMBS, or CMOs, debt securities issued by the U.S. Department of the Treasury or a government-sponsored entity that are not backed by collateral but, in the case of government agencies, are backed by the full faith and credit of the U.S. government, or U.S. Treasury Securities, and, in the case of government sponsored entities, are backed by the integrity and creditworthiness of the issuer, or U.S. Agency Debentures and credit risk transfer securities, such as Structured Agency Credit Risk ("STACR") debt securities issued by Freddie Mac, Connecticut Avenue Securities ("CAS") issued by Fannie Mae and similar securities issued by a GSE where their cash flows track the credit risk performance of a notional reference pool of mortage loans.

CYS was formed as a Maryland corporation on January 3, 2006. CYS has elected to be taxed as a REIT for U.S. federal income tax purposes. The CYS Common Stock, CYS Series A Preferred Stock and CYS Series B Preferred Stock trade on the NYSE under the symbols "CYS," "CYS PrA" and "CYS PrB," respectively.

The Combined Company

The Combined Company will retain the name "Two Harbors Investment Corp." and will continue to be a Maryland corporation which has elected to be taxed as a REIT under the Code. The Combined Company will be a publicly traded corporation focused on investing in, financing and managing Agency RMBS, non-Agency securities, MSR and other financial assets. The Combined Company is expected to have a pro forma equity market capitalization of approximately $4.0 billion and a total capitalization of approximately $4.9 billion based on the $15.76 per share closing price of Two Harbors Common Stock on June 13, 2018.

The business of the Combined Company will be operated through Two Harbors and its subsidiaries, which will include CYS and its subsidiaries. Upon completion of the Merger, the

Table of Contents

continuing Two Harbors common stockholders are expected to own in the aggregate approximately 70% of the Combined Company's fully diluted equity, and the former CYS common stockholders are expected to own in the aggregate the remaining approximately 30%.

The common stock of the Combined Company will continue to be listed on the NYSE, trading under the symbol "TWO". The newly issued shares of Two Harbors Series D Preferred Stock will trade under the symbol "TWO PRD", and the newly issued shares of Two Harbors Series E Preferred Stock will trade under the symbol "TWO PRE".

The Combined Company's principal executive offices will be located at 575 Lexington Avenue, Suite 2930, New York, New York 10022, and its telephone number will be (612) 629-2500.

Table of Contents

THE TWO HARBORS SPECIAL MEETING

This joint proxy statement/prospectus is being furnished in connection with the solicitation of proxies from Two Harbors common stockholders for use at the Two Harbors special meeting. This joint proxy statement/prospectus and accompanying form of proxy are first being mailed to Two Harbors common stockholders on or about [•], 2018.

Purpose of the Two Harbors Special Meeting

A special meeting of Two Harbors stockholders will be held at 601 Carlson Parkway, 2nd Floor, Minnetonka, Minnesota 55305, on July 27, 2018, at 9:00 a.m., Central Time, for the following purposes:

- to consider and vote on the Two Harbors Common Stock Issuance Proposal, which is the proposal to approve the issuance of shares of Two Harbors Common Stock to the CYS common stockholders in the Merger and upon any conversion (upon certain future changes of control of Two Harbors, if any) of the Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock to be issued in the Merger; and

- to consider and vote on the Two Harbors Adjournment Proposal, the proposal to adjourn the Two Harbors special meeting, if necessary or appropriate, including to solicit additional proxies if there are not sufficient votes to approve the Two Harbors Common Stock Issuance Proposal.

Only business within the purposes described in the Notice of Special Meeting of Two Harbors common stockholders' may be conducted at the Two Harbors special meeting. Any action may be taken on the items of business described above at the Two Harbors special meeting on the date specified above, or on any date or dates to which the special meeting may be adjourned or postponed.

This joint proxy statement/prospectus also contains information regarding the CYS special meeting, including the items of business for that special meeting. Two Harbors common stockholders are not voting on the proposals to be voted on at the CYS special meeting.

Record Date; Voting Rights; Proxies

Two Harbors has fixed the close of business on June 22, 2018 as the record date for determining holders of Two Harbors Common Stock entitled to notice of, and to vote at, the Two Harbors special meeting. Only holders of Two Harbors Common Stock at the close of business on the record date will be entitled to notice of, and to vote at, the Two Harbors special meeting, unless a new record date is set in connection with any adjournment or postponement of the Two Harbors special meeting. As of the record date, there were [•] issued and outstanding shares of Two Harbors Common Stock. Each holder of record of Two Harbors Common Stock on the record date is entitled to one vote per share. Votes may be cast either in person or by properly executed proxy at the Two Harbors special meeting. As of the record date, the issued and outstanding shares of Two Harbors Common Stock were held by approximately [•] beneficial owners.

Stockholders of Record. If you are a stockholder of record of Two Harbors Common Stock, you may have your shares of Two Harbors Common Stock voted on the matters to be presented at the special meeting in any of the following ways:

- To authorize a proxy through the Internet, visit the website set forth on the proxy card you received. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

- To authorize a proxy by telephone, dial the toll free telephone number set forth on the proxy card you received using a touch tone phone and follow the recorded instructions. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized by

Table of Contents

telephone or through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

To authorize a your proxy by mail, complete, date and sign each proxy card you receive and return it as promptly as practicable in the enclosed prepaid envelope. If you sign and return your proxy card, but do not mark the boxes showing how you wish to vote, your shares of common stock will be voted "**FOR**" the Two Harbors Common Stock Issuance Proposal and the Two Harbors Adjournment Proposal.

If you intend to vote in person, please bring proper identification, together with proof that you are a record owner of shares of the applicable company.

Beneficial Owners. If your shares of Two Harbors Common Stock are held in "street name," please refer to the instructions provided by your broker, bank, trustee or other nominee to see which of the above choices are available to you. Please note that if you are a holder in "street name" and wish to vote in person at the special meeting, you must obtain a legal proxy from broker, bank, trustee or other nominee.

All shares of Two Harbors Common Stock that are entitled to vote and are represented at the Two Harbors special meeting by properly authorized proxies received before or at the Two Harbors special meeting and not revoked, will be voted at such special meeting in accordance with the instructions indicated on the proxies. If no instructions are given on a timely and properly executed proxy card, your shares of stock will be voted:

"**FOR**" the Two Harbors Common Stock Issuance Proposal; and

"**FOR**" the Two Harbors Adjournment Proposal.

Votes cast by proxy or in person at the Two Harbors special meeting will be tabulated by the inspector of elections appointed for the Two Harbors special meeting, who will also determine whether or not a quorum is present.

Any proxy given by a common stockholder pursuant to this solicitation may be revoked at any time before the vote is taken at the special meeting in any of the following ways:

authorizing a later proxy by telephone or through the Internet prior to 11:59 p.m., Eastern Time, on July 26, 2018;

filing with the Secretary of Two Harbors, before the taking of the vote at the Two Harbors special meeting, a written notice of revocation bearing a later date than the proxy card;

duly executing a later dated proxy card relating to the same shares of stock and delivering it to the Secretary of Two Harbors before the taking of the vote at the Two Harbors special meeting; or

voting in person at the Two Harbors special meeting, although attendance at the special meeting alone will not by itself constitute a revocation of a proxy.

Any written notice of revocation or subsequent proxy card should be sent to Two Harbors Investment Corp., 575 Lexington Avenue, Suite 2930, New York, New York, 10022, Attention: Secretary, or hand delivered to the Secretary of Two Harbors before the taking of the vote at the Two Harbors special meeting.

Solicitation of Proxies

Two Harbors is soliciting proxies on behalf of the Two Harbors Board. Two Harbors will bear the costs of soliciting proxies. Brokerage houses, fiduciaries, nominees and others will be reimbursed for their out-of-pocket expenses in forwarding proxy materials to owners of Two

Harbors Common Stock

Table of Contents

held in their names. In addition to the solicitation of proxies by use of the mails, proxies may be solicited from Two Harbors common stockholders by directors, officers and employees of Two Harbors in person or by telephone, by facsimile, on the Internet or other appropriate means of communications. No additional compensation, except for reimbursement of reasonable out-of-pocket expenses, will be paid to directors, officers and employees of Two Harbors in connection with this solicitation. Two Harbors has retained D.F. King to solicit, and for advice and assistance in connection with the solicitation of, proxies for the Two Harbors special meeting at a cost of $12,500, plus out-of-pocket expenses. No portion of the amount that Two Harbors has agreed to pay to D.F. King is contingent upon the Closing. Any questions or requests for assistance regarding this joint proxy statement/prospectus and related proxy materials may be directed to D.F. King by mail at D.F. King & Co., Inc., 28 Wall Street, 22nd Floor, New York, New York 10005, by telephone at (866) 530-8632, or by email at two@dfking.com.

Quorum; Abstentions and Broker Non-Votes

The presence, in person or by proxy, of the holders of shares of Two Harbors Common Stock entitled to cast a majority of all the votes entitled to be cast at the Two Harbors special meeting will constitute a quorum at the Two Harbors special meeting. Two Harbors will include abstentions in the calculation of the number of shares considered to be present at the Two Harbors special meeting for purposes of determining the presence of a quorum at the Two Harbors special meeting. Approval of the Two Harbors Common Stock Issuance Proposal requires that the number of votes cast for the Two Harbors Common Stock Issuance Proposal exceeds the number of votes cast against and abstaining from the Two Harbors Common Stock Issuance Proposal, assuming a quorum is present. Under NYSE guidance applicable to the Two Harbors Stock Issuance Proposal, abstentions will be considered as votes cast and accordingly will have the same effect as votes "AGAINST" the Two Harbors Stock Issuance Proposal. Approval of the Two Harbors Adjournment Proposal requires that the number of votes cast for the Two Harbors Adjournment Proposal exceeds the number of votes cast against the Two Adjournment Proposal. Abstentions will not be counted as "votes cast" for this proposal and will therefore have no effect on the outcome of the vote on the Two Harbors Adjournment Proposal. Any failure to return your proxy card or other failure to vote will have no effect on the outcome of the vote on either the Two Harbors Stock Issuance Proposal or the Two Harbor Adjournment Proposal provided that a quorum is otherwise present at the Two Harbors special meeting.

Banks, brokers and other nominees that hold their customers' shares in street name may not vote their customers' shares on "non-routine" matters without instructions from their customers. As each of the proposals to be voted upon at the Two Harbors special meeting is considered "non-routine," such organizations do not have discretion to vote on any of the proposals. As a result, if you do not provide your broker, bank or other nominee with instructions regarding how to vote your shares of Two Harbors Common Stock, your shares of Two Harbors Common Stock will not be considered present at the Two Harbors special meeting and will not be voted on any of the proposals.

Required Vote

Approval of the Two Harbors Common Stock Issuance Proposal requires that the number of votes cast for the Two Harbors Common Stock Issuance Proposal exceeds the number of votes cast against and abstaining from the Two Harbors Common Stock Issuance Proposal, assuming a quorum is present.

If voted upon at the Two Harbors special meeting, approval of the Two Harbors Adjournment Proposal requires that the number of votes cast for the Two Harbors Adjournment Proposal exceeds the number of votes cast against the Two Harbors Adjournment Proposal. Abstentions will not be counted as "votes cast" for this proposal and will therefore have no effect on the outcome of the vote on the Two Harbors Adjournment Proposal.

Regardless of the number of shares of Two Harbors Common Stock you own, your vote is important. Please complete, sign, date and promptly return the enclosed proxy card today or vote by phone or Internet.

Table of Contents

PROPOSALS SUBMITTED TO THE TWO HARBORS COMMON STOCKHOLDERS

Proposal 1: Two Harbors Common Stock Issuance Proposal

Two Harbors common stockholders are being asked to approve the issuance of shares of Two Harbors Common Stock to the CYS common stockholders in the Merger and upon any conversion (upon certain future changes of control of Two Harbors, if any) of the Two Harbors Series D Preferred Stock and Two Harbors Series E Preferred Stock to be issued in the Merger. For a summary and detailed information regarding this proposal, see the information about the Merger and the Merger Agreement throughout this joint proxy statement/prospectus, including the information set forth in sections entitled "The Merger" beginning on page 66 and "The Merger Agreement" beginning on page 124. A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus.

Pursuant to the Merger Agreement, approval of the Two Harbors Common Stock Issuance is a condition to the consummation of the Merger. If the Two Harbors Common Stock Issuance Proposal is not approved, the Merger will not be completed.

Approval of the Two Harbors Common Stock Issuance Proposal requires that the number of votes cast for this proposal exceeds the number of votes cast against this proposal and abstaining from voting on the proposal from holders of Two Harbors Common Stock represented in person or by proxy and entitled to vote at the Two Harbors special meeting, assuming a quorum is present.

Recommendation of the Two Harbors Board

The Two Harbors Board unanimously recommends that Two Harbors common stockholders vote "FOR" the Two Harbors Common Stock Issuance Proposal to issue shares of Two Harbors Common Stock to CYS common stockholders, pursuant to the Merger Agreement.

Proposal 2: Two Harbors Adjournment Proposal

The Two Harbors special meeting may be adjourned to another time or place, if necessary or appropriate in the view of the Two Harbors Board, to permit, among other things, further solicitation of proxies, if necessary or appropriate in the view of the Two Harbors Board, in favor of the Two Harbors Common Stock Issuance Proposal if there are not sufficient votes at the time of such adjournment to approve such proposal.

Two Harbors is asking Two Harbors common stockholders to approve the adjournment of the Two Harbors special meeting, if necessary or appropriate, to solicit additional proxies in favor of the Two Harbors Common Stock Issuance Proposal if there are not sufficient votes at the time of such adjournment to approve such proposal.

Approval of the Two Harbors Adjournment Proposal requires that the number of votes cast for this proposal exceeds the number of votes cast against this proposal from holders of Two Harbors Common Stock represented in person or by proxy and entitled to vote at the Two Harbors special meeting.

Two Harbors does not intend to call a vote on the Two Harbors Adjournment Proposal if the Two Harbors Common Stock Issuance Proposal considered at the Two Harbors special meeting has been approved at the Two Harbors special meeting.

Recommendation of the Two Harbors Board

The Two Harbors Board unanimously recommends that Two Harbors common stockholders vote "FOR" the Two Harbors Adjournment Proposal to adjourn the Two Harbors special meeting, if

Table of Contents

necessary or appropriate, including to solicit additional proxies if there are not sufficient votes to approve the Two Harbors Common Stock Issuance Proposal.

Other Business

Pursuant to Maryland law and Two Harbors Bylaws, only matters described in the Notice of Special Meeting for Two Harbors may be brought before the Two Harbors special meeting.

Table of Contents

THE CYS SPECIAL MEETING

This joint proxy statement/prospectus is being furnished in connection with the solicitation of proxies from CYS common stockholders for use at the CYS special meeting. This joint proxy statement/prospectus and accompanying form of proxy are first being mailed to CYS common stockholders on or about [•], 2018.

Purpose of the CYS Special Meeting

A special meeting of CYS common stockholders will be held at 50 Rowes Wharf, Boston, Massachusetts 02110, on July 27, 2018 at 9:00 a.m., Eastern Time, for the following purposes:

to consider and vote on the Merger Proposal;

to consider and vote on the CYS Non-Binding Compensation Advisory Proposal; and

to consider and vote on the CYS Adjournment Proposal.

Only business within the purposes described in the Notice of Special Meeting of CYS may be conducted at the CYS special meeting. Any action may be taken on the items of business described above at the CYS special meeting on the date specified above, or on any date or dates to which the CYS special meeting may be adjourned or postponed.

This joint proxy statement/prospectus also contains information regarding the Two Harbors special meeting, including the items of business for that special meeting. CYS stockholders are not voting on the proposals to be voted on at the Two Harbors special meeting.

Record Date; Voting Rights; Proxies

CYS has fixed the close of business on June 22, 2018 as the record date for determining holders of CYS Common Stock entitled to notice of, and to vote at, the CYS special meeting. Holders of CYS Common Stock and CYS Series A Preferred Stock and CYS Series B Preferred Stock at the close of business on the record date will be entitled to notice of the CYS special meeting, unless a new record date is set in connection with any adjournment or postponement of the special meeting. Only holders of CYS Common Stock at the close of business on the record date will be entitled to vote at the CYS special meeting, unless a new record date is set in connection with any adjournment or postponement of the special meeting. As of the record date, there were [•] issued and outstanding shares of CYS Common Stock. Each holder of record of CYS Common Stock on the record date is entitled to one vote per share. Votes may be cast either in person or by properly authorized proxy at the CYS special meeting. As of the record date, the issued and outstanding CYS Common Stock was held by approximately [•] beneficial owners.

Stockholders of Record. If you are a stockholder of record of CYS Common Stock, you may have your shares of CYS Common Stock voted on the matters to be presented at the special meeting in any of the following ways:

To authorize a proxy through the Internet, visit the website set forth on the proxy card you received. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

To authorize a proxy by telephone, dial the toll free telephone number set forth on the proxy card you received using a touch tone phone and follow the recorded instructions. You will be asked to provide the control number from the enclosed proxy card. Proxies authorized by telephone or through the Internet must be received by 11:59 p.m., Eastern Time, on July 26, 2018.

Table of Contents

To authorize a your proxy by mail, complete, date and sign each proxy card you receive and return it as promptly as practicable in the enclosed prepaid envelope. If you sign and return your proxy card, but do not mark the boxes showing how you wish to vote, your shares of common stock will be voted "**FOR**" the Merger Proposal, the CYS Non-Binding Compensation Advisory Proposal and the CYS Adjournment Proposal.

If you intend to vote in person, please bring proper identification, together with proof that you are a record owner of shares of the applicable company.

Beneficial Owners. If your shares of CYS Common Stock are held in "street name," please refer to the instructions provided by your broker, bank, trustee or other nominee to see which of the above choices are available to you. Please note that if you are a holder in "street name" and wish to vote in person at the special meeting, you must obtain a legal proxy from broker, bank, trustee or other nominee. Please also see the question and answer referencing "street name" shares below.

All shares of CYS Common Stock that are entitled to vote and are represented at the CYS special meeting by properly authorized proxies received before or at the special meeting and not revoked, will be voted at such special meeting in accordance with the instructions indicated on the proxies. If no instructions are given on a timely and properly executed proxy card, your shares will be voted:

"**FOR**" the Merger Proposal.

"**FOR**" the CYS Non-Binding Compensation Advisory Proposal.

"**FOR**" the CYS Adjournment Proposal.

Votes cast by proxy or in person at the CYS special meeting will be tabulated by one or more inspectors appointed by the CYS Board for the special meeting who will also determine whether or not a quorum is present.

Any proxy given by a stockholder pursuant to this solicitation may be revoked at any time before the vote is taken at the special meeting in any of the following ways:

authorizing a later proxy by telephone or through the Internet prior to 11:59 p.m., Eastern Time, on July 26, 2018;

filing with the Secretary of CYS, before the taking of the vote at the CYS special meeting, a written notice of revocation bearing a later date than the proxy card;

duly executing a later dated proxy card relating to the same shares and delivering it to the Secretary of CYS before the taking of the vote at the CYS special meeting; or

voting in person at the CYS special meeting, although attendance at the special meeting alone will not by itself constitute a revocation of a proxy.

Any written notice of revocation or subsequent proxy card should be sent to 500 Totten Pond Road, 6th Floor, Waltham, Massachusetts 02451, Attention: Corporate Secretary, or hand delivered to the Secretary of CYS before the taking of the vote at the CYS special meeting.

Solicitation of Proxies

CYS is soliciting proxies on behalf of the CYS Board. CYS will bear the costs of soliciting proxies. Brokerage houses, fiduciaries, nominees and others will be reimbursed for their out-of-pocket expenses in forwarding proxy materials to owners of CYS Common Stock held

in their names. In addition to the solicitation of proxies by use of the mails, proxies may be solicited from CYS common stockholders by directors, officers and employees of CYS in person or by telephone, by facsimile, on the Internet or other appropriate means of communications. No additional compensation, except for reimbursement of reasonable out-of-pocket expenses, will be paid to directors, officers and employees of CYS in

Table of Contents

connection with this solicitation. CYS has retained Georgeson to solicit, and for advice and assistance in connection with the solicitation of, proxies for the CYS special meeting at a cost of $12,500, plus out-of-pocket expenses. No portion of the amount that CYS has agreed to pay to Georgeson is contingent upon the Closing. CYS has agreed to indemnify Georgeson against any loss, damage, expense, liability or claim arising out of such services. Any questions or requests for assistance regarding this joint proxy statement/prospectus and related proxy materials may be directed to Georgeson by telephone at 866-300-8594.

Quorum; Abstentions and Broker Non-Votes

The presence in person or by proxy of the holders of shares of CYS Common Stock entitled to cast a majority of all the votes entitled to be cast at the CYS special meeting will constitute a quorum at the special meeting. Shares that abstain from voting will be treated as shares that are present and entitled to vote at the CYS special meeting for purposes of determining whether a quorum exists. Because approval of the Merger Proposal requires the affirmative vote of holders of a majority of the outstanding shares of CYS Common Stock entitled to vote on the matter, abstentions and the failure to vote will have the same effect as votes "**AGAINST**" approval of the Merger Proposal. For the CYS Non-Binding Compensation Advisory Proposal and the CYS Adjournment Proposal, a failure to vote, a failure to instruct your bank, broker or nominee to vote or an abstention from voting will have no effect, assuming a quorum is present.

Banks, brokers and other nominees that hold their customers' shares in street name may not vote their customers' shares on "non-routine" matters without instructions from their customers. As each of the proposals to be voted upon at the CYS special meeting is considered "non-routine," such organizations do not have discretion to vote on any of the proposals. As a result, if you hold your shares in "street name" and you fail to provide your broker, bank or other nominee with any instructions regarding how to vote your shares of CYS Common Stock your shares of CYS Common Stock will not be considered present at the CYS special meeting and will not be voted on any of the proposals.

Required Vote

Approval of the Merger Proposal requires the affirmative vote of the holders of a majority of the outstanding shares of CYS Common Stock entitled to vote on the matter.

Approval of the CYS Non-Binding Compensation Advisory Proposal requires, provided a quorum is present, the affirmative vote of a majority of the votes cast on the CYS Non-Binding Compensation Advisory Proposal by holders of CYS Common Stock at the CYS special meeting.

Approval of the CYS Adjournment Proposal requires, provided a quorum is present, the affirmative vote of a majority of the votes cast on the CYS Adjournment Proposal by holders of CYS Common Stock at the CYS special meeting.

Regardless of the number of shares of CYS Common Stock you own, your vote is important. Please complete, sign, date and promptly return the enclosed proxy card today or vote by phone or Internet.

Table of Contents

PROPOSALS SUBMITTED TO THE CYS COMMON STOCKHOLDERS

Proposal 1: Merger Proposal

CYS common stockholders are asked to approve the Merger Proposal as contemplated by the Merger Agreement. For a summary and detailed information regarding the Merger Proposal, see the information about the Merger and the Merger Agreement throughout this joint proxy statement/prospectus, including the information set forth in sections entitled "The Merger" beginning on page 66 and "The Merger Agreement" beginning on page 124. A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus.

Pursuant to the Merger Agreement, approval of the Merger Proposal is a condition to the consummation of the Merger. If the Merger Proposal is not approved, the Merger will not be completed.

Approval of the Merger Proposal requires the affirmative vote of the holders of a majority of the outstanding shares of CYS Common Stock entitled to vote on the matter.

Recommendation of the CYS Board

The CYS Board unanimously recommends that CYS common stockholders vote "FOR" the Merger Proposal.

Proposal 2: CYS Non-Binding Compensation Advisory Proposal

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and Rule 14a-21(c) of the Exchange Act, CYS is seeking stockholder approval of a non-binding advisory proposal to approve the compensation that may be paid or become payable to CYS's named executive officers that is based on or otherwise relates to the Merger, as described in the section entitled "The Merger Related Compensation" beginning on page 119.

As an advisory vote, this proposal is not binding upon CYS or the CYS Board, or Two Harbors or the Two Harbors Board, and approval of this proposal is not a condition to completion of the Merger and is a vote separate and apart from the Merger Proposal. Accordingly, you may vote to approve the Merger Proposal and vote not to approve the CYS Non-Binding Compensation Advisory Proposal and vice versa. Because the merger-related executive compensation to be paid in connection with the Merger is based on the terms of the Merger Agreement as well as the contractual arrangements with CYS's named executive officers, such compensation will be payable, regardless of the outcome of this advisory vote, if the Merger Proposal is approved (subject only to the contractual conditions applicable thereto). However, CYS seeks the support of its stockholders and believes that stockholder support is appropriate because CYS has a comprehensive executive compensation program designed to link the compensation of its executives with CYS's performance and the interests of CYS stockholders. Accordingly, holders of shares of CYS Common Stock are being asked to vote on the following resolution:

> RESOLVED, that the compensation that may be paid or become payable to CYS's named executive officers, in connection with the Merger Agreement, the Merger and the transactions contemplated thereby and the agreements or understandings pursuant to which such compensation may be paid or become payable, as disclosed pursuant to Item 402(t) of Regulation S-K under the heading "The Merger Merger Related Compensation" is hereby APPROVED.

Approval of the CYS Non-Binding Compensation Advisory Proposal, provided a quorum is present, requires the affirmative vote of a majority of votes cast on the proposal. For purposes of the CYS Non-Binding Compensation Advisory Proposal, a failure to vote, a failure to instruct your bank, broker or nominee to vote or an abstention from voting will have no effect.

Table of Contents

Recommendation of the CYS Board

The CYS Board unanimously recommends that CYS common stockholders vote "FOR" the CYS Non-Binding Compensation Advisory Proposal.

Proposal 3: CYS Adjournment Proposal

The CYS common stockholders are being asked to approve a proposal that will give CYS the authority to adjourn the CYS special meeting, if necessary or appropriate, for the purpose of soliciting additional votes for the approval of the Merger Proposal if there are not sufficient votes at the time of the CYS special meeting to approve the Merger Proposal. If, at the CYS special meeting, the number of shares of CYS Common Stock present or represented by proxy and voting for the approval of the Merger Proposal is insufficient to approve such proposal, CYS intends to move to adjourn the CYS special meeting to another place, date or time in order to enable the CYS Board to solicit additional proxies for approval of the proposal. The affirmative vote of a majority of votes cast, provided a quorum is present, may adjourn the special meeting to another place, date or time. CYS does not intend to call a vote on the CYS Adjournment Proposal if the Merger Proposal is considered and approved at the CYS special meeting. If the CYS special meeting is adjourned for the purpose of soliciting additional proxies, CYS common stockholders who have already submitted their proxies will be able to revoke them at any time prior to their exercise.

Recommendation of the CYS Board

The CYS Board unanimously recommends that CYS common stockholders vote "FOR" the CYS Adjournment Proposal to adjourn the CYS special meeting, if necessary or appropriate, including to solicit additional proxies if there are not sufficient votes to approve the Merger Proposal.

Other Business

No other matters will be transacted at the CYS special meeting.

Table of Contents

THE MERGER

The following is a summary of the material terms of the Merger. This summary does not purport to be complete and may not contain all of the information about the Merger that is important to you. The summary of the material terms of the Merger below and elsewhere in this joint proxy statement/prospectus is qualified in its entirety by reference to the Merger Agreement, a copy of which is attached to this joint proxy statement/prospectus as Annex A, and is incorporated by reference into this joint proxy statement/prospectus. You are urged to read this joint proxy statement/prospectus, including the Merger Agreement, carefully and in its entirety for a more complete understanding of the Merger.

General

Each of the Two Harbors Board and the CYS Board has unanimously approved the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement. Subject to the terms and conditions of the Merger Agreement, including the approval of the CYS common stockholders of the Merger Proposal and the Two Harbors common stockholders of the Two Harbors Common Stock Issuance Proposal, Merger Sub will merge with and into CYS, with CYS continuing as the surviving corporation. As a result of the Merger, the surviving corporation will be an indirect, wholly owned subsidiary of Two Harbors. CYS stockholders will receive the merger consideration described below under "The Merger Agreement Consideration for the Merger" beginning on page 125.

Background of the Merger

The CYS Board regularly evaluates CYS's strategic direction and ongoing business plans and reviews possible ways of increasing long-term stockholder value. These reviews include the consideration of various investments, diversification into new assets, purchases and sales of assets, potential strategic business combinations, and other transactions with third parties that would further CYS's strategic objectives and ability to create stockholder value.

On April 29, 2016, Kevin E. Grant, Chairman of the CYS Board and President and Chief Executive Officer of CYS, was approached by representatives of a mortgage REIT ("Company A") with an interest in exploring a potential acquisition of CYS. Mr. Grant subsequently briefed Stephen P. Jonas, the then-lead independent director of the CYS Board, and later, Vinson & Elkins, CYS's legal counsel, and the CYS Board regarding these discussions. On May 20, 2016, the CYS Board formed a committee of independent directors consisting of Jeffery P. Hughes, Stephen P. Jonas, Dale A. Reiss and James A. Stern (the "2016 CYS Committee") to evaluate and negotiate any potential transaction with Company A. The CYS Board discussed the appropriateness of engaging a financial advisor to assist in the evaluation of any proposal from Company A and which financial advisor would be a good fit based on such advisor's knowledge of the mortgage REIT sector, familiarity with CYS and independence from Company A. At the CYS Board's direction, Mr. Grant contacted representatives of Barclays to assist the 2016 CYS Committee if a Company A Proposal were to materialize. The CYS Board also authorized the 2016 CYS Committee and CYS management to engage in negotiations with Company A with respect to a non-disclosure agreement (the "Company A NDA"). Over the course of the following month, CYS and Company A engaged in negotiations with respect to the Company A NDA, but no agreement was reached between the two companies. As a result, no confidential information was exchanged, no further discussions ensued between CYS and Company A and the 2016 CYS Committee did not formally engage Barclays.

In July 2016, Mr. Grant received discussion materials from a representative of another mortgage REIT ("Company B"), in which Company B expressed an interest in exploring a potential acquisition of CYS. Following receipt of the materials, the CYS Board worked with Vinson & Elkins to consider how CYS should respond. On August 9, 2016, the CYS Board re-formed the 2016 CYS Committee and

Table of Contents

authorized the 2016 CYS Committee to evaluate and negotiate any potential transaction involving a change of control of CYS, including with Company A and Company B. Following such discussion, the CYS Board authorized the 2016 CYS Committee and CYS management, together with Vinson & Elkins, to engage in negotiations with Company B with respect to a non-disclosure agreement (the "Company B NDA") that also included, at the request of Company B, a 30-day exclusivity period. At the direction of the CYS Board, Mr. Grant contacted representatives of Barclays and inquired as to Barclays' willingness to serve as a financial advisor. The Company B NDA was executed on August 22, 2016, and CYS and Company B subsequently began sharing confidential information about their respective business and operations, and discussing preliminarily the terms of a potential transaction. On August 24, 2016, the 2016 CYS Committee engaged Barclays for the purpose of evaluating any change of control transaction and, if appropriate, issue a fairness opinion with respect to such transaction. On September 22, 2016, Company B withdrew its indication of interest to acquire CYS and discussions with respect to a potential transaction with Company B ceased.

On February 8, 2018, Mr. Grant received an unsolicited letter from a third mortgage REIT ("Company C") that contained a non-binding proposal to acquire CYS in a stock-for-stock merger. Following receipt of the letter from Company C, the CYS Board worked with Vinson & Elkins to consider how CYS should respond to the proposal from Company C.

On February 13, 2018, the CYS Board held a telephonic meeting with representatives of Vinson & Elkins to discuss Company C's proposal. After reviewing the Company C proposal, the independent members of the CYS Board met in executive session without management, including Mr. Grant, to discuss the appropriate roles of management and members of the CYS Board in negotiating and evaluating Company C's proposal and the advisability of forming a special committee of the CYS Board to negotiate a potential transaction with Company C, and to consider other strategic alternatives. The independent members of the CYS Board considered potential conflicts of interests among the members of the CYS Board and determined that there were none. However, due to the possibility of conflicts of interest with Mr. Grant, should he be requested to continue employment with Company C or another acquirer of CYS, the independent members of the CYS Board formed a special committee (the "CYS Special Committee") comprised of James A. Stern (designated by the CYS Board at the February 13, 2018 meeting as the chairman of the CYS Special Committee), Karen Hammond, and Tanya S. Beder. The CYS Board delegated to the CYS Special Committee the power and authority to, among other things, (i) review, evaluate and, if advisable, negotiate the terms and provisions of any transaction involving a change of control of CYS, (ii) determine whether any such potential transaction is fair to, and in the best interests of, CYS and its stockholders, and (iii) make a recommendation to the CYS Board to approve or disapprove of any such proposed transaction. No conflict with Mr. Grant materialized during the process and the Special Committee functioned as a transaction committee throughout the process.

Mr. Grant then rejoined the CYS Board meeting and provided the CYS Board with an update regarding his recent discussions with Company C relating to its proposal. The CYS Board then discussed the relative strategic merits of a potential transaction with Company C and Vinson & Elkins advised the CYS Board of its duties in the context of a sale transaction or business combination. The CYS Board then discussed the hiring of a financial advisor to assist the CYS Board in its consideration of a potential transaction with Company C and other strategic alternatives available to CYS. At this time, representatives of each of Barclays and Credit Suisse were invited to join the meeting and review their respective preliminary financial analyses with respect to a potential transaction with Company C and other strategic alternatives available to CYS. After the representatives of Credit Suisse and Barclays left the meeting, the CYS Board discussed the potential financial advisor candidates, their industry knowledge and experience and how each of Barclays and Credit Suisse could assist the CYS Board and the CYS Special Committee in their consideration of a potential transaction with Company C and other strategic alternatives available to CYS.

Table of Contents

On February 15, 2018, the CYS Board held a telephonic meeting with representatives of Vinson & Elkins present to discuss, among other things, the hiring of Barclays, Credit Suisse, or both, to serve as the financial advisor or financial advisors to CYS, the CYS Board and/or the CYS Special Committee. During this meeting, the CYS Board considered the qualifications of each investment bank to serve as a financial advisor and evaluated each investment bank based on various criteria, including, among other things, its past relationships with and knowledge of CYS, its institutional knowledge of the commercial and residential mortgage REIT industries, its capacities as a full-service investment bank, including its knowledge of the trading market for mortgage-backed securities, and the investment banking team's past experience advising other companies in connection with similar transactions. The CYS Board further considered the advantages and disadvantages of engaging two financial advisors as opposed to one. Based on the foregoing criteria, and upon determining that engaging two financial advisors would be more conducive to maximizing value to CYS stockholders, the CYS Board decided to engage both Barclays and Credit Suisse as the CYS Board's and CYS's financial advisors, respectively, in connection with CYS's evaluation of a potential transaction with Company C and other strategic alternatives, subject to the negotiation of acceptable engagement letters. Over the course of the following week, representatives of CYS, including Vinson & Elkins, on the one hand, and each of Barclays and Credit Suisse, on the other hand, negotiated the terms and conditions of the engagement letters, which were executed on February 26, 2018, in the case of the Barclays engagement letter, and February 27, 2018, in the case of the Credit Suisse engagement letter.

On February 16, 2018, the CYS Special Committee held a telephonic meeting, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins, to discuss the unsolicited proposal received by CYS from Company C and whether CYS should pursue a sale of CYS at that time. During the meeting, representatives of Barclays and Credit Suisse reviewed their respective preliminary financial analyses of Company C's proposal. Representatives of Barclays and Credit Suisse also provided general views of the mortgage REIT industry, noting that there were likely other strategic parties that would have an interest in potentially acquiring CYS.

Following the CYS Special Committee meeting, at the direction of the CYS Special Committee, representatives of Barclays and Credit Suisse contacted representatives of Company C to ask certain clarifying questions regarding its proposal.

On February 21, 2018, Mr. Grant received an unsolicited letter that contained a non-binding proposal from Company B relating to a potential acquisition of CYS by Company B.

On February 27, 2018, the CYS Board held a telephonic meeting, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins, to discuss the proposals received from Company B and Company C. During the meeting, representatives of Barclays and Credit Suisse summarized their conversations with Company C regarding its proposal, including Company C's stated willingness to pay a premium over CYS's current book value and engage in discussions relating to certain purchase price protection mechanisms. Members of the CYS Board, with representatives of Barclays and Credit Suisse in attendance, also discussed whether it was in the best interest of CYS and its stockholders to consider a sale of CYS at that time. The CYS Board then engaged in a related discussion regarding whether CYS should solicit additional proposals from other potential bidders and, if so, how a bid process with multiple bidders should be structured in light of CYS having already received unsolicited proposals from different potential acquirers. At the conclusion of the meeting, the CYS Board (i) authorized CYS management to negotiate and execute a non-disclosure agreement with Company C, and (ii) instructed representatives of Barclays and Credit Suisse to contact Company B to obtain additional information about its proposal.

Immediately following the meeting of the CYS Board, the CYS Special Committee held a meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss the potential bid process, timing, and outreach to other potential bidders, including the likelihood of various potential

Table of Contents

bidders being interested in, and capable of, acquiring CYS or otherwise entering into a strategic transaction or business combination with CYS. During the meeting, the CYS Special Committee decided to engage with other potential bidders, including Company B, while continuing to engage in discussions with Company C. Following such discussion, the CYS Special Committee instructed Barclays and Credit Suisse to contact six other potential bidders (in addition to Company B and Company C) to determine whether they would be interested in submitting an offer to enter into a business combination or strategic transaction with CYS. The CYS Special Committee also instructed Vinson & Elkins to negotiate non-disclosure agreements with any such interested parties, in addition to Company B and Company C.

At the direction of the CYS Special Committee, on February 27, 2018 and February 28, 2018, representatives of Barclays and Credit Suisse reached out to six mortgage REIT counterparties, including Two Harbors, to obtain a general level of interest in a potential strategic transaction with CYS.

On March 2, 2018, the CYS Special Committee held a telephonic meeting to discuss the status of the targeted bid process. During the meeting, representatives of Barclays and Credit Suisse noted that all six of the potential bidders contacted by representatives of Barclays and Credit Suisse, as well as Company B and Company C, had requested non-disclosure agreements and had either entered into a non-disclosure agreement with CYS or were in the process of negotiating a non-disclosure agreement with CYS. Members of the CYS Special Committee and representatives of Vinson & Elkins, Barclays, and Credit Suisse also discussed their initial assessments of the potential bidders.

Following Barclays' and Credit Suisse's outreach to other potential bidders, CYS entered into non-disclosure agreements that contained customary standstill provisions with seven of the eight potential bidders, which included Two Harbors, Company A, Company B, and Company C. CYS subsequently provided all the potential counterparties, except Company C, with certain limited confidential information about CYS's existing securities portfolio for purposes of submitting an initial offer to acquire or otherwise enter into a strategic transaction or business combination with CYS. Company C had previously been provided with similar information. At the direction of the CYS Special Committee, representatives of Barclays and Credit Suisse requested that the counterparties provide preliminary indications of interest by March 12, 2018. Company C was not invited to submit an indication of interest because it had already submitted a non-binding offer to acquire CYS on February 8, 2018.

Shortly after the execution of the Company A NDA, Company A indicated that it was no longer interested in participating in the bid process and that it would not be submitting a bid.

On March 7, 2018, Company C received access to CYS's virtual data room for the purpose of conducting due diligence on CYS.

On March 8, 2018, the CYS Special Committee held telephonic meetings with representatives of Vinson & Elkins, Barclays, and Credit Suisse to discuss the status of each of the potential bidders and the due diligence materials that had been provided to Company C, in addition to transaction structure and appropriate terms and conditions to provide price protection in the event of a transaction involving consideration consisting of shares of stock in whole or in part.

On March 9, 2018, Barclays and Credit Suisse delivered to Company C a reverse diligence request list and requested that Company C populate a virtual data room with relevant information about Company C.

On or about March 12, 2018, representatives of Barclays and Credit Suisse received initial indications of interest from three potential counterparties, including Two Harbors.

Table of Contents

On March 13, 2018, CYS and its representatives received access to Company C's virtual data room for purposes of conducting due diligence on Company C. From March 13, 2018 until April 15, 2018, CYS and its representatives engaged in due diligence on Company C.

On the morning of March 14, 2018, CYS and its representatives and Company C held an in-person reciprocal due diligence session.

On March 14, 2018, Barclays and Credit Suisse circulated to the CYS Special Committee preliminary indications of interest received from four potential counterparties, including Two Harbors and Company B. In addition to Company C's non-binding proposal, the non-binding indications of interest included (i) a proposal from Company B for an all-cash tender offer, (ii) a proposal from a publicly traded mortgage REIT ("Company D") for an all-stock merger that would require the approval of Company D's stockholders, (iii) a proposal from a publicly traded mortgage REIT ("Company E") for a part-cash, part-stock merger, and (iv) a proposal from Two Harbors for an all-stock merger that would require the approval of Two Harbors stockholders.

Later on March 14, 2018, the CYS Special Committee held a telephonic meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss the indications of interest received from the five bidders described in the foregoing paragraph. Representatives of Barclays and Credit Suisse reviewed their preliminary financial analyses of each indication of interest with the CYS Special Committee. At the conclusion of the meeting, the CYS Special Committee instructed representatives of Barclays and Credit Suisse to request that all five bidders submit revised bids incorporating certain assumptions relating to CYS's anticipated transaction expenses.

Following the CYS Special Committee meeting on March 14, 2018, Barclays and Credit Suisse contacted the five bidders, and requested that each bidder submit revised indications of interest by March 16, 2018 incorporating CYS's transaction expense assumptions.

On or about March 16, 2018, representatives of Barclays and Credit Suisse received revised indications of interest from Company B, Company D, Company E, and Two Harbors.

On March 19, 2018, the CYS Special Committee held a telephonic meeting to discuss the revised bids. Representatives of Barclays and Credit Suisse summarized the revised bids, which reflected the following proposed purchase price per share of CYS Common Stock: (i) Company B proposed $7.27 per share of CYS Common Stock; (ii) Company C proposed a range of $7.33 to $7.47 per share of CYS Common Stock; (iii) Two Harbors proposed $7.33 per share of CYS Common Stock; (iv) Company D proposed $7.42 per share of CYS Common Stock and (v) Company E proposed $7.15 per share of CYS Common Stock. In summarizing the revised bids, representatives of Barclays and Credit Suisse noted that while Company B, Company D, and Company E did not modify their proposed purchase price to acquire CYS, each of these bidders had revised estimated transaction related expenses and as a result, they had each effectively increased their proposed purchase price for CYS on an adjusted book value basis. Representatives of Barclays and Credit Suisse also explained that (i) Company B had indicated a willingness to pay up to 50% of the merger consideration in Company B common stock, (ii) Two Harbors had increased its proposed purchase price by approximately $0.13 per share of CYS Common Stock and (iii) Two Harbors' external manager, PRCM Advisers, had offered to further reduce its base management fee by 0.25%, to a total reduction of 0.75%, with respect to the additional equity under management resulting from the proposed transaction with CYS for the first year following the effective time of the Merger.

On March 20, 2018, CYS received a letter from Company B indicating that Company B would revoke its proposal to acquire CYS unless Company B was provided with access to CYS's virtual data room by 5:00 p.m. Eastern Time, on March 21, 2018. The letter further indicated that Company B's offer would be withdrawn if no definitive merger agreement were executed by March 28, 2018.

Table of Contents

On the evening of March 20, 2018, CYS received a letter from Company C with its revised indication of interest to acquire CYS in a stock-for-stock merger transaction.

On the morning of March 21, 2018, the CYS Special Committee, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins, held a telephonic meeting to discuss the revised indication of interest received from Company C. Following a discussion regarding the advantages and disadvantages of Company C's revised proposal, the meeting was adjourned in anticipation of a CYS Board meeting.

During the telephonic meeting of the CYS Board on March 21, 2018, representatives of Barclays and Credit Suisse reviewed the revised indications of interests from all five bidders. The CYS Board discussed (i) the advantages and disadvantages of each bid, (ii) which bidders, if any, should be eliminated from the bid process, and (iii) the demand from Company B that it would revoke its indication of interest unless CYS undertook certain actions. During the meeting, and upon the request of the CYS Board, Mr. Grant provided an update with respect to CYS's ongoing business operations. Mr. Grant and representatives of Barclays and Credit Suisse also discussed the potential impact of a rising interest rate environment on CYS's business on a going forward basis.

Following the CYS Board meeting, the CYS Special Committee reconvened its meeting to further discuss each of the revised bids, and which bidders should be invited to participate in a subsequent round (the "second round") of the bid process. Following such discussion, the CYS Special Committee instructed representatives of Barclays and Credit Suisse to invite Company C, Company D, and Two Harbors to continue to participate in the bid process. The CYS Special Committee also instructed representatives of Barclays and Credit Suisse to speak with Company B to confirm that it would be willing to move forward in the bid process based on CYS's proposed timeline and approach. The CYS Special Committee further instructed representatives of Barclays and Credit Suisse to invite Company E to participate in the second round of the bid process if Company B elected not to proceed based on CYS's proposed timeline and approach.

On the afternoon of March 21, 2018, representatives of Barclays and Credit Suisse contacted Company B to inquire as to whether it would be willing to proceed on CYS's proposed timeline and approach. Representatives of Company B did not provide a definitive answer in response. On that same afternoon, representatives of Barclays and Credit Suisse reached out to each of Company C, Company D and Two Harbors to request that each party submit a markup of a draft merger agreement by March 28, 2018. Barclays and Credit Suisse also provided each of Company C and Two Harbors a comprehensive due diligence request list and requested that such bidders populate a virtual data room with relevant information about such counterparty. Each of Company D and Two Harbors was also granted access to CYS's virtual data room (Company C had already been granted access to CYS's virtual data room).

Following the March 21, 2018 CYS Board meeting, and continuing through April 5, 2018, each remaining bidder engaged in due diligence of CYS, and CYS and its representatives engaged in due diligence on each bidder.

On the morning of March 22, 2018, representatives of Credit Suisse followed up with Company B and informed it that absent the expression of an affirmative desire to continue in the bid process, CYS would move forward without Company B. Following Company B's failure to confirm that it would be willing to proceed on CYS's proposed timeline and approach, the CYS Special Committee determined that CYS should move forward without Company B and that Company E should be invited to the process in Company B's place. At the direction of the CYS Special Committee, representatives of Vinson & Elkins sent a letter to Company B reminding it of its obligations of confidentiality under its NDA, subsequent to which no further discussions or negotiations took place with Company B. At the direction of the CYS Special Committee, representatives of Barclays and Credit Suisse then contacted

Table of Contents

representatives of Company E and invited Company E to participate in the second round of the bid process and provided them with the diligence instructions provided to the other bidders.

Also on March 22, 2018, Company E received access to CYS's virtual data room for the purpose of conducting due diligence on CYS. Also on March 22, 2018, forms of draft merger agreements reflecting alternative transaction structures prepared by Vinson & Elkins were uploaded to CYS's virtual data room. Each merger agreement was based on the same form, but one draft contained a tender offer structure and the other draft contemplated a single-step merger structure.

On the morning of March 26, 2018, representatives of each of Two Harbors and CYS held an in-person diligence session, with representatives of Barclays, Credit Suisse, and Vinson & Elkins in attendance either in person or by telephone. Later that same day, representatives of Company D held an in-person diligence session, with representatives of Barclays, Credit Suisse, and Vinson & Elkins in attendance either in person or by telephone.

On March 27, 2018, representatives of each of Company E and CYS held an in-person diligence session, with representatives of Barclays, Credit Suisse, and Vinson & Elkins in attendance either in person or by telephone. Also on March 27, 2018, CYS management participated in a follow-up diligence call with representatives of Company C.

On March 28, 2018, CYS received a markup of the draft merger agreement from Company E. On March 29, 2018, CYS received markups of the draft merger agreement from Company C, Company D, and Two Harbors.

On April 3, 2018, the CYS Special Committee held a telephonic meeting during which members of the CYS Special Committee and representatives of Barclays, Credit Suisse, and Vinson & Elkins discussed the proposals from the remaining four bidders and their markups to the draft merger agreement. Neither the form of consideration nor the relative values of the bids from Company D, Company E and Two Harbors had changed from their respective previous bids, while Company C had revised its stock-for-stock bid and proposed $7.46 per share of CYS Common Stock. During the meeting, the CYS Special Committee discussed the advantages and disadvantages of each bid, including various strategic considerations relating to the proposed tax structure of each bid, the expected timing to close, and the value and future prospects of each bidder's common stock that would be issued to CYS stockholders as merger consideration. The CYS Special Committee also discussed the next round (the "third round") of the bid process, including narrowing the number of bidders from four to two and which bidders should be invited to participate in the third round. Following such discussions, the CYS Special Committee decided to discuss the foregoing matters with the CYS Board.

On the afternoon and evening of April 3, 2018, at the direction of the CYS Special Committee, representatives of Vinson & Elkins held telephonic meetings with representatives of each of the four bidders and their legal counsel to discuss their proposed markups of the draft merger agreement. The purpose of each meeting was to remind each bidder of the competitiveness of the bid process and to suggest improvements in regards to the respective positions taken by the bidders with respect to certain legal and business points (the "Legal and Business Points") that would improve the competitiveness of the bidder's markup. Vinson & Elkins also reminded each of the bidders that the CYS Board would be evaluating the mark ups to determine whether such bidder would be invited to continue to participate in the third round of the bid process. Following such meetings, each of the four bidders provided Vinson & Elkins with written responses to the Legal and Business Points. In particular, Two Harbors, upon consultation with its legal counsel, Sidley Austin LLP ("Sidley"), agreed to make certain changes to its proposed markup of the draft merger agreement, including (i) PRCM Advisers agreeing to contribute $10 million in cash as part of the merger consideration, (ii) providing CYS with the right to terminate the merger agreement for a CYS superior proposal, provided that the fee payable with respect to any CYS superior proposal termination was equal to 3.5% of the expected transaction value,

Table of Contents

and (iii) providing each party with an expense amount to be paid in the event the requisite stockholder approval is not obtained equal to 0.5% of the equity value of the other party.

On April 4, 2018, the CYS Special Committee held a telephonic meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss each bidder's response to the Legal and Business Points. Representatives of Vinson & Elkins provided an overview of each bidder's response, noting that several of the bidders made significant concessions to their initial markup of the draft merger agreement. Following a discussion of each bid and markup of the draft merger agreement, the CYS Special Committee determined, after considering a multitude of factors, including the value of the consideration offered, the tax structure of the proposed transaction, whether the bidder would be required to obtain stockholder approval, the pricing mechanics of the proposed merger consideration and the markups of the draft merger agreement, among other factors, to recommend to the CYS Board that CYS should (i) continue to engage in negotiations with Company C and Two Harbors and (ii) pause negotiations with Company D and Company E.

On April 5, 2018, the CYS Board held a telephonic meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss each of the remaining proposed bids. During the meeting, representatives of Barclays and Credit Suisse reviewed their preliminary financial analyses of each bid and Vinson & Elkins presented an overview of each bidder's markup to the draft merger agreement and their responses to the Legal and Business Points. Following a discussion by members of the CYS Board and representatives of Barclays, Credit Suisse, and Vinson & Elkins regarding the merits of each bid, the CYS Board instructed the CYS Special Committee to (i) continue negotiating with Company C and Two Harbors and (ii) pause discussions regarding a strategic transaction with Company D and Company E unless such parties increased their revised proposals.

Following the April 5, 2018 meeting, at the direction of the CYS Board, representatives of Barclays and Credit Suisse contacted Company C and Two Harbors to inform them that the CYS Board had decided to move forward with each bidder in the bid process. At the direction of the CYS Board, representatives of Barclays and Credit Suisse also contacted Company D and Company E to inform them that CYS would not be moving forward with their proposals unless such parties responded with improved proposals.

On April 7, 2018, at the direction of the CYS Special Committee, Barclays and Credit Suisse provided Two Harbors a comprehensive due diligence request list and requested that Two Harbors populate a virtual data room with relevant information. At the direction of the CYS Special Committee, Barclays and Credit Suisse also delivered CYS' follow-up due diligence request list to representatives of Company C.

On April 8, 2018, Vinson & Elkins delivered revised markups of the draft merger agreement to representatives of Company C and Two Harbors.

On April 9, 2018, counsel to Company C and representatives of Vinson & Elkins held a call to discuss CYS's revised draft of the merger agreement.

Also on April 9, 2018, CYS and its representatives received access to Two Harbors' virtual data room for purposes of conducting due diligence on Two Harbors. From April 9, 2018 until April 25, 2018, CYS and its representatives engaged in corporate, tax and legal due diligence on Two Harbors.

On April 11, 2018, tax counsel to Company C and representatives of Vinson & Elkins held a call to discuss certain tax due diligence items.

Also on April 11, 2018, counsel to Company C delivered a revised draft of the merger agreement to Vinson & Elkins. Company C's revised draft of the merger agreement contained a number of revisions, including adjustments to the offer price and purchase price mechanics that effectively resulted in at least a $0.11 per share reduction in Company C's per share offer price (to $7.32 or less, which

Table of Contents

was less than the value of the Two Harbors bid). In addition, Company C's revised draft of the merger agreement failed to include certain purchase price protection mechanisms that were expected to be included in the merger agreement, and deemed by the CYS Board to be favorable and important to CYS stockholders. Upon receipt of Company C's revised draft of the merger agreement, representatives of Barclays and Credit Suisse contacted representatives of Company C to seek further clarification in regards to the revisions to the economic terms that were reflected in the draft of the merger agreement.

On April 12, 2018, representatives of Two Harbors held a call with representatives of CYS to discuss various due diligence matters. During the call, representatives of Two Harbors indicated a desire for the transaction to be structured as a taxable transaction to CYS stockholders and discussed its rationale that a taxable transaction would be in the best interests of the Combined Company as a result of various REIT tax limitations that would be imposed on the Combined Company and the amortization of premium on CYS's assets that were retained, which would have reduced the earnings of the Combined Company, if the transaction were structured as a tax free reorganization.

On April 12, 2018, the CYS Special Committee held a telephonic meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins, during which they discussed Company C's revised markup of the draft merger agreement, including Company C's revisions to the purchase price mechanics and the effective reduction in Company C's offer price. During the meeting, representatives of Barclays and Credit Suisse briefed the CYS Special Committee on their discussions with Company C about its revised offer price. Representatives of Vinson & Elkins also discussed with the CYS Special Committee the material legal issues contained in Company C's revised markup of the draft merger agreement. Members of the CYS Special Committee also discussed whether to suspend negotiations with Company C regarding a strategic transaction as a result of its reduction in its offer price. Members of the CYS Special Committee also discussed a number of additional business points raised by Two Harbors, including its desire to effect a taxable transaction and the appointment of CYS directors to the Two Harbors Board upon the closing of the transaction.

On the evening of April 12, 2018, a representative of Two Harbors delivered to the CYS Board (i) a revised markup of the merger agreement, and (ii) a letter proposing that Two Harbors and CYS engage on an exclusive basis for a period of at least one week prior to an anticipated signing date of April 24, 2018. The letter also notified the CYS Board that Two Harbors' offer would remain open until 5:00 p.m. Eastern Time, on April 16, 2018.

On April 13, 2018, the CYS Board held a telephonic meeting with members of CYS management, Barclays, Credit Suisse, and Vinson & Elkins during which they discussed, among other things, (i) the projections prepared by CYS management and (ii) the revised proposals and merger agreement markups received from Company C and Two Harbors. During this meeting, members of the CYS Board discussed whether to move forward with both Company C and Two Harbors or to move forward exclusively with Two Harbors. Upon further discussion, the CYS Board determined that the CYS Special Committee should negotiate for additional value and/or concessions from Two Harbors in exchange for agreeing to an exclusivity period.

From April 14 through April 15, 2018, representatives of Barclays and Credit Suisse engaged in further discussions with representatives of Company C to determine whether Company C would be willing to improve the economics of its bid. On April 15, 2018, Company C terminated CYS's access to its virtual data room.

On April 15, 2018, Vinson & Elkins sent a revised draft of the merger agreement to Sidley, and on April 16, 2018, representatives of Vinson & Elkins and Sidley discussed that revised draft of the merger agreement.

Table of Contents

On the afternoon of April 16, 2018, the CYS Special Committee held a telephonic meeting. Representatives of Barclays and Credit Suisse informed the CYS Special Committee that Company C had indicated it was still interested in pursuing a transaction with CYS but that it was unwilling to increase its bid. Representatives of Vinson & Elkins then provided an overview of the open issues in the Two Harbors draft merger agreement, which included: (i) the appropriate number of CYS directors that would be appointed to serve on Two Harbors' board upon the closing of the transaction; (ii) whether Two Harbors would have the right to terminate the merger agreement to enter into a definitive agreement with respect to a possible future acquisition transaction involving Two Harbors that the Two Harbors' Board deemed to be a superior proposal; (iii) whether the CYS termination fee would be 3.5% or 4.0% of the expected transaction value; (iv) whether the expense amount payable to each party under certain circumstances would be 0.5% or 0.8% of the equity value of the other party; and (v) whether the transaction would be structured as a taxable transaction to CYS stockholders. The CYS Special Committee then engaged in a discussion regarding whether CYS should engage exclusively with Two Harbors and on what terms CYS would be willing to do so. Following such discussion, members of the CYS Special Committee resolved to propose to Two Harbors that CYS would be willing to agree to enter into exclusive negotiations for a one-week period if (a) Two Harbors or PRCM Advisers agreed to make an additional $10 million cash payment to CYS stockholders (such that the cash paid to CYS stockholders was $20 million in the aggregate); (b) three CYS directors would be appointed to the Two Harbors Board upon the closing of the transaction; (c) Two Harbors would not have the right to terminate the merger agreement for a Two Harbors superior proposal; (d) Two Harbors agreed that the CYS termination fee would be 3.5% of the expected transaction value and that the Two Harbors termination fee would be 4.5% of the expected transaction value; and (e) the expense amount payable under certain circumstances would be 0.8% of the other party's equity value. The CYS Special Committee further instructed representatives of Barclays and Credit Suisse to convey CYS's proposal to Two Harbors. Following the meeting, representatives of Barclays and Credit Suisse relayed the foregoing proposal to Two Harbors.

On the evening of April 16, 2018, representatives of Two Harbors contacted representatives of Barclays and Credit Suisse to respond to CYS's proposal. A representative of Two Harbors stated in an email that (i) PRCM Advisers would contribute an additional $5 million in cash consideration to CYS common stockholders (such that the cash paid to CYS common stockholder was $15 million in the aggregate), (ii) Two Harbors would agree not to have the right to terminate the merger agreement for a Two Harbors superior proposal, and (iii) Two Harbors would agree to a CYS termination fee equal to 3.5% of the expected transaction value and a Two Harbors termination fee equal to 4.5% of the expected transaction value. The representatives of Two Harbors did not agree to elect three CYS directors to the Two Harbors Board or to the expense amounts proposed by CYS.

On April 17, 2018, the CYS Board met telephonically, together with members of CYS management and representatives of Barclays, Credit Suisse, and Vinson & Elkins, to discuss financial projections prepared by CYS management. Members of CYS management provided an overview of these projections to the CYS Board and the assumptions and approach undertaken with respect to such projections. Following questions from members of the CYS Board and a discussion regarding the projections, the CYS Board determined that, based on the assumptions set forth therein, the CYS management projections were reasonable. Representatives of Barclays, Credit Suisse, and Vinson & Elkins informed the CYS Board that the CYS Special Committee had terminated negotiations with Company C as a result of Company C's unwillingness to increase its offer, which reflected an overall decrease in the economics of Company C's proposal compared to its initial bid, and a lower bid compared to other bids, including Two Harbors' bid. Representatives of Barclays, Credit Suisse, and Vinson & Elkins also explained that the CYS Special Committee had proposed to Two Harbors a list of economic and legal proposals in exchange for CYS negotiating exclusively with Two Harbors and that Two Harbors had agreed to some, but not all, of those requests.

Table of Contents

On April 17, 2018, Vinson & Elkins received a draft exclusivity agreement from Sidley. Later that day, the CYS Special Committee met telephonically, together with members of CYS management and representatives of Barclays, Credit Suisse, and Vinson & Elkins, to discuss the draft exclusivity agreement and the open business and legal issues.

Also on April 17, 2018, at the direction of the CYS Special Committee, representatives of Barclays and Credit Suisse proposed to Two Harbors that CYS would agree to a CYS termination fee of 3.75% of the expected transaction value if Two Harbors agreed to expense amounts of 0.75% of the other party's equity value measured at the date of signing. Shortly thereafter, in response to the foregoing proposal, representatives of Two Harbors offered to agree to the proposed termination fee and expense amounts if CYS agreed that it would have the right to designate only two directors for appointment to the Two Harbors Board.

On the afternoon of April 18, 2018, the CYS Special Committee held a telephonic meeting with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss the proposed transaction with Two Harbors. Representatives from Credit Suisse provided an update on their discussions with Two Harbors, noting that Two Harbors would not agree to the appointment of three CYS directors to the Two Harbors Board upon the closing of the transaction. Following a discussion, the CYS Special Committee agreed to accept two board seats in exchange for Two Harbors agreeing to the termination fee and expense amounts proposed by CYS.

During the evening of April 18, 2018, Vinson & Elkins sent a revised draft of the exclusivity agreement to Sidley, and CYS and Two Harbors executed an exclusivity agreement providing for exclusivity regarding a potential strategic transaction between CYS and Two Harbors until 11:59 p.m. Central Time on April 25, 2018.

Thereafter, Vinson & Elkins and Sidley exchanged drafts of the merger agreement and the various ancillary documents related thereto.

On the evening of April 23, 2018, the CYS Special Committee met telephonically, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins, to discuss the proposed transaction with Two Harbors. Representatives of Credit Suisse and Barclays informed the CYS Special Committee that Two Harbors had requested that the transaction be structured as a taxable transaction. The CYS Board, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins, discussed the merits of structuring the transaction as a taxable transaction and its impact on CYS stockholders, including the number of CYS stockholders that potentially could be taxed as a result of the transaction. Representatives of Credit Suisse and Barclays also informed the CYS Special Committee that Two Harbors had assumed that certain post-closing transaction expenses had been included in CYS's estimated transaction expense amount that Two Harbors had used to calculate its offer price and that Two Harbors, after being informed that such post-closing expenses were not included, now desired to reduce the purchase price by the amount of such expenses. The CYS Special Committee instructed Barclays and Credit Suisse to seek clarification from Two Harbors regarding how it factored post-closing transaction expenses into the purchase price and to respond negatively to such request before the CYS Special Committee responded to Two Harbors' request for a taxable transaction. Following the meeting, representatives of Barclays and Credit Suisse contacted representatives of Two Harbors to discuss how Two Harbors factored post-closing transaction expenses into the purchase price.

During the early afternoon of April 24, 2018, representatives of Vinson & Elkins and Sidley held a telephone call to discuss various open items in the draft merger agreement, and that evening Vinson & Elkins delivered a revised draft of the merger agreement to Sidley.

On the morning of April 25, 2018, the CYS Board met in person and telephonically, together with members of CYS management and representatives of Barclays, Credit Suisse and Vinson & Elkins to discuss and review the draft merger agreement and to consider the proposed transaction. Barclays and

Table of Contents

Credit Suisse provided an update regarding the open business issues, including the post-closing transaction expenses. Following such update, representatives of Venable LLP, Maryland counsel to CYS, reviewed with the CYS Board the duties of the CYS directors under Maryland law. Representatives of Vinson & Elkins then reviewed the terms of the draft merger agreement and noted the outstanding legal issues. Also at this meeting, Barclays and Credit Suisse reviewed with the CYS Board their respective preliminary financial analyses of the proposed transaction with Two Harbors.

At noon, Eastern Time, on April 25, 2018, the CYS Special Committee met telephonically, together with representatives of Barclays, Credit Suisse, and Vinson & Elkins to discuss the open business issues in the draft merger agreement.

On the afternoon of April 25, 2018, the CYS Board met telephonically, and representatives of Barclays, Credit Suisse, and Vinson & Elkins briefed the CYS Board regarding the remaining open issues in the draft merger agreement. Representatives of Barclays and Credit Suisse informed the CYS Board that PRCM Advisers had agreed that it would cover the relevant post-closing transaction expenses up to an amount of $3.3 million by taking a post-closing downward adjustment in its management fees. After confirming that no other economic or business points remained outstanding, the CYS Board instructed Barclays and Credit Suisse to agree to Two Harbors' request to structure the transaction as a taxable transaction. Following further discussion, the CYS Board instructed Vinson & Elkins, Barclays and Credit Suisse to finalize the draft merger agreement with Two Harbors and its representatives.

Throughout the day on April 25, 2018, Vinson & Elkins and Sidley exchanged drafts of the merger agreement and ancillary agreements related thereto.

On the evening of April 25, 2018, the CYS Board met telephonically to approve the merger agreement. Following a discussion of the resolution of the final open issues in the draft merger agreement, the CYS Board agreed to the terms of the merger agreement. Also at this meeting, representatives of Barclays and Credit Suisse rendered their respective oral fairness opinions, subsequently confirmed by delivery of written opinions, each dated April 25, 2018, that, in the case of Barclays' opinion, based upon and subject to the qualifications, limitations and assumptions set forth therein, as of the date of the opinion, the merger consideration to be offered to the holders of shares of CYS Common Stock in the Merger was fair, from a financial point of view, to such holders of CYS Common Stock, and in the case of Credit Suisse's opinion, as of the date of the opinion and based on and subject to various assumptions made, procedures followed, matters considered and limitations and qualifications on the review undertaken, the merger consideration to be received by holders of CYS Common Stock (other than excluded holders) pursuant to the Merger Agreement was fair, from a financial point of view, to such holders. Following the delivery of the oral opinions by Barclays and Credit Suisse, the CYS Board unanimously (i) determined that the Merger Agreement and the transactions contemplated thereby (collectively, the "Transactions"), including the Merger, were in the best interests of CYS and its stockholders, (ii) approved the Merger Agreement and declared the Transactions, including the Merger, advisable and (iii) authorized CYS to enter into the Merger Agreement.

On the evening of April 25, 2018, the Two Harbors Board met telephonically to approve the merger agreement with representatives of Two Harbors' management, Sidley and JMP in attendance. At the meeting, Two Harbors' management provided the Two Harbors Board with an update on the resolution of open issues on the merger agreement. Following this discussion, representatives of Sidley reviewed with the Two Harbors Board the duties of directors in connection with transactions of this type. Representatives from Sidley then summarized the final terms of the merger agreement, including the resolution of open issues. Also at this meeting, JMP reviewed with the Two Harbors Board its financial analysis of the Per Share Stock Consideration to be paid by Two Harbors as part of the merger consideration and rendered to the Two Harbors Board an oral opinion, confirmed by delivery

Table of Contents

of a written opinion dated April 25, 2018, to the effect that, as of that date and based on and subject to the various assumptions and limitations set forth in its opinion, the Per Share Stock Consideration to be paid by Two Harbors as part of the merger consideration was fair, from a financial point of view, to Two Harbors. After further discussions, and after taking into consideration all of the information presented and discussed in the several prior communications and meetings among Two Harbors' management, the Two Harbors Board and its members that occurred over the course of the negotiations between Two Harbors and CYS, the Two Harbors Board unanimously (i) determined that the Merger Agreement, the Fourth Amendment to the Management Agreement and the Transactions, including the merger of Merger Sub with and into CYS and the Two Harbors Common Stock Issuance, were in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement, the Fourth Amendment to the Management Agreement and the Transactions, including the Merger and the Two Harbors Common Stock Issuance; (iii) directed that Two Harbors Common Stock Issuance be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting, and (iv) recommended that the holders of Two Harbors Common Stock approve the issuance of the shares of Two Harbors Common Stock to be issued in the Merger.

On the morning of April 26, 2018, the parties executed the Merger Agreement, which was dated effective as of April 25, 2018.

Prior to the opening of trading on April 26, 2018 of Two Harbors Common Stock and CYS Common Stock on the NYSE, Two Harbors and CYS issued a joint press release announcing the execution of the Merger Agreement.

Recommendation of the Two Harbors Board and Its Reasons for the Merger

By vote at a meeting held on April 25, 2018, after careful consideration, the Two Harbors Board unanimously (i) determined that the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. The Two Harbors Board unanimously recommends that Two Harbors common stockholders vote "**FOR**" the Two Harbors Common Stock Issuance Proposal and "**FOR**" the Two Harbors Adjournment Proposal.

In reaching its determination, the Two Harbors Board evaluated the Merger Agreement and the other transactions contemplated therein in consultation with Two Harbors' senior management and outside legal and financial advisors and carefully considered numerous factors that the Two Harbors Board viewed as supporting its decision, including, but not limited to, the following material factors:

The Two Harbors Board expects that the Merger will provide a number of significant potential strategic opportunities and benefits, including the following:

- the combination of Two Harbors and CYS is expected to create cost efficiencies and decrease Two Harbors' other operating expense ratio by approximately 30 to 40 basis points. In addition, PRCM Advisers' agreement to reduce its base management fee on the new CYS equity will further enhance operating cost efficiencies in the year following the Closing;

- following the Closing, Two Harbors anticipates that its current quarterly dividend of $0.47 will be sustainable at least through 2018, subject to market conditions and the discretion and authorization of the Two Harbors Board;

Table of Contents

assuming improvements in Agency spreads in 2018, as is currently expected by Two Harbors, the Merger is expected to be accretive to earnings;

the Combined Company is expected to provide improved scale, liquidity and capital alternatives for Two Harbors stockholders as a result of the increased equity capitalization and the increased stockholder base of the Combined Company. In addition, larger capitalized mortgage REITs have historically carried premium valuations; and

the Combined Company will have a larger capital base, which will support continued growth across Two Harbors' target assets and positions Two Harbors to take advantage of market opportunities as they arise.

The Two Harbors Board considered that the Merger Agreement provides the Two Harbors Board with the right, prior to the receipt of Two Harbors stockholder approval of the Two Harbors Common Stock Issuance Proposal and subject to certain terms and conditions of the Merger Agreement, to make a change in recommendation regarding the Two Harbors Common Stock Issuance Proposal.

The Two Harbors Board considered JMP's opinion, dated April 25, 2018, to the Two Harbors Board as to the fairness, from a financial point of view and as of the date of JMP's opinion, to Two Harbors of the Per Share Stock Consideration (based on an illustrative 0.4872 Exchange Ratio as calculated, with the approval of Two Harbors, based on CYS's adjusted book value per share as of March 31, 2018 (as provided by CYS) and Two Harbors' adjusted book value per share as of March 31, 2018 (as provided by Two Harbors)), as more fully described in the section entitled "The Merger Opinion of Two Harbors' Financial Advisor" beginning on page 84.

The Two Harbors Board considered its knowledge of the business, operations, financial condition, earnings and prospects of Two Harbors and CYS, taking into account the results of Two Harbors' due diligence review of CYS, as well as its knowledge of the current and prospective environment in which Two Harbors and CYS operate, including economic and market conditions.

The Two Harbors Board considered the commitment on the part of both parties to consummate the Merger as reflected in their respective obligations under the terms of the Merger Agreement, and the likelihood that the stockholder approvals needed to consummate the Merger would be obtained in a timely manner.

The Two Harbors Board also considered a variety of risks and other potentially negative factors in considering the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement, including, but not limited to, the following material factors:

the risk of diverting management focus and resources from operational matters and other strategic opportunities while working to implement the Merger;

that, under the terms of the Merger Agreement, Two Harbors must pay CYS a termination fee of $51.8 million and/or pay an expense amount equal to $20.6 million if the Merger Agreement is terminated under specified circumstances, which may deter other parties from proposing an alternative transaction that may be more advantageous to Two Harbors stockholders, or which may become payable following a termination of the Merger Agreement in circumstances where no alternative transaction or superior proposal is available to Two Harbors. For more information, see "The Merger Agreement Termination of the Merger Agreement" on page 143;

the limitations in the Merger Agreement on the right of Two Harbors to (i) solicit, initiate or knowingly encourage the making of a competing proposal, (ii) engage in any discussions or

79

Table of Contents

negotiations with any person with respect to a competing proposal and (iii) furnish non-public information regarding Two Harbors to any person in connection with or in response to a competing proposal;

the risk that, notwithstanding the likelihood of the Merger being completed, the Merger may not be completed, or that completion may be unduly delayed, including the effect of the pendency of the Merger and the effect such failure to be completed may have on the trading price of Two Harbors common stock and Two Harbors' operating results, particularly in light of the costs incurred in connection with the transaction;

the risk that the cost savings, operational synergies and other benefits to the Two Harbors stockholders expected to result from the Merger might not be fully realized or realized at all, including as a result of possible changes in the markets in which the Combined Company will operate;

the risk that Two Harbors will be unable to redeploy the capital acquired in connection with the Merger into its target assets within the anticipated timeline or at anticipated returns;

the risk of other potential difficulties in integrating the two companies and their respective operations;

the substantial costs to be incurred in connection with the transaction, including the transaction expenses arising from the Merger and the costs of integrating the businesses of Two Harbors and CYS;

the restrictions on the conduct of Two Harbors' business during the period between the execution of the Merger Agreement and the Closing. For more information, see "The Merger Agreement Conduct of Business by Two Harbors Pending the Merger";

the risk that Two Harbors or CYS may be unable to retain key employees;

the Merger Agreement's provisions permitting CYS to terminate the Merger Agreement in order to enter into a superior proposal for more than 50% of CYS (as further defined in "The Merger Agreement Competing Proposals CYS Competing Proposal" and "The Merger Agreement Superior Proposals CYS Superior Proposal") (subject to compliance with the provisions of the Merger Agreement regarding non-solicitation of competing proposals) upon payment by CYS to Two Harbors of a termination fee of $43.2 million and/or an expense amount equal to $8.6 million. For more information, see "The Merger Agreement Termination of the Merger Agreement"; and

other matters described in the sections entitled "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements."

The foregoing discussion of the factors considered by the Two Harbors Board is not intended to be exhaustive and is not provided in any specific order or ranking, but rather includes material factors considered by the Two Harbors Board. In view of the wide variety of factors considered in connection with its evaluation of the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement, and the complexity of these matters, the Two Harbors Board did not consider it practicable to, and did not attempt to, quantify, rank or otherwise assign any relative or specific weights or values to the factors considered, and individual directors may have held varied views of the relative importance of the factors considered and given different weights or values to different factors. The Two Harbors Board viewed its position and recommendation as being based on an overall review of the totality of the information available to it, including discussions with Two Harbors' management and outside legal and financial advisors, and determined that, in the aggregate, the potential benefits considered outweighed the potential risks or possible negative consequences of approving the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement.

Table of Contents

The explanation and reasoning of the Two Harbors Board and all other information presented in this section is forward-looking in nature and, therefore, should be read in light of the factors discussed in the section entitled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 51.

For the reasons set forth above, the Two Harbors Board has unanimously (i) determined that the Merger Agreement and the transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, are in the best interests of Two Harbors and its stockholders, (ii) approved the Merger Agreement and the other transactions contemplated therein, including the Merger and the Two Harbors Common Stock Issuance, (iii) directed that the Two Harbors Common Stock Issuance Proposal be submitted to the holders of Two Harbors Common Stock for consideration at the Two Harbors special meeting and (iv) recommended that the holders of Two Harbors Common Stock approve the Two Harbors Common Stock Issuance Proposal. The Two Harbors Board unanimously recommends that the Two Harbors common stockholders vote "FOR" the Two Harbors Common Stock Issuance Proposal and "FOR" the Two Harbors Adjournment Proposal.

Recommendation of the CYS Board and Its Reasons for the Merger

In evaluating the Merger Agreement, the Merger, and the other transactions contemplated by the Merger Agreement, the CYS Board and the CYS Special Committee consulted with CYS's financial and legal advisors: Barclays and Credit Suisse, as financial advisors to CYS, and Vinson & Elkins, as legal counsel to CYS. In reaching its determination that the transactions contemplated by the Merger Agreement are advisable and in the best interests of CYS and its stockholders, the CYS Board and CYS Special Committee considered a number of factors, including, but not limited to, the following material factors, which the CYS Board and the CYS Special Committee viewed as supporting its determination with respect to the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement:

- in the case of the CYS Board, the unanimous recommendation of the CYS Special Committee that the CYS Board approve the Merger Agreement and declare the transactions contemplated thereby, including the Merger, advisable and in the best interests of CYS and its stockholders, as well as the independence of the members of the CYS Special Committee making such recommendation;

- the merger consideration had an implied value per share of CYS Common Stock of $7.79 which represented a premium of approximately 17.7% to CYS's closing price per share and 105% of CYS's book value per share on April 25, 2018, the last trading day prior to the public announcement of the Merger Agreement;

- the final merger consideration is based on the Exchange Ratio, which will fluctuate as a result of changes in the book values of CYS and Two Harbors prior to the Determination Date, plus a cash payment to be paid by Two Harbors in the amount of $15 million;

- the general views of the members of the CYS Board and the CYS Special Committee with respect to the business, financial condition, current business strategy, and short and long-term prospects of CYS;

- the belief of the CYS Special Committee that, as a result of the targeted bid process conducted by CYS and its robust negotiations with multiple bidders, including Two Harbors, CYS maximized stockholder value and obtained Two Harbors' best and final offer;

- the receipt of Two Harbors Common Stock as part of the merger consideration provides CYS common stockholders the opportunity to continue ownership in the Combined Company, which

Table of Contents

is expected to provide a number of significant potential strategic opportunities and benefits, including the following:

- Two Harbors' more diversified portfolio helps mitigate the impact of rising interest rates due to its mortgage servicing rights and deeply discounted, legacy non-Agency RMBS;

- the meaningful premium to the CYS Common Stock price is also a premium to CYS common stockholders on a book value basis;

- Two Harbors' hybrid business model is well positioned for periods of market volatility because it is comprised of a mix of asset classes and a well-built platform that has been developed over time. Two Harbors' portfolio includes a rates strategy comprised of Agency RMBS paired with mortgage servicing rights, which typically perform better in a rising interest rate environment, and a credit strategy, comprised primarily of deeply discounted, legacy non-Agency RMBS; and

- CYS common stockholders will benefit from increased operating scale, liquidity, and capital alternatives available to the larger Combined Company;

the valuation of Agency RMBS could be vulnerable as the Federal Reserve's balance sheet normalization takes full effect and as interest rates increase;

the merger consideration, which includes shares of Two Harbors Common Stock that will be listed for trading on the NYSE, continues to provide liquidity for CYS common stockholders desiring to liquidate their investment after the Merger;

the opinions of each of Barclays and Credit Suisse, each dated April 25, 2018, to the CYS Board that, in the case of Barclays' opinion, based upon and subject to the qualifications, limitations and assumptions set forth therein, as of the date of the opinion, the merger consideration to be offered to the holders of shares of CYS Common Stock in the Merger was fair, from a financial point of view, to such holders of CYS Common Stock, and in the case of Credit Suisse's opinion, as of the date of the opinion and based on and subject to various assumptions made, procedures followed, matters considered and limitations and qualifications on the review undertaken, the merger consideration to be received by holders of CYS Common Stock (other than excluded holders) pursuant to the Merger Agreement was fair, from a financial point of view, to such holders, as more fully described below in the sections entitled "The Merger Opinion of CYS's Financial Advisor, Barclays Capital Inc." and "The Merger Opinion of CYS's Financial Advisor, Credit Suisse Securities (USA) LLC" beginning on pages 92 and 101, respectively.

the Merger Agreement permits CYS to continue to pay its stockholders regular quarterly dividends payable in respect of the CYS Common Stock consistent with past practice between the signing of the Merger Agreement and the consummation of the Merger;

the Merger is subject to approval by holders of a majority of the outstanding shares of CYS Common Stock entitled to vote on the matter;

the Merger Agreement provides CYS with the right, under certain specified circumstances, to consider an unsolicited competing proposal if the CYS Board determines in good faith, after consultation with its financial advisors and outside legal counsel, that such competing proposal is, or is reasonably expected to lead to, a Superior Proposal, and provides the CYS Board with the ability, under certain specified circumstances, to make a change in recommendation or to terminate the Merger Agreement in order to enter into a definitive agreement with respect to a Superior Proposal upon payment of a $43.2 million termination fee;

82

Table of Contents

the commitment on the part of each of CYS and Two Harbors to complete the Merger as reflected in their respective obligations under the terms of the Merger Agreement and the absence of any required government consents, and the likelihood that the Merger will be completed on a timely basis;

the fact that the Merger Agreement provides that two current CYS directors will be appointed to serve on the Combined Company's board of directors; and

the other terms of the Merger Agreement, including representations, warranties and covenants of the parties, as well as the conditions to their respective obligations under the Merger Agreement.

The CYS Board and the CYS Special Committee also considered a variety of risks and other potentially negative factors in considering the Merger Agreement, the Merger, and the other transactions contemplated by the Merger Agreement, including, but not limited to, the following material factors:

that, because the Exchange Ratio may fluctuate as a result of changes in either party's book value prior to the Determination Date, an unfavorable change would reduce the number of shares of Two Harbors Common Stock received by holders of CYS Common Stock in the Merger;

the risk that a different strategic alternative, such as continuing as an independent public company, could be more beneficial to CYS stockholders than the Merger;

that the receipt of the merger consideration by CYS U.S. stockholders in exchange for their CYS Stock in the Merger will be a taxable transaction for federal income tax purposes;

that, under the terms of the Merger Agreement, CYS must pay Two Harbors a $43.2 million termination fee if the Merger Agreement is terminated under certain circumstances, which might discourage or deter other parties from proposing an alternative transaction that may be more advantageous to CYS stockholders;

the possibility that, in certain circumstances, CYS could be required to pay Two Harbors an expense amount equal to $8.6 million;

that the terms of the Merger Agreement place limitations on CYS's right to initiate, solicit or knowingly encourage the making of any proposal by or with a third party with respect to a competing transaction and to furnish information to, or enter into discussions with, a third party interested in pursuing an alternative strategic transaction;

the risk that, while the Merger is expected to be completed, there is no assurance that all the conditions to the parties' obligations to complete the Merger will be satisfied or waived, or that the Merger in fact will be completed;

that forecasts of future financial and operational results of the Combined Company are necessarily estimates based on assumptions and may vary significantly from future performance;

the risk of diverting management focus and resources from operational matters and other strategic opportunities while working to implement the Merger;

that the consummation of the Merger is subject to the approval of the Two Harbors common stockholders, and that the Merger will not close if the Two Harbors common stockholders do not approve the Two Harbors Common Stock Issuance Proposal;

that the consummation of the Merger is subject to the approval of the CYS common stockholders and the Merger will not close if the CYS common stockholders do not approve the Merger Proposal;

Table of Contents

that, under the terms of the Merger Agreement, in certain circumstances, the Two Harbors Board may make a change in recommendation, as more fully described in the section entitled "The Merger Agreement Competing Proposals" beginning on page 138;

that provisions in the Merger Agreement restricting non-ordinary course operation of CYS's business during the period between the signing of the Merger Agreement and consummation of the Merger may delay or prevent CYS from undertaking business opportunities that may arise or other actions it would otherwise take with respect to its operations absent the pending completion of the Merger;

the expenses to be incurred in connection with the Merger; and

the types and nature of the risks described under the section entitled "Risk Factors" beginning on page 42.

The foregoing discussion of the factors considered by the CYS Board and the CYS Special Committee is not intended to be exhaustive and is not provided in any specific order or ranking, but rather includes material factors considered by the CYS Board and the CYS Special Committee. In view of the wide variety of factors considered in connection with their respective evaluation of the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement, and the complexity of these matters, the CYS Board and the CYS Special Committee did not consider it practical to, and did not attempt to, quantify, rank or otherwise assign any relative or specific weights or values to the different factors considered and individuals may have given different weights to different factors. The CYS Board and the CYS Special Committee conducted an overall review of the factors considered and determined that, in the aggregate, the potential benefits considered outweighed the potential risks or possible negative consequences of approving the Merger Agreement, the Merger, and the other transactions contemplated by the Merger Agreement.

The explanation and reasoning of the CYS Board and the CYS Special Committee and all other information presented in this section is forward-looking in nature and, therefore, should be read in light of the factors discussed in the section entitled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 51.

After careful consideration, for the reasons set forth above, the CYS Board has approved the Merger Agreement, the Merger, and the other transactions contemplated thereby and has determined that the transactions contemplated by the Merger Agreement, including the Merger, are advisable and in the best interests of CYS and its stockholders and recommends to the CYS common stockholders that they vote "FOR" the Merger Proposal, "FOR" the CYS Non-Binding Compensation Advisory Proposal and "FOR" the CYS Adjournment Proposal.

Opinion of Two Harbors' Financial Advisor

Two Harbors has retained JMP as its financial advisor in connection with the Merger. In connection with this engagement, the Two Harbors Board requested that JMP evaluate the fairness, from a financial point of view, of the Per Share Stock Consideration to be paid by Two Harbors as part of the merger consideration. On April 25, 2018, at a meeting of the Two Harbors Board at which the Merger was approved, JMP rendered to the Two Harbors Board an oral opinion, confirmed by delivery of a written opinion dated April 25, 2018, to the effect that, as of that date and based on and subject to the matters described in its opinion, the Per Share Stock Consideration to be paid by Two Harbors as part of the merger consideration was fair, from a financial point of view, to Two Harbors.

The full text of JMP's written opinion, dated April 25, 2018, which describes the assumptions made, procedures followed, matters considered and limitations on the review undertaken, is attached to this proxy statement/prospectus as Annex B and is incorporated into this joint proxy statement/prospectus by reference. The description of JMP's opinion set forth in this joint proxy statement/

Table of Contents

prospectus is qualified in its entirety by reference to the full text of JMP's opinion. **JMP's opinion was directed and addressed to the Two Harbors Board (in its capacity as such) in connection with its consideration of the Merger. JMP's opinion did not address the underlying decision of the Two Harbors Board to proceed with or effect the Merger or the relative merits of the Merger as compared to any alternative strategy or transaction that might exist for Two Harbors. JMP's opinion does not constitute a recommendation as to how the Two Harbors Board or any Two Harbors common stockholder should act or vote with respect to the Merger or any other matter.**

For purposes of its opinion, JMP:

- reviewed the financial terms and conditions of a draft dated April 25, 2018 of the Merger Agreement;
- reviewed certain publicly available business and financial information relating to CYS and Two Harbors, including research analyst estimates for CYS and Two Harbors;
- reviewed certain financial projections provided to JMP by CYS relating to CYS and certain other historical and current financial and business information relating to CYS provided to JMP by CYS, including estimates of the senior management of CYS as to the net asset value per share of CYS as of March 31, 2018;
- reviewed certain historical, current and prospective financial and business information relating to Two Harbors provided to JMP by Two Harbors, including estimates of the senior management of Two Harbors (which consists solely of employees of PRCM Advisers) as to the net asset value per share of Two Harbors as of March 31, 2018;
- held discussions regarding the operations, financial condition and prospects of CYS and Two Harbors with the respective senior managements of CYS and Two Harbors;
- reviewed the financial and stock market performance of CYS and Two Harbors and compared them with one another and with those of certain other publicly traded companies that JMP deemed to be relevant;
- compared certain financial terms of the Merger to financial terms, to the extent publicly available, of other transactions JMP deemed relevant;
- reviewed the premiums paid in certain publicly announced specialty finance mergers and acquisitions transactions;
- reviewed the current and historical trading prices and volume for CYS Common Stock and Two Harbors Common Stock;
- reviewed certain publicly available research analyst price targets for CYS; and
- performed such other studies, analyses and inquiries and considered such other factors as JMP deemed appropriate.

In arriving at its opinion, JMP, with Two Harbors' consent, (i) relied upon and assumed the accuracy and completeness of all information from public sources or which was provided to JMP by or on behalf of CYS or Two Harbors or otherwise reviewed by JMP, without independent verification, (ii) did not assume any responsibility for independently verifying such information, and (iii) relied on the assurances of the senior managements of CYS and Two Harbors that they were not aware of any facts or circumstances that would make such information which was provided to JMP inaccurate or misleading. In addition, with Two Harbors' consent, JMP did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of CYS or Two Harbors, nor was JMP furnished with any such evaluations or appraisals. With respect to the financial projections and net asset value per share estimates referred to above and any other forecasts or forward-looking

85

Table of Contents

information, JMP assumed, upon the advice of the respective senior managements of CYS and Two Harbors, as the case may be, that such projections, estimates, forecasts and information were reasonably prepared and reflected the best currently available estimates and good faith judgments of the managements of CYS and Two Harbors, as the case may be, as to the expected future results of operations and financial condition of CYS and Two Harbors and the other matters covered thereby, and JMP relied on such information in arriving at its opinion and did not assess the reasonableness or achievability of such projections, estimates, forecasts and information. Further, with respect to such financial projections, as part of JMP's analysis in connection with its opinion, JMP assumed, at the direction of Two Harbors, that the financial results reflected therein could be realized in the amounts and at the times indicated thereby. In addition, JMP did not perform or rely upon any analysis to (i) value the respective portfolio investments or assets of CYS or Two Harbors, (ii) value any preferred stock of CYS or Two Harbors, or (iii) evaluate the potential pro forma financial and/or strategic effects of the Merger on Two Harbors. JMP also assumed that there would be no developments with respect to the housing market, mortgage industry and related credit and financial markets that would be material in any respect to its analysis or opinion.

In addition, in arriving at its opinion, JMP assumed, with Two Harbors' consent, that (i) there were no material changes in any of the assets, financial condition, business or prospects of CYS or Two Harbors since the date of the most recent financial statements and other information made available to JMP, (ii) all material information JMP requested from Two Harbors and CYS during the scope of its engagement was provided to JMP fully and in good faith, (iii) the Merger and the other transactions contemplated by the Merger Agreement (including, without limitation, the management fee reductions contemplated by the Fourth Amendment to the Management Agreement ("Management Fee Reductions")) would be consummated in accordance with the terms and conditions set forth in the Merger Agreement (the final terms and conditions of which JMP assumed would not differ in any respect material to its analysis from the aforementioned draft it reviewed), without any waiver, modification or amendment of any material terms or conditions, (iv) the representations and warranties made by the parties to the Merger Agreement were and would be true and correct in all respects material to its analysis, (v) all governmental and third party consents, approvals and agreements necessary for the consummation of the Merger and the other transactions contemplated by the Merger Agreement would be obtained without any adverse effect on Two Harbors, CYS or the Merger, and (vi) the Merger and the other transactions contemplated by the Merger Agreement would not violate any applicable federal or state statutes, rules or regulations. JMP assumed, with Two Harbors' consent, that Two Harbors and CYS have operated in conformity with the requirements for qualification as a REIT for U.S. federal income tax purposes since their respective formation as a REIT, and JMP also assumed, with Two Harbors' consent, that the Merger and the other transactions contemplated by the Merger Agreement would not adversely affect the REIT status of Two Harbors. JMP further assumed, with Two Harbors' consent, that the Merger would qualify for the intended tax treatment described in the Merger Agreement for U.S. federal income tax purposes. JMP did not review, and expressed no view or opinion with respect to, the repurchase agreements of Two Harbors or CYS.

JMP's opinion addressed only the fairness, from a financial point of view and as of the date of JMP's opinion, to Two Harbors of the Per Share Stock Consideration based on an illustrative 0.4872 Exchange Ratio as calculated, with the approval of Two Harbors, based on CYS's adjusted book value per share as of March 31, 2018 (as provided by CYS) and Two Harbors' adjusted book value per share as of March 31, 2018 (as provided by Two Harbors). Two Harbors advised JMP, and JMP assumed, that the proceeds of the one-time downward adjustment of $15 million to the management fees payable by Two Harbors for the quarter in which the Merger closes would be used by Two Harbors to fund the aggregate Per Share Cash Consideration and, accordingly, (i) JMP treated the Per Share Cash Consideration as if it were paid directly by PRCM Advisers and not Two Harbors and (ii) JMP's opinion did not address, and JMP expressed no view or opinion with respect to, the Per Share Cash Consideration.

Table of Contents

JMP expressed no view or opinion as to the form or structure of the Merger, including, without limitation, the calculation of the Exchange Ratio, what the actual Exchange Ratio would be when determined, the allocation of the consideration to be paid to the holders of CYS Common Stock between the Per Share Stock Consideration and the Per Share Cash Consideration or the treatment of the outstanding shares of CYS Series A Preferred Stock and CYS Series B Preferred Stock in the Merger. JMP's opinion did not constitute legal, regulatory, accounting, insurance, tax or other similar professional advice and did not address (i) the underlying decision of the Two Harbors Board to proceed with or effect the Merger or the other transactions contemplated by the Merger Agreement (including, without limitation, the Management Fee Reductions), (ii) the terms of the Merger (other than the Per Share Stock Consideration to the extent expressly addressed in JMP's opinion), the Management Fee Reductions or any other related transaction or any arrangements, understandings, agreements or documents related to the Merger or any related transaction, (iii) the fairness of the Merger or any other transaction to Two Harbors' equity holders or creditors, PRCM Advisers or any other person or entity (other than to Two Harbors with respect to the Per Share Stock Consideration to the extent expressly addressed in JMP's opinion), (iv) the relative merits of the Merger or the other transactions contemplated by the Merger Agreement as compared to any alternative strategy or transaction that might exist for Two Harbors, or the effect of any other transaction which it may consider in the future, (v) the tax, accounting or legal consequences of the Merger or the other transactions contemplated by the Merger Agreement, (vi) the solvency, creditworthiness, fair market value or fair value of any of Two Harbors, CYS or their respective assets under any applicable laws relating to bankruptcy, insolvency, fraudulent conveyance or similar matters, or (vii) the appropriate capital structure of Two Harbors or the potential dilutive or other effects of the Merger on the existing security holders of Two Harbors. JMP's opinion expressed no opinion as to the fairness of the amount or nature of any compensation to any officers, directors, or employees of any party to the Merger, or any class of such persons, relative to the Per Share Stock Consideration.

JMP's opinion was necessarily based on business, economic, monetary, market and other conditions as they existed and could reasonably be evaluated on, and the information made available to JMP as of, the date of JMP's opinion. Subsequent developments may affect JMP's opinion, and JMP assumed no responsibility for updating or revising its opinion based on circumstances or events occurring after the date of JMP's opinion (regardless of the date of Closing). JMP was not engaged to amend, supplement or update its opinion at any time. JMP expressed no view or opinion as to what the value of Two Harbors Common Stock or any other security of Two Harbors actually would be when issued pursuant to the Merger or otherwise or the prices at which Two Harbors Common Stock, CYS Common Stock or any other security of Two Harbors or CYS might be purchased, sold or exchanged, or otherwise be transferable, at any time. JMP also expressed no view or opinion as to the prices at which any of the respective portfolio investments or assets of Two Harbors or CYS may be purchased, sold or exchanged, or otherwise be transferable, at any time. Except as described in this summary, Two Harbors imposed no other instructions or limitations on JMP with respect to the investigations made or procedures followed by JMP in rendering its opinion.

In preparing its opinion, JMP performed a variety of financial analyses, including those described below. This summary of the analyses is not a complete description of JMP's opinion or the analyses underlying, and factors considered in connection with, JMP's opinion, but summarizes the material analyses performed and presented in connection with such opinion. The preparation of a financial opinion is a complex analytical process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances and, therefore, a financial opinion is not readily susceptible to summary description. JMP arrived at its ultimate opinion based on the results of all analyses undertaken by it and assessed as a whole, and did not draw, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion. Accordingly, JMP believes that its analyses must be considered as a

Table of Contents

whole and selecting portions of its analyses and factors, without considering all analyses and factors, could create a misleading or incomplete view of the processes underlying its analyses and opinion.

In its analyses, JMP considered industry performance, general business, economic, market and financial conditions and other matters existing as of the date of its opinion, many of which are beyond the control of Two Harbors. No company, business or transaction reviewed is identical to Two Harbors, CYS or the Merger. An evaluation of these analyses is not entirely mathematical; rather, the analyses involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the public trading or other values of the companies, businesses or transactions reviewed.

The estimates contained in JMP's analyses and the valuation ranges resulting from any particular analysis are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than those suggested by its analyses. In addition, analyses relating to the value of businesses or securities do not purport to be appraisals or to reflect the prices at which businesses or securities actually may be sold or acquired. Accordingly, the estimates used in, and the results derived from, JMP's analyses are inherently subject to substantial uncertainty.

JMP was not requested to, and it did not, recommend the specific consideration payable in the Merger. The type and amount of consideration payable in the Merger was determined through negotiations between Two Harbors and CYS and the decision of Two Harbors to enter into the Merger Agreement was solely that of the Two Harbors Board. JMP's opinion was only one of many factors considered by the Two Harbors Board in its consideration of the Merger and should not be viewed as determinative of the views of the Two Harbors Board or Two Harbors management with respect to the Merger or the consideration to be paid in the Merger.

The following is a summary of the material financial analyses provided to the Two Harbors Board in connection with JMP's opinion. **The financial analyses summarized below include information presented in tabular format. In order to fully understand JMP's financial analyses, the tables must be read together with the text of each summary. Considering the data below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of JMP's financial analyses.**

For purposes of the financial analyses of CYS described below, JMP utilized an implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock based on an illustrative 0.4872 Exchange Ratio (as calculated, with the approval of Two Harbors, based on CYS's adjusted book value per share as of March 31, 2018 (as provided by CYS) and Two Harbors' adjusted book value per share as of March 31, 2018 (as provided by Two Harbors)) and the closing price of Two Harbors Common Stock on April 24, 2018.

Selected Public Companies Comparable Data

JMP compared certain financial and stock market information for Two Harbors and CYS to similar information for 12 selected publicly traded residential mortgage REITs with current market capitalizations greater than $500 million. The selected companies were the following:

Annaly Capital Management, Inc.

AGNC Investment Corp.

New Residential Investment Corp.

Chimera Investment Corporation

Table of Contents

MFA Financial, Inc.

Invesco Mortgage Capital Inc.

Redwood Trust, Inc.

PennyMac Mortgage Investment Trust

ARMOUR Residential REIT, Inc.

MTGE Investment Corp.

Capstead Mortgage Corporation

New York Mortgage Trust, Inc.

Using publicly available information and market data, JMP reviewed closing stock prices on April 24, 2018 of the selected companies as multiples of calendar year 2018 and 2019 estimated earnings per share ("EPS") and tangible book value per share as of the end of the most recent publicly available completed quarter. JMP also reviewed dividend yields of the selected companies calculated as annualized dividends for the most recent publicly available completed quarter as a percentage of closing stock prices on April 24, 2018. JMP then compared these multiples and dividend yields to the corresponding data of Two Harbors and CYS based on research analyst estimates for Two Harbors and CYS, reported book values per share for Two Harbors and CYS as of December 31, 2017 and closing stock prices on April 24, 2018. This analysis indicated the following top quartile, median and bottom quartile data for the selected companies as compared to corresponding data for Two Harbors and CYS:

Selected Companies	Price-to-2018 EPS	Price-to-2019 EPS	Price-to-Tangible Book Value	Dividend Yield
Top Quartile	10.4x	10.1x	0.99x	11.6%
Median	9.4x	9.9x	0.94x	11.0%
Bottom Quartile	8.7x	8.8x	0.87x	10.3%
Two Harbors	8.3x	8.4x	0.96x	12.0%
CYS	7.7x	8.2x	0.79x	13.3%

CYS Financial Analyses

Premiums Paid Analysis

JMP reviewed the premiums paid in 17 selected acquisitions of publicly traded specialty finance companies relative to the closing stock prices of the acquired companies one day, one week and one month prior to public announcement of the relevant transaction. The selected acquisitions consisted of completed transactions announced between October 26, 2009 and February 27, 2018 with announced implied transaction values of between $250 million and $2.5 billion.

The top quartile, median and bottom quartile of premiums paid in the selected acquisitions reviewed by JMP and the corresponding closing stock prices of CYS on April 24, 2018, April 17, 2018 and March 26, 2018 are indicated in the table below:

	Based on Closing Stock Price at		
	1 - Day	1 - Week	1 - Month
Top Quartile of Premiums Paid	30.9%	28.8%	24.2%
Median of Premiums Paid	16.6%	17.7%	17.5%

Bottom Quartile of Premiums Paid	2.6%	4.3%	10.0%
Corresponding CYS Closing Stock Price	$6.62 (as of 4/24/18)	$6.67 (as of 4/17/18)	$6.56 (as of 3/26/18)

Table of Contents

Taking into account the above summary data, JMP applied a range of premiums, using the bottom and top quartiles of the premiums paid to closing stock prices one-day prior to announcement in the selected acquisitions, to the closing price of CYS Common Stock on April 24, 2018. This analysis indicated an implied per share equity value reference range for CYS of $6.79 to $8.67, as compared to the implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock.

Selected Public Companies Analysis

Using publicly available information and market data, JMP reviewed closing stock prices on April 24, 2018 of 13 selected companies, consisting of Two Harbors and the 12 residential mortgage REITs listed above under "Selected Public Companies Comparable Data," as a multiple of tangible book value per share as of the end of the most recent publicly available completed quarter. JMP also reviewed dividend yields of the selected companies, including Two Harbors, calculated as annualized dividends for the most recent publicly available completed quarter as a percentage of closing stock prices on April 24, 2018.

The top quartile, median and bottom quartile of tangible book value per share multiples and dividend yields of the selected companies, including Two Harbors, are indicated in the table below:

	Price-to-Tangible Book Value	Dividend Yield
Top Quartile	0.98x	11.7%
Median	0.96x	11.2%
Bottom Quartile	0.87x	10.4%

Taking into account the above summary data, JMP applied a range of tangible book value per share multiples, using the bottom and top quartiles of the multiples of the selected companies, to CYS's book value per share as of March 31, 2018, and JMP applied a range of dividend yields, using the bottom and top quartiles of the dividend yields of the selected companies, to CYS's current annualized dividend for the quarter ended March 31, 2018. This analysis indicated an implied per share equity value reference range of CYS of $6.43 to $7.25 based on tangible book value per share multiples and an implied per share equity value reference range of CYS of $7.55 to $8.50 based on dividend yields, as compared to the implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock.

Table of Contents

Selected Precedent M&A Transactions Analysis

JMP reviewed publicly available information relating to 14 selected mortgage REIT M&A transactions that were announced since January 1, 2000 involving companies in the mortgage REIT industry. The selected transactions were the following:

Target	Acquirer
Hatteras Financial	Annaly Capital Management
JAVELIN Mortgage	ARMOUR Residential REIT
Apollo Residential Mortgage	Apollo Commercial Real Estate Finance
CreXus Investment	Annaly Capital Management
Accredited Home Lenders Holding	Lone Star Funds
Fieldstone Investment	Credit-Based Asset Servicing and Securitization
ARCap Investors	CharterMac
Saxon Capital	Morgan Stanley
MortgageIT Holdings	Deutsche Bank
Aames Investment	Accredited Home Lenders Holding
CRIIMI MAE	Caisse de Depot et Placement du Quebec
Apex Mortgage Capital	American Home Mortgage Investment
FBR Asset Investment	Arlington Asset Investment
IMPAC Commercial Holdings	Fortress Investment Group

Using publicly available information, JMP reviewed the equity purchase value in each of the selected transactions as a multiple of each target company's equity book value at the end of the most recent completed quarter prior to public announcement of the relevant transaction based on then publicly available information. The top quartile, median and bottom quartile of the equity book value multiples of the selected transactions are indicated in the table below:

	Equity Value/ Book Value
Top Quartile	1.20x
Median	0.98x
Bottom Quartile	0.84x

Taking into account the above summary data, JMP applied a range of book value multiples, using the bottom and top quartiles of the multiples of the selected transactions, to CYS's book value as of March 31, 2018. This analysis indicated an implied per share equity value reference range of $6.24 to $8.88, as compared to the implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock.

Dividend Discount Analysis

JMP performed a dividend discount analysis of CYS based on financial projections provided to JMP by CYS. Using discount rates ranging from 9.0% to 10.0%, JMP calculated (i) a range of implied present values of the projected dividends that CYS was forecasted to generate from March 31, 2018 through calendar year 2020 and (ii) ranges of implied present values of implied terminal values for CYS using two methodologies, one based on long-term price-to-book value multiples and the other based on dividend yields. The implied terminal values were derived by (a) applying a range of terminal multiples of 0.95x to 1.05x to CYS's estimated book value as of December 31, 2020 and (b) applying a range of dividend yields of 12.0% to 14.0% to CYS's estimated dividends per share for the year ended December 31, 2020. This analysis indicated an implied per share equity value reference range for CYS

Table of Contents

of $7.53 to $8.26 using the long-term price-to-book value multiple-based terminal value methodology and an implied per share equity value reference range for CYS of $7.75-$8.86 using the long-term dividend yield-based terminal value methodology, as compared to the implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock.

Other Information

In addition to the financial analyses described above, JMP reviewed with the Two Harbors Board for informational purposes, among other things, the following:

- historical closing stock price-to-book value multiples of Two Harbors during the one-year period ended April 24, 2018, which had an average of 0.99x, as compared to the closing stock price-to-book value multiple of Two Harbors on April 24, 2018 of approximately 0.96x;

- historical closing stock price-to-book value multiples of CYS since its initial public offering on June 11, 2009, as compared to an implied transaction multiple for the proposed Merger (based on the implied value of the Per Share Stock Consideration of $7.66 per outstanding share of CYS Common Stock) of 1.03x CYS's book value as of March 31, 2018; and

- five publicly available research analyst price targets for CYS, which ranged from $6.50 to $8.00, as of April 24, 2018.

Miscellaneous

Under the terms of JMP's engagement, Two Harbors has agreed to pay JMP for its financial advisory services in connection with the Merger an aggregate fee currently estimated to be approximately $6.0 million, portions of which became payable upon JMP's engagement and upon delivery of JMP's opinion and a substantial portion of which will become payable only if the proposed Merger is consummated. In addition, Two Harbors has agreed to indemnify JMP against certain claims and liabilities related to or arising out of its engagement. JMP may seek to provide investment banking and other financial services to Two Harbors, CYS or their respective affiliates in the future, for which JMP would expect to receive compensation. JMP and its affiliates in the past provided investment banking and other financial services to Two Harbors and CYS and received compensation for the rendering of these services, including (i) having acted as manager for a share repurchase program of CYS and (ii) having acted as manager on the at-the-market equity placement program for CYS. Furthermore, JMP acted as co-manager on the initial public offering of Granite Point Mortgage Trust Inc., then an affiliate of Two Harbors. In the ordinary course of business, JMP and its affiliates may actively trade or hold the securities of Two Harbors and CYS for their own account or for the account of their customers and, accordingly, may at any time hold a long or short position in those securities.

Two Harbors selected JMP as its financial advisor in connection with the merger based on JMP's reputation and experience and familiarity with Two Harbors and its business. JMP is a nationally recognized investment banking firm which provides capital raising, mergers and acquisitions transaction and other strategic advisory services to corporate clients. JMP's opinion was approved by a JMP Securities LLC fairness opinion committee.

Opinion of CYS's Financial Advisor, Barclays Capital Inc.

Barclays was engaged to act as a financial advisor to the CYS Board with respect to pursuing strategic alternatives for CYS, including a possible sale of CYS, pursuant to an engagement letter dated February 26, 2018, as amended. On April 25, 2018, Barclays rendered its oral opinion (which was subsequently confirmed in writing) to the CYS Board that, as of such date and based upon and subject to the qualifications, limitations and assumptions stated in its opinion, from a financial point of view,

Table of Contents

the merger consideration to be offered to the holders of shares of CYS Common Stock is fair to such stockholders.

The full text of Barclays' written opinion, dated as of April 25, 2018, is attached as Annex C to this joint proxy statement/prospectus. Barclays' written opinion sets forth, among other things, the assumptions made, procedures followed, factors considered and limitations upon the review undertaken by Barclays in rendering its opinion. You are encouraged to read the opinion carefully in its entirety. The following is a summary of Barclays' opinion and the methodology that Barclays used to render its opinion. This summary is qualified in its entirety by reference to the full text of the opinion.

Barclays' opinion, the issuance of which was approved by Barclays' Valuation and Fairness Opinion Committee, is addressed to the CYS Board, addresses only the fairness, from a financial point of view, of the merger consideration to be offered to the holders of CYS Common Stock and does not constitute a recommendation to any holder of CYS Common Stock as to how such stockholder should vote with respect to the proposed transaction or any other matter. The terms of the proposed transaction were determined through arm's-length negotiations between CYS and Two Harbors and were unanimously approved by CYS's Board. Barclays did not recommend any specific form of consideration to CYS or that any specific form of consideration constituted the only appropriate consideration for the proposed transaction. Barclays was not requested to address, and its opinion does not in any manner address, CYS's underlying business decision to proceed with or effect the proposed transaction, the likelihood of the consummation of the proposed transaction, or the relative merits of the proposed transaction as compared to any other transaction in which CYS may engage. In addition, Barclays expressed no opinion on, and its opinion does not in any manner address, the fairness of the amount or the nature of any compensation to any officers, directors or employees of any parties to the proposed transaction, or any class of such persons, relative to the consideration to be offered to the holders of CYS Common Stock in the proposed transaction. No limitations were imposed by CYS's Board upon Barclays with respect to the investigations made or procedures followed by it in rendering its opinion.

In arriving at its opinion, Barclays, among other things:

- reviewed and analyzed a draft of the merger agreement, dated as of April 25, 2018, and the specific terms of the proposed transaction;
- reviewed and analyzed publicly available information concerning CYS and Two Harbors that Barclays believed to be relevant to its analysis, including CYS's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and Two Harbors' Annual Report on Form 10-K for the fiscal year ended December 31, 2017;
- reviewed and analyzed financial and operating information with respect to the business, operations and prospects of CYS furnished to Barclays by CYS, including financial projections of CYS prepared by CYS's management furnished to Barclays by CYS (which are referred to in this section as the "CYS Projections");
- reviewed and analyzed financial and operating information with respect to the business, operations and prospects of Two Harbors furnished to Barclays by Two Harbors or CYS, including financial projections of Two Harbors prepared by management of Two Harbors and furnished to Barclays by Two Harbors (which are referred to in this section as the "Two Harbors Projections");
- reviewed and analyzed financial and operating information with respect to the business, operations and prospects of the pro forma combined company (which is referred to in this section as "Pro Forma Two Harbors") furnished to Barclays by Two Harbors or CYS, including financial projections of Pro Forma Two Harbors prepared by management of Two Harbors and

Table of Contents

furnished to Barclays by Two Harbors (which are referred to in this section as the "Pro Forma Projections");

reviewed and analyzed a trading history of CYS Common Stock and Two Harbors Common Stock from June 17, 2009 through April 20, 2018 and a comparison of those trading histories with each other and with those of other companies that Barclays deemed relevant;

reviewed and analyzed a comparison of the historical financial results and present financial condition of CYS and Two Harbors with each other and with those of other companies that Barclays deemed relevant;

reviewed and analyzed a comparison of the financial terms of the proposed transaction with the financial terms of certain other recent transactions that Barclays deemed relevant;

reviewed and analyzed published estimates of independent research analysts with respect to the future financial performance and net asset value of CYS and Two Harbors and price targets of CYS Common Stock and Two Harbors Common Stock;

had discussions with the managements of CYS and Two Harbors concerning the business, operations, assets, liabilities, financial condition and prospects of Two Harbors and with the management of CYS concerning the strategic rationale for the proposed transaction and the business, operations, assets, liabilities, financial condition and prospects of CYS; and

has undertaken such other studies, analyses and investigations as Barclays deemed appropriate.

In arriving at its opinion, Barclays assumed and relied upon the accuracy and completeness of the financial and other information used by Barclays without any independent verification of such information (and had not assumed responsibility or liability for any independent verification of such information). Barclays also relied upon the assurances of the managements of CYS and Two Harbors that they were not aware of any facts or circumstances that would make such information inaccurate or misleading. With respect to the CYS Projections, upon the advice and at the direction of CYS, Barclays assumed that such projections, based on the assumptions stated therein, (i) were reasonably prepared and (ii) reflected the most reasonable currently available estimates and judgments of the management of CYS as to the future financial performance of CYS and that CYS would perform substantially in accordance with such projections. With respect to the Two Harbors Projections, upon the advice and at the direction of CYS, Barclays assumed that such projections, based on the assumptions stated therein, (i) were reasonably prepared and (ii) reflected the most reasonable currently available estimates of the management of CYS as to the future financial performance of Two Harbors and that Two Harbors would perform substantially in accordance with such projections. With respect to the Pro Forma Projections, upon the advice and at the direction of CYS, Barclays assumed that such projections, based on the assumptions stated therein, (i) were reasonably prepared and (ii) reflected the most reasonable currently available estimates and judgments of the management of CYS as to the future financial performance of Pro Forma Two Harbors and that Pro Forma Two Harbors would perform substantially in accordance with the Pro Forma Projections.

In arriving at its opinion, Barclays assumed no responsibility for and expressed no view as to any such projections or estimates or the assumptions on which they were based. In arriving at its opinion, Barclays did not conduct a physical inspection of the properties and facilities of CYS or Two Harbors and did not make or obtain any evaluations or appraisals of the assets or liabilities of CYS or Two Harbors. Barclays' opinion was necessarily based upon market, economic and other conditions as they existed on, and could be evaluated as of, April 25, 2018. Barclays assumed no responsibility for updating or revising its opinion based on events or circumstances that may occur after April 25, 2018. Barclays expressed no opinion as to the prices at which (i) shares of Two Harbors Common Stock would trade fo-decoration: none; padding-top: 12pt; padding-right: 0pt; padding-left: 0pt; padding-bottom: 3pt; margin-top: 0pt; margin-right: 0pt; margin-left: 0pt; margin-bottom: 0pt">S-105

TABLE OF CONTENTS

Conversion of Notes

Upon conversion of the notes, we may deliver solely shares of our common stock (and cash in lieu of fractional shares), solely cash, or a combination of cash and shares of our common stock, as described above under Description of Notes Conversion Rights Settlement upon Conversion.

A U.S. holder of notes generally will not recognize gain or loss on the conversion of the notes solely into shares of common stock, other than cash received in lieu of fractional shares, which will be treated as described below, and other than amounts attributable to accrued but unpaid interest, which will be taxable as interest to the extent not previously included in income.

In the event that we deliver solely cash upon such a conversion, the U.S. holder s gain or loss will be determined in the same manner as if the U.S. holder disposed of the notes in a taxable disposition (as described above under Consequences to U.S. Holders Sale, Exchange or Other Taxable Disposition of Notes).

In the event that we deliver common stock and cash upon such a conversion, the U.S. federal income tax treatment of the conversion is uncertain. U.S. holders should consult their tax advisors regarding the consequences of such a conversion. It is possible that the conversion may be treated as a recapitalization or as a taxable exchange in part as discussed below.

Treatment as a Recapitalization. If we pay a combination of cash and stock in exchange for notes upon conversion, we intend to take the position that the notes are securities for U.S. federal income tax purposes and that, as a result, the exchange would be treated as a recapitalization. In such case, capital gain, but not loss, would be realized equal to the excess of the sum of the fair market value of the common stock and cash received (other than amounts attributable to accrued but unpaid interest, which will be taxable as interest to the extent not previously included in income) over a U.S. holder s adjusted tax basis in the notes, but such gain would be recognized only to the extent of the amount of cash received (excluding amounts attributable to accrued but unpaid interest and cash in lieu of fractional shares, which will be treated as described below).

Alternative Treatment as Part Conversion and Part Sale. If the conversion of a note into cash and common stock were not treated as a recapitalization, the cash payment received would generally be treated as proceeds from the sale of a portion of the note and taxed in the manner described under Consequences to U.S. Holders Sale, Exchange or Other Taxable Disposition of Notes above (or in the case of cash received in lieu of a fractional share, taxed as a disposition of a fractional share), and the common stock received should be treated as having been received upon a conversion of the note, which generally would not be taxable to a U.S. holder. The prior sentence does not apply to any cash or common stock received in respect of accrued and unpaid interest, which will be taxable as interest to the extent not previously included in income. The U.S. holder s tax basis in the note would generally be allocated pro rata among the common stock received (other than common stock received with respect to accrued but unpaid interest), the fractional share that is treated as sold for cash and the cash received, in accordance with their fair market values.

Fractional Shares. Cash received in lieu of a fractional share of common stock will be treated as a payment in exchange for the fractional share and generally will result in capital gain or loss. Gain or loss recognized on the receipt of cash paid in lieu of fractional shares generally will equal the difference between the amount of cash received and the amount of tax basis allocable to the fractional share exchanged.

Basis and Holding Period of Common Stock. Except as described above under Alternative Treatment as Part Conversion and Part Sale, the U.S. holder s tax basis in the shares of common stock received upon conversion of the

notes (other than common stock attributable to accrued but unpaid interest, the tax basis of which would equal the amount of accrued interest with respect to which the common stock was received, but including any fractional share deemed received) will be equal to the holder s aggregate tax basis in the notes converted, reduced by the amount of any cash received (other than cash received in lieu of a fractional share or cash attributable to accrued but unpaid interest), and increased by the amount of gain, if any, recognized (other than with respect to a fractional share).

A U.S. holder s holding period for the shares of common stock received by the holder upon conversion of notes generally will include the period during which the holder held the notes prior to the conversion,

TABLE OF CONTENTS

except that the holding period of any common stock received with respect to accrued but unpaid interest will commence on the day after the date of receipt.

Constructive Distributions

The conversion rate of the notes will be adjusted in certain circumstances, as described under Description of Notes Conversion Rights Conversion Rate Adjustments and Increase in Conversion Rate upon Conversion upon a Make-whole Fundamental Change. Adjustments (or failures to make adjustments) that have the effect of increasing a U.S. holder s proportionate interest in our assets or earnings may in some circumstances result in a deemed distribution to a U.S. holder for U.S. federal income tax purposes. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that have the effect of preventing the dilution of the interest of the holders of the notes, however, will generally not be considered to result in a deemed distribution to a U.S. holder. Certain of the possible conversion rate adjustments provided in the notes (including, without limitation, adjustments in respect of taxable dividends to holders of our common stock and adjustments to the conversion rate upon a make-whole fundamental change) may not qualify as being pursuant to a bona fide reasonable adjustment formula. If such an adjustment is made and does not so qualify, a U.S. holder generally will be deemed to have received a distribution even if the U.S. holder has not received any cash or property as a result of such adjustment. Any deemed distribution will be taxable as a dividend, return of capital, or capital gain in accordance with the description below under Consequences to U.S. Holders Distributions on Common Stock. It is not clear whether a constructive dividend deemed paid to a U.S. holder would be eligible for the preferential rates of U.S. federal income tax applicable in respect of certain dividends received. It is also unclear whether corporate holders would be entitled to claim the dividends-received deduction with respect to any such constructive dividends. Because a constructive dividend deemed received by a U.S. holder would not give rise to any cash from which any applicable withholding tax could be satisfied, if backup withholding is required on behalf of a U.S. holder (because such U.S. holder failed to establish an exemption from backup withholding taxes), any such payment may be withheld from payments of cash and common stock payable on the notes.

Distributions on Common Stock

Distributions made on our common stock generally will be included in a U.S. holder s income as ordinary dividend income to the extent of our current and accumulated earnings and profits. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. holder s adjusted tax basis in the common stock and thereafter as capital gain from the sale or exchange of such common stock. With respect to dividends received by certain non-corporate U.S. holders, the lower applicable long-term capital gains rates may apply if certain holding period requirements are satisfied. Dividends received by corporate U.S. holders may be eligible for a dividends-received deduction, subject to applicable limitations.

Sale or Other Taxable Disposition of Common Stock

Upon the sale or other taxable disposition of our common stock, a U.S. holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property received upon such disposition and (ii) the U.S. holder s adjusted tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if a U.S. holder s holding period in the common stock is more than one year at the time of the taxable disposition. In the case of certain non-corporate U.S. holders (including individuals), long-term capital gain generally is subject to U.S. federal income tax at a lower rate than short-term capital gain, which is taxed at ordinary income rates. The deductibility of capital losses is subject to significant limitations under the Code.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to payments of interest on the notes and dividends on shares of common stock and to the proceeds of a sale of a note or share of common stock paid to a U.S. holder unless the U.S. holder is an exempt recipient. Backup withholding will apply to those payments if the U.S. holder fails to provide its correct taxpayer identification number, or certification of exempt status, or if the U.S. holder is notified by the IRS that it has failed to report in full payments of

TABLE OF CONTENTS

interest and dividend income. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a U.S. holder s U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Consequences to Non-U.S. Holders

Payments of Interest

Subject to the discussions below concerning backup withholding, constructive distributions, and FATCA, payments of interest on the notes to a non-U.S. holder will generally not be subject to U.S. federal withholding tax, provided that:

interest paid on the note is not effectively connected with the non-U.S. holder s conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is not attributable to a U.S. permanent establishment or fixed base);

the non-U.S. holder does not actually or constructively own 10% or more of the total combined voting power of all classes of our stock that are entitled to vote within the meaning of section 871(h)(3) of the Code;

the non-U.S. holder is not a controlled foreign corporation that is related to us (actually or constructively) through stock ownership;

the non-U.S. holder is not a bank whose receipt of interest on a note is described in section 881(c)(3)(A) of the Code; and

(a) the non-U.S. holder provides its name and address, and certifies, under penalties of perjury, that it is not a U.S. person (which certification may be made on an IRS Form W-8BEN or W-8BEN-E or other applicable form) or (b) the non-U.S. holder holds the notes through certain foreign intermediaries, and the non-U.S. holder and the foreign intermediary satisfy the certification requirements of applicable Treasury regulations. Special certification rules apply to non-U.S. holders that are pass-through entities.

If a non-U.S. holder cannot satisfy the requirements described above, payments of interest will be subject to a 30% U.S. federal withholding tax, unless the non-U.S. holder provides a properly executed (i) IRS Form W-8BEN or W-8BEN-E (or other applicable form) claiming an exemption from or reduction in withholding under the benefit of an applicable income tax treaty or (ii) IRS Form W-8ECI (or other applicable form) stating that interest paid on the notes is not subject to withholding tax because it is effectively connected with the non-U.S. holder s conduct of a trade or business in the United States. If a non-U.S. holder is engaged in a trade or business in the United States and interest on the notes is effectively connected with the conduct of that trade or business and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment or fixed base, then, although the non-U.S. holder will be exempt from the 30% withholding tax provided the certification requirements discussed above are satisfied, the non-U.S. holder will be subject to U.S. federal income tax on that interest on a net income basis in the same manner as if the non-U.S. holder were a U.S. holder. In addition, if a non-U.S. holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or a lesser rate under an applicable income tax treaty) of its earnings and profits for the taxable year, subject to adjustments, that are effectively connected with its conduct of a trade or business in the United States.

Dividends and Constructive Distributions

Any dividends paid to a non-U.S. holder with respect to the shares of common stock (and any deemed dividends resulting from certain adjustments, or the failure to make adjustments, to the conversion rate, as discussed above under Consequences to U.S. Holders Constructive Distributions) will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. However, dividends that are effectively

connected with the conduct of a trade or business within the United States and, where required by an applicable income tax treaty, are attributable to a U.S. permanent establishment or fixed base, are not subject to the withholding tax, but instead are subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder were a U.S. holder.

TABLE OF CONTENTS

In addition, any such effectively connected income received by a non-U.S. holder that is a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

As discussed above under Consequences to Non-U.S. Holders Payments of Interest, certain certification requirements and disclosure requirements must be complied with in order to claim the benefit of an applicable treaty rate or for effectively connected income to be exempt from withholding. Because a constructive dividend deemed received by a non-U.S. holder would not give rise to any cash from which any applicable withholding tax could be satisfied, if withholding is required on behalf of a non-U.S. holder, any such payment may be withheld from payments of cash and common stock payable on the notes. A non-U.S. holder may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Sale, Exchange or Other Taxable Dispositions of Notes or Shares of Common Stock

Subject to the discussions below concerning backup withholding and FATCA, gain realized by a non-U.S. holder on the sale, exchange or other taxable disposition of a note or common stock will not be subject to U.S. federal income tax unless:

that gain is effectively connected with the non-U.S. holder s conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment or fixed base);
the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition and certain other conditions are met; or
we are or have been a U.S. real property holding corporation for U.S. federal income tax purposes during the shorter of the non-U.S. holder s holding period or the 5-year period ending on the date of disposition of the notes or common stock, as the case may be; provided, that as long as our common stock is regularly traded on an established securities market, generally only non-U.S. holders (i) who have held more than 5% of such class of stock or, if the notes are regularly traded, more than 5% of the notes at any time during such five-year or shorter period or (ii) if the notes are not regularly traded, who have acquired notes with a fair market value of more than 5% of such class of stock on the acquisition date would be subject to taxation under this rule. Although there can be no assurance, we believe that we are not, and we do not anticipate becoming, a U.S. real property holding corporation for U.S. federal income tax purposes. No assurance can be provided that our common stock will remain regularly traded on an established securities market for purposes of the rules described above.

If a non-U.S. holder is described in the first bullet point above, it will be subject to tax on the net gain derived from the sale, exchange or other taxable disposition under regular graduated U.S. federal income tax rates and in the same manner as if the non-U.S. holder were a U.S. holder. In addition, if a non-U.S. holder is a foreign corporation, it may be subject to the branch profits tax equal to 30% of its effectively connected earnings and profits for that taxable year, or at such lower rate as may be specified by an applicable income tax treaty. If a non-U.S. holder is an individual described in the second bullet point above, such holder will be subject to a flat 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the gain derived from the sale, exchange or other taxable disposition, which may be offset by U.S. source capital losses, even though such holder is not considered a resident of the United States.

Any gain recognized by a non-U.S. holder upon the conversion of a note will be subject to U.S. federal income tax in accordance with the above rules. Any common stock or cash which a non-U.S. holder receives on the conversion of a note that is attributable to accrued interest will be subject to U.S. federal income tax in accordance with the rules for taxation of interest described above under Consequences to Non-U.S. Holders Payments of Interest.

Information Reporting and Backup Withholding

Generally, we (or the applicable withholding agent) must report annually to the IRS and to non-U.S. holders the amount of interest and dividends paid to non-U.S. holders and the amount of tax, if any, withheld with respect to those payments. Copies of the information returns reporting such interest, dividends and

TABLE OF CONTENTS

withholding may also be made available to the tax authorities in the country in which a non-U.S. holder resides under the provisions of an applicable income tax treaty.

In general, a non-U.S. holder will not be subject to backup withholding with respect to payments of interest or dividends that we make, provided the certification described above in the last bullet point under Consequences to Non-U.S. Holders Payments of Interest has been received and we do not have actual knowledge or reason to know that the holder is a U.S. person, as defined under the Code, who is not an exempt recipient. A non-U.S. holder will be subject to information reporting and, depending on the circumstances, backup withholding with respect to payments of the proceeds of the sale of a note or share of our common stock within the United States or conducted through certain U.S.-related financial intermediaries, unless the certification described above has been received, and we do not have actual knowledge or reason to know that a holder is a U.S. person, as defined under the Code, who is not an exempt recipient, or the non-U.S. holder otherwise establishes an exemption. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder s U.S. federal income tax liability provided the required information is furnished timely to the IRS.

U.S. Federal Estate Taxes

A note beneficially owned by an individual who is not a citizen or resident of the U.S. (as specially defined for U.S. federal estate tax purposes) at the time of his or her death generally will not be subject to U.S. federal estate tax as a result of the individual s death, provided that:

the individual does not actually or constructively own 10% or more of the total combined voting power of all classes of our stock entitled to vote within the meaning of section 871(h)(3) of the Code; and

interest payments with respect to such note, if received at the time of the individual s death, would not have been effectively connected with the conduct of a U.S. trade or business by the individual.

Common stock owned or treated as owned by an individual who is not a citizen or resident of the U.S. (as specially defined for U.S. federal estate tax purposes) at the time of his or her death (including stock treated as owned by such non-U.S. holder by reason of a transfer subject to certain retained powers, or by reason of any transfer within three years of death) will be included in the individual s estate for U.S. federal estate tax purposes and thus will be subject to U.S. federal estate tax, unless an applicable estate tax treaty provides otherwise.

FATCA

Provisions of the Code and official guidance commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, impose a 30% withholding tax on payments of interest on the notes, dividends on our common stock, and, after December 31, 2018, gross proceeds from the sale or other disposition of the notes or our common stock (including settlement of the notes at maturity), if paid to a foreign entity unless (i) if the foreign entity is a foreign financial institution, the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a foreign financial institution, the foreign entity identifies certain of its U.S. investors, or (iii) the foreign entity is otherwise excepted under FATCA. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. If withholding under FATCA is required on any payment related to the notes or our common stock, investors not otherwise subject to withholding (or that otherwise would be entitled to a reduced rate of withholding) on such payment may be required to seek a refund or credit from the IRS.

Investors are encouraged to consult their own tax advisors regarding the possible implications of FATCA on their investment in the notes.

TABLE OF CONTENTS

UNDERWRITING

RBC Capital Markets, LLC and UBS Securities LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the principal amount of notes set forth opposite its name below.

Underwriter	Principal Amount of Notes
RBC Capital Markets, LLC	
UBS Securities LLC	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Citigroup Global Markets Inc.	
Credit Suisse Securities (USA) LLC	
Total	$ 400,000,000

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the notes sold under the underwriting agreement (other than those covered by the underwriters over-allotment option described below) if any of these notes are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the notes, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer s certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the notes at a price of % of the principal amount of the notes, plus accrued interest from the original issue date of the notes, if any, and to dealers at that price less a concession not in excess of % of the principal amount of the notes, plus accrued interest from the original issue date of the notes, if any. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their over-allotment option.

	Per	Without	With

	Note	Option	Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to Intercept	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $625,000 and are payable by us. The underwriters have agreed to reimburse us for certain expenses related to the offering. We also expect to enter into capped call transactions with the option counterparties as described below.

Over-allotment Option

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to an additional $60,000,000 aggregate principal amount of notes at the public offering price, less the underwriting discount, solely to cover over-allotments, if any. If the underwriters

TABLE OF CONTENTS

exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase an additional principal amount of notes proportionate to that underwriter s initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and certain beneficial owners of 5% or more of our securities (other than FMR LLC, Carmignac Gestion, Capital World Investors and Ameriprise Financial, Inc.) have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 45 days after the date of this prospectus supplement without first obtaining the written consent of RBC Capital Markets, LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

offer, pledge, sell or contract to sell any common stock,
sell any option or contract to purchase any common stock,
purchase any option or contract to sell any common stock,
grant any option, right or warrant for the sale of any common stock,
lend or otherwise dispose of or transfer any common stock,
request or demand that we file a registration statement related to the common stock, or
enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

The restrictions described above do not apply to, among other things:

sales of common stock by certain executive officers and directors under trading plans established prior to the date of the lock-up agreement pursuant to Rule 10b5-1 under the Exchange Act, subject to certain conditions; and
the sale of common stock issuable in connection with the exercise of stock options or the vesting of restricted stock units or awards during the lock-up period, subject to certain conditions.

RBC Capital Markets, LLC in its sole discretion may release the common stock and other securities subject to the lock-up agreements described above at any time without notice.

No Trading Market

The notes are a new issue of securities with no established trading market. We have been advised by certain of the underwriters that they intend to make a market in the notes but they are not obliged to do so and may discontinue market making at any time without notice. No assurance can be given as to the liquidity of the trading market for the notes. We do not intend to apply for listing of the notes on any securities exchange or for inclusion of the notes in any automated quotation system.

Nasdaq Global Select Market Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol ICPT.

Price Stabilization, Short Positions

In connection with the offering, the underwriters may purchase and sell the notes or shares of our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater principal amount of notes than they are required to purchase in the offering.

TABLE OF CONTENTS

Covered short sales are sales made in an amount not greater than the underwriters over-allotment option described above. The underwriters may close out any covered short position by either exercising their over-allotment option or purchasing notes in the open market. In determining the source of notes to close out the covered short position, the underwriters will consider, among other things, the price of notes available for purchase in the open market as compared to the price at which they may purchase notes through the over-allotment option. Naked short sales are sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing notes in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the notes in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of notes or shares of common stock made by the underwriters in the open market to peg, fix or maintain the price of the notes or common stock prior to the completion of the offering.

Similar to other purchase transactions, the underwriters purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of the notes or preventing or retarding a decline in the market price of the notes. As a result, the price of the notes may be higher than the price that might otherwise exist in the open market.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes or our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Capped Call Transactions

In connection with the pricing of the notes, we expect to enter into capped call transactions with the option counterparties. The capped call transactions are expected to reduce potential dilution to our common stock and/or offset any cash payments due in excess of the principal amount of converted notes, as the case may be, upon any conversion of notes, with such reduction and/or offset subject to a cap.

We intend to use approximately $ million of the net proceeds from this offering to pay the cost of the capped call transactions. If the underwriters exercise their over-allotment option, we may use a portion of the proceeds from the sale of the additional notes to enter into additional capped call transactions.

In connection with establishing their initial hedge of the capped call transactions, the option counterparties and/or their respective affiliates expect to enter into various derivative transactions with respect to our common stock and/or purchase shares of our common stock concurrently with or shortly after the pricing of the notes. This activity could increase (or reduce the size of any decrease in) the market price of our common stock or the notes at that time.

In addition, the option counterparties and/or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the notes and prior to the maturity of the notes (and are likely to do so during any observation period related to a conversion of notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or the notes, which could affect your ability to convert the notes and, to the extent the activity occurs during any observation period related to a conversion of notes, it could affect the number of shares and value of the consideration that you will receive upon conversion of the notes.

For a discussion of the potential impact of any market or other activity by the option counterparties and/or their respective affiliates in connection with the capped call transactions, see Risk Factors Risks Related to the Offering and the Notes The capped call transactions may affect the value of the notes and our common stock.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

TABLE OF CONTENTS

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area (each a Member State), no offer of notes which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

to any legal entity which is a qualified investor as defined in the Prospectus Directive;
to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or
in any other circumstances falling within Article 3(2) of the Prospectus Directive,
provided that no such offer of notes referred to in (A) to (C) shall result in a requirement for us or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of notes is made or who receives any communication in respect of an offer of notes, or who initially acquires any notes will be deemed to have represented, warranted, acknowledged and agreed to and with each representative and the Company that (1) it is a qualified investor within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any notes acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the notes acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where notes have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those notes to it is not treated under the Prospectus Directive as having been made to such persons.

We, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

This prospectus has been prepared on the basis that any offer of notes in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of notes. Accordingly any person making or intending to make an offer in that Member State of notes which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the underwriters have authorized, nor do they authorize, the making of any offer of notes in circumstances in which an obligation arises for us or the underwriters to publish a prospectus for such offer.

TABLE OF CONTENTS

For the purpose of the above provisions, the expression an offer to the public in relation to any notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe the notes, as the same may be varied in the Member State by any measure implementing the Prospectus Directive in the Member State and the expression Prospectus Directive means Directive 2003/71/EC (including the 2010 PD Amending Directive, to the extent implemented in the Member States) and includes any relevant implementing measure in the Member State and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are qualified investors (as defined in the Prospectus Directive)(i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The notes may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the notes or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the notes have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of notes will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of notes has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of notes.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This prospectus supplement is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for the prospectus supplement. The notes to which this prospectus supplement relates may be

illiquid and/or subject to restrictions on their resale. Prospective purchasers of the notes offered should conduct their own due diligence on the notes. If you do not understand the contents of this prospectus supplement you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the notes may only be made to persons (the Exempt Investors) who are sophisticated investors (within the meaning of section 708(8) of the Corporations Act), professional

TABLE OF CONTENTS

investors (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the notes without disclosure to investors under Chapter 6D of the Corporations Act.

The notes applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Further, any shares of common stock issued on conversion of the notes must not be offered for sale in Australia in the period of 12 months after the date of issue of those shares except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring notes must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to professional investors as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a prospectus as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, Japanese Person shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Non-CIS Securities may not be circulated or distributed, nor may the Non-CIS Securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

TABLE OF CONTENTS

Where the Non-CIS Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Non-CIS Securities pursuant to an offer made under Section 275 of the SFA except:

to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

where no consideration is or will be given for the transfer;

where the transfer is by operation of law;

as specified in Section 276(7) of the SFA; or

as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser s province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

TABLE OF CONTENTS

LEGAL MATTERS

Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York, will pass upon certain legal matters for us in connection with the offering of the notes. The underwriters are being represented in connection with the offering of the notes by Orrick, Herrington & Sutcliffe, LLP, New York, New York and Davis Polk & Wardwell LLP, New York, New York.

EXPERTS

The consolidated financial statements of Intercept Pharmaceuticals, Inc. as of December 31, 2015 and 2014, and for each of the years in the three-year period ended December 31, 2015, incorporated by reference in this prospectus from Intercept Pharmaceuticals, Inc. s Annual Report on Form 10-K for the year ended December 31, 2015 have been so included in reliance on the report of KPMG LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC s website at *www.sec.gov*. Copies of certain information filed by us with the SEC are also available on our website at *www.interceptpharma.com*. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus. You may also read and copy any document we file at the SEC s Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

This prospectus is part of a registration statement we filed with the SEC. This prospectus supplement and the accompany prospectus omit some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus supplement and the accompany prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC s Internet site.

TABLE OF CONTENTS

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus supplement and the accompanying prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-35668) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

Annual Report on Form 10-K filed with the SEC on February 29, 2016, as amended by the Amendment to Annual Report on Form 10-K/A filed with the SEC on April 29, 2016;

Quarterly Report on Form 10-Q filed with the SEC on May 10, 2016;

Current Reports on Form 8-K filed with the SEC on January 27, 2016, January 29, 2016, February 17, 2016, May 3, 2016, May 5, 2016 (except with respect to Item 2.02 and Exhibit 99.1), May 25, 2016, May 31, 2016 (except with respect to Item 7.01 and Exhibit 99.1), June 10, 2016 (except with respect to Item 7.01 and Exhibit 99.1) and June 28, 2016; and

The description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on September 27, 2012, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

Intercept Pharmaceuticals, Inc.
450 W. 15th Street, Suite 505
New York, New York 10011
Attn: Investor Relations
Phone: (646) 747-1000

TABLE OF CONTENTS

PROSPECTUS

Debt Securities
Common Stock
Preferred Stock
Depositary Shares
Purchase Contracts
Purchase Units
Warrants

We may issue securities from time to time in one or more offerings. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. This prospectus may be used to offer shares of our common stock for the account of persons other than us, whom we refer to in this prospectus as selling stockholders. You should read this prospectus and any applicable prospectus supplement carefully before you invest.

We or any selling stockholders may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement. Unless otherwise set forth in a prospectus supplement, we will not receive any proceeds from the sale of common stock by any selling stockholders.

Our common stock trades on The NASDAQ Global Select Market under the symbol ICPT.

Investing in these securities involves significant risks. See Risk Factors included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 1, 2014

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a shelf registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings, and selling stockholders may from time to time sell shares of common stock described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we or selling stockholders may offer. Each time we or selling stockholders sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading Where You Can Find More Information beginning on page 2 of this prospectus.

We have not authorized anyone to provide you with information different from that contained in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We do not take any responsibility for, and cannot provide any assurance as to the reliability of, any information other than the information in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. This prospectus and the accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to we, our, us and the Company refer, collectively, to Intercept Pharmaceuticals, Inc., a Delaware corporation, and its consolidated subsidiaries.

TABLE OF CONTENTS

RISK FACTORS

Investing in our securities involves significant risks. You should carefully consider the risks and uncertainties described in this prospectus and any accompanying prospectus supplement, including the risk factors set forth in our filings with the SEC that are incorporated by reference herein, including the risk factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, before making an investment decision pursuant to this prospectus and any accompanying prospectus supplement relating to a specific offering.

Our business, financial condition and results of operations could be materially and adversely affected by any or all of these risks or by additional risks and uncertainties not presently known to us or that we currently deem immaterial that may adversely affect us in the future.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC s website at *http://www.sec.gov.* Copies of certain information filed by us with the SEC are also available on our website at *http://www.interceptpharma.com.* Our website is not a part of this prospectus and is not incorporated by reference in this prospectus. You may also read and copy any document we file at the SEC s Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-35668) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

Annual Report on Form 10-K for the fiscal year ended December 31, 2013, as filed with the SEC on March 14, 2014;
Definitive Proxy Statement on Schedule 14A, as filed with the SEC on April 12, 2013 (excluding those portions that are not incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2012);

TABLE OF CONTENTS

Current Reports on Form 8-K and 8-K/A as filed with the SEC on April 15, 2013, May 13, 2013 (solely with respect to Item 5.02), January 2, 2014, January 10, 2014 (solely with respect to Item 8.01), February 18, 2014 (solely with respect to Item 5.02), March 17, 2014 (solely with respect to Item 8.01) and March 26, 2014; and

The description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on September 27, 2012, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

Intercept Pharmaceuticals, Inc.
450 W. 15th Street, Suite 505
New York, New York 10011
Attn: Investor Relations
Phone: (646) 747-1000

TABLE OF CONTENTS

FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. All statements contained or incorporated by reference herein, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, other than statements of historical facts, are forward-looking statements. The words anticipate, believe, estimate, expect, intend, may, plan, predict, project, potential, should, continue, and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed or implied in our forward-looking statements. There are a number of important factors that could cause actual results, levels of activity, performance or events to differ materially from those expressed or implied in the forward-looking statements we make. These important factors include our critical accounting estimates described in Part II, Item 7 Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates of our most recent Annual Report on Form 10-K and the factors set forth under the caption Risk Factors in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2013. Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and readers should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

TABLE OF CONTENTS

INTERCEPT PHARMACEUTICALS, INC.

We are a biopharmaceutical company focused on the development and commercialization of novel therapeutics to treat chronic liver and intestinal diseases utilizing our proprietary bile acid chemistry. Our product candidates have the potential to treat orphan and more prevalent liver and gastrointestinal diseases for which there currently are limited therapeutic solutions.

Our principal executive offices are located at 450 W. 15th Street, Suite 505, New York, New York 10011, and our telephone number is (646) 747-1000.

CONSOLIDATED RATIOS OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges and preferred stock dividends for each of the periods indicated. For purposes of calculating the ratios in the table below, earnings consist of net loss plus fixed charges. Fixed charges include interest expense and an estimate of the interest portion of rent expense which is deemed to be representative of the interest factor.

You should read this table in conjunction with the consolidated financial statements and notes incorporated by reference in this prospectus.

	Fiscal Year Ended December 31,			
	2010	2011	2012	2013
Consolidated ratios of earnings to fixed charges[1][2]	N/A	N/A	N/A	N/A
Consolidated ratios of earnings to fixed charges and preferred dividends[1][3]	N/A	N/A	N/A	N/A

(1) Due to our losses for the years ended December 31, 2010, 2011, 2012 and 2013, the ratio coverage was less than 1:1.

(2) We would have needed to generate additional earnings of $15.1 million, $12.7 million, $43.6 million and $67.8 million for the years ended December 31, 2010, 2011, 2012 and 2013, respectively, to cover our fixed charges in those periods.

(3) We would have needed to generate additional earnings of $18.0 million, $15.7 million, $46.3 million and $67.8 million for the years ended December 31, 2010, 2011, 2012 and 2013, respectively, to cover our fixed charges and accrued preferred dividends in those periods. We did not have any preferred stock outstanding after the completion of our initial public offering in October 2012.

TABLE OF CONTENTS

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include the acquisition of products, technologies or businesses, repayment and refinancing of debt, working capital and capital expenditures. We may temporarily invest the net proceeds in investment-grade, interest-bearing securities until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

Unless otherwise set forth in a prospectus supplement, we will not receive any proceeds from the sale of common stock by any selling stockholders.

TABLE OF CONTENTS

SELLING STOCKHOLDERS

In addition to covering the offering of the securities by us, this prospectus covers the offering for resale of common stock by selling stockholders. Information about selling stockholders, if any, will be set forth in a prospectus supplement, in an amendment to the registration statement of which this prospectus is a part or in other filings we make with the SEC under the Exchange Act, which are incorporated by reference.

TABLE OF CONTENTS

DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. When we refer to the Company, we, our, and us in this section, we mean Intercept Pharmaceuticals, Inc. excluding, unless the conte otherwise requires or as otherwise expressly stated, our subsidiaries.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

None of the indentures will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The senior debt securities will constitute our unsubordinated general obligations and will rank pari passu with our other unsubordinated obligations. The subordinated debt securities will constitute our subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading Certain Terms of the Subordinated Debt Securities Subordination.

The debt securities will be our unsecured obligations unless otherwise specified in the applicable prospectus supplement. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and any free writing prospectus will include any additional or different terms of the debt securities of any series being offered, including the following terms:

the title and type of the debt securities;

whether the debt securities will be senior or subordinated debt securities, and, with respect to debt securities issued under the subordinated indenture the terms on which they are subordinated;

the aggregate principal amount of the debt securities;

the price or prices at which we will sell the debt securities;

the maturity date or dates of the debt securities and the right, if any, to extend such date or dates;

the rate or rates, if any, per year, at which the debt securities will bear interest, or the method of determining such rate or rates;

TABLE OF CONTENTS

the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;

the right, if any, to extend the interest payment periods and the duration of that extension;

the manner of paying principal and interest and the place or places where principal and interest will be payable;

provisions for a sinking fund, purchase fund or other analogous fund, if any;

any redemption dates, prices, obligations and restrictions on the debt securities;

the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable;

any conversion or exchange features of the debt securities;

whether and upon what terms the debt securities may be defeased;

any events of default or covenants in addition to or in lieu of those set forth in the indenture;

whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions;

whether the debt securities will be guaranteed as to payment or performance;

if the debt securities of the series or, if applicable, any guarantees will be secured by any collateral and, if so, a general description of the collateral and the terms and provisions of such collateral security, pledge or other agreements; and

any other material terms of the debt securities.

The applicable prospectus supplement will also describe any applicable material U.S. federal income tax consequences.

When we refer to principal in this section with reference to the debt securities, we are also referring to premium, if any.

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

You may present debt securities for exchange and you may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide you those services without charge, although you may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending

TABLE OF CONTENTS

on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked.

Certain Terms of the Senior Debt Securities

Covenants. Unless we indicate otherwise in a prospectus supplement, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets. Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust (subject to certain exceptions provided for in the senior indenture);
the successor entity assumes our obligations on the senior debt securities and under the senior indenture;
immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
certain other conditions are met.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture for any series of senior debt securities:

failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 90 days (or such other period as may be specified for such series);
failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period);
default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series;
certain events of bankruptcy or insolvency, whether or not voluntary; and
any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

Unless we indicate otherwise in a prospectus supplement, the default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

TABLE OF CONTENTS

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs with respect to us and is continuing, the entire principal amount of and accrued interest, if any, on each series of senior debt securities then outstanding shall become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, prior to a declaration of acceleration and subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities or in respect of a covenant or provision of the senior indenture which cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto. For information as to the waiver of defaults, see Modification and Waiver.

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

- the holder gives the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default;
- the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense;
- the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security to receive payment of the principal of and interest, if any, on such senior debt security in accordance with the terms of such debt security, or to

bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

TABLE OF CONTENTS

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge. We can satisfy and discharge our obligations to holders of any series of senior debt securities if:

we pay or cause to be paid, as and when due and payable, the principal of and any interest on all senior debt securities of such series outstanding under the senior indenture; or
all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year) and we deposit in trust a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

Under current U.S. federal income tax law, the deposit and our legal release from the senior debt securities would be treated as a taxable event, and beneficial owners of such debt securities would generally recognize any gain or loss on such senior debt securities. Purchasers of the senior debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance. Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any senior series of senior debt securities issued under the indentures.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the senior debt securities of any series (called legal defeasance) if certain conditions are met, including the following:

We deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.
There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.

We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we ever did accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change of current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the senior debt securities (called covenant defeasance). In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the debt senior securities. In order to achieve covenant defeasance, we must do the following (among other things):

We must deposit in trust for your benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal and any other payments on the senior debt securities of that series on their various due dates.

TABLE OF CONTENTS

We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due.

If we accomplish covenant defeasance, you can still look to us for repayment of the senior debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

Modification and Waiver. We and the trustee may amend or supplement the senior indenture or the senior debt securities without the consent of any holder:

to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;

to evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture;

to comply with the requirements of the SEC in order to effect or maintain th qualification of the indenture under the Trust Indenture Act of 1939, as amended;

to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default;

to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement;

to provide for or add guarantors with respect to the senior debt securities of any series;

to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture;

to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;

to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms, purposes of issue, authentication and delivery of any series of senior debt securities;

to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding; or

to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

extends the final maturity of any senior debt securities of such series;

reduces the principal amount of on any senior debt securities of such series;

reduces the rate or extends the time of payment of interest on any senior debt securities of such series;

reduces the amount payable upon the redemption of any senior debt securities of such series;

TABLE OF CONTENTS

changes the currency of payment of principal of or interest on any senior debt securities of such series;
reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy;
waives a default in the payment of principal of or interest on the senior debt securities;
changes the provisions relating to the waiver of past defaults or changes or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor;
modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification; or
reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or to modify or amend or to waive certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Incorporators, Stockholders, Officers, Directors. The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee. The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person s own affairs.

The senior indenture and the provisions of the Trust Indenture Act of 1939, or Trust Indenture Act, incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds. All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such principal, premium or interest became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

TABLE OF CONTENTS

Governing Law. The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term senior indebtedness of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

- all of the indebtedness of that person for money borrowed;
- all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;
- all of the lease obligations which are capitalized on the books of that person in accordance with generally accepted accounting principles;
- all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and
- all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated debt indenture.

TABLE OF CONTENTS

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is intended as a summary only. This description is based upon, and is qualified by reference to, our restated certificate of incorporation, our restated by-laws and applicable provisions of Delaware corporate law. This summary is not complete. You should read our restated certificate of incorporation and restated by-laws, which are filed as exhibits to the registration statement of which this prospectus forms a part, for the provisions that are important to you.

Our authorized capital stock consists of 25,000,000 shares of common stock, $0.001 par value per share, and 5,000,000 shares of preferred stock, $0.001 par value per share. As of February 28, 2014, 19,519,657 shares of common stock were outstanding, and no shares of preferred stock were outstanding. In addition, as of February 28, 2014, we also had outstanding options to purchase 1,522,818 shares of our common stock, restricted stock units to purchase 104,941 shares of our common stock and warrants to purchase 865,381 shares of our common stock.

Common Stock

Annual Meeting. Annual meetings of our stockholders are held on the date designated in accordance with our restated by-laws. Written notice must be mailed to each stockholder entitled to vote not less than ten nor more than 60 days before the date of the meeting. The presence in person or by proxy of the holders of record of a majority of our issued and outstanding shares entitled to vote at such meeting constitutes a quorum for the transaction of business at meetings of the stockholders. Special meetings of the stockholders may be called for any purpose only by our board of directors pursuant to a resolution adopted by a majority of the total number of directors. Except as may be otherwise provided by applicable law, our restated certificate of incorporation or our restated by-laws, all elections shall be decided by a plurality, and all other questions shall be decided by a majority, of the votes cast by stockholders entitled to vote thereon at a duly held meeting of stockholders at which a quorum is present.

Voting Rights. Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders and do not have cumulative voting rights.

Dividends. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments.

Liquidation and Dissolution. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in any of our assets remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Other Rights. The holders of common stock have no preferences or rights of conversion, exchange, pre-emptive or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Transfer Agent and Registrar. VStock Transfer, LLC is transfer agent and registrar for the common stock.

NASDAQ Global Select Market. Our common stock is listed on The NASDAQ Global Select Market under the symbol ICPT.

Preferred Stock

As of February 28, 2014, no shares of preferred stock were outstanding. Other terms of any series of preferred stock will be described in the prospectus supplement relating to that series of preferred stock. The terms of any series of preferred stock may differ from the terms described below. Certain provisions of the preferred stock described below and in any applicable prospectus supplement are not complete.

We are authorized to issue blank check preferred stock, which may be issued in one or more series upon authorization of our board of directors. Our board of directors is authorized to fix the designation of the series, the number of authorized shares of the series, dividend rights and terms, conversion rights, voting rights, redemption rights and terms, liquidation preferences and any other rights, powers, preferences and

TABLE OF CONTENTS

limitations applicable to each series of preferred stock. The authorized shares of our preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. If the approval of our stockholders is not required for the issuance of shares of our preferred stock, our board may determine not to seek stockholder approval. The specific terms of any series of preferred stock offered pursuant to this prospectus will be described in the prospectus supplement relating to that series of preferred stock.

A series of our preferred stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue such shares based upon its judgment as to the best interests of our stockholders. Our directors, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt through which an acquirer may be able to change the composition of our board of directors, including a tender offer or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of the stock.

The preferred stock has the terms described below unless otherwise provided in the prospectus supplement relating to a particular series of preferred stock. You should read the prospectus supplement relating to the particular series of preferred stock being offered for specific terms, including:

the designation and stated value per share of the preferred stock and the number of shares offered;
the amount of liquidation preference per share;
the price at which the preferred stock will be issued;
the dividend rate, or method of calculation of dividends, the dates on which dividends will be payable, whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will commence to accumulate;
any redemption or sinking fund provisions;
if other than the currency of the United States, the currency or currencies including composite currencies in which the preferred stock is denominated and/or in which payments will or may be payable;
any conversion provisions;
whether we have elected to offer depositary shares as described below under Description of Depositary Shares; and
any other rights, preferences, privileges, limitations and restrictions on the preferred stock.

The preferred stock will, when issued, be fully paid and nonassessable. Unless otherwise specified in the prospectus supplement, each series of preferred stock will rank equally as to dividends and liquidation rights in all respects with each other series of preferred stock. The rights of holders of shares of each series of preferred stock will be subordinate to those of our general creditors.

As described under Description of Depositary Shares, we may, at our option, with respect to any series of preferred stock, elect to offer fractional interests in shares of preferred stock, and provide for the issuance of depositary receipts representing depositary shares, each of which will represent a fractional interest in a share of the series of preferred stock. The fractional interest will be specified in the prospectus supplement relating to a particular series of preferred stock.

Rank. Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up of its affairs, rank:

senior to our common stock and to all equity securities ranking junior to such preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs;

on a parity with all equity securities issued by us, the terms of which specifically provide that such equity securities rank on a parity with the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs; and

TABLE OF CONTENTS

junior to all equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs.

The term equity securities does not include convertible debt securities.

Dividends. Holders of the preferred stock of each series will be entitled to receive, when, as and if declared by our board of directors, cash dividends at such rates and on such dates described in the prospectus supplement. Different series of preferred stock may be entitled to dividends at different rates or based on different methods of calculation. The dividend rate may be fixed or variable or both. Dividends will be payable to the holders of record as they appear on our stock books on record dates fixed by our board of directors, as specified in the applicable prospectus supplement.

Dividends on any series of preferred stock may be cumulative or noncumulative, as described in the applicable prospectus supplement. If our board of directors does not declare a dividend payable on a dividend payment date on any series of noncumulative preferred stock, then the holders of that noncumulative preferred stock will have no right to receive a dividend for that dividend payment date, and we will have no obligation to pay the dividend accrued for that period, whether or not dividends on that series are declared payable on any future dividend payment dates. Dividends on any series of cumulative preferred stock will accrue from the date we initially issue shares of such series or such other date specified in the applicable prospectus supplement.

No dividends may be declared or paid or funds set apart for the payment of any dividends on any parity securities unless full dividends have been paid or set apart for payment on the preferred stock. If full dividends are not paid, the preferred stock will share dividends pro rata with the parity securities.

No dividends may be declared or paid or funds set apart for the payment of dividends on any junior securities unless full dividends for all dividend periods terminating on or prior to the date of the declaration or payment will have been paid or declared and a sum sufficient for the payment set apart for payment on the preferred stock.

Liquidation Preference. Upon any voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before we make any distribution or payment to the holders of any common stock or any other class or series of our capital stock ranking junior to the preferred stock in the distribution of assets upon any liquidation, dissolution or winding up of our affairs, the holders of each series of preferred stock shall be entitled to receive out of assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference per share set forth in the prospectus supplement, plus any accrued and unpaid dividends thereon. Such dividends will not include any accumulation in respect of unpaid noncumulative dividends for prior dividend periods. Unless otherwise specified in the prospectus supplement, after payment of the full amount of their liquidating distributions, the holders of preferred stock will have no right or claim to any of our remaining assets. Upon any such voluntary or involuntary liquidation, dissolution or winding up, if our available assets are insufficient to pay the amount of the liquidating distributions on all outstanding preferred stock and the corresponding amounts payable on all other classes or series of our capital stock ranking on parity with the preferred stock and all other such classes or series of shares of capital stock ranking on parity with the preferred stock in the distribution of assets, then the holders of the preferred stock and all other such classes or series of capital stock will share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be entitled.

Upon any such liquidation, dissolution or winding up and if we have made liquidating distributions in full to all holders of preferred stock, we will distribute our remaining assets among the holders of any other classes or series of capital stock ranking junior to the preferred stock according to their respective rights and preferences and, in each case, according to their respective number of shares. For such purposes, our consolidation or merger with or into any

other corporation, trust or entity, or the sale, lease or conveyance of all or substantially all of our property or assets will not be deemed to constitute a liquidation, dissolution or winding up of our affairs.

TABLE OF CONTENTS

Redemption. If so provided in the applicable prospectus supplement, the preferred stock will be subject to mandatory redemption or redemption at our option, as a whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such prospectus supplement.

The prospectus supplement relating to a series of preferred stock that is subject to mandatory redemption will specify the number of shares of preferred stock that shall be redeemed by us in each year commencing after a date to be specified, at a redemption price per share to be specified, together with an amount equal to all accrued and unpaid dividends thereon to the date of redemption. Unless the shares have a cumulative dividend, such accrued dividends will not include any accumulation in respect of unpaid dividends for prior dividend periods. We may pay the redemption price in cash or other property, as specified in the applicable prospectus supplement. If the redemption price for preferred stock of any series is payable only from the net proceeds of the issuance of shares of our capital stock, the terms of such preferred stock may provide that, if no such shares of our capital stock shall have been issued or to the extent the net proceeds from any issuance are insufficient to pay in full the aggregate redemption price then due, such preferred stock shall automatically and mandatorily be converted into the applicable shares of our capital stock pursuant to conversion provisions specified in the applicable prospectus supplement. Notwithstanding the foregoing, we will not redeem any preferred stock of a series unless:

if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on the preferred stock for all past dividend periods and the then current dividend period; or

if such series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends for the then current dividend period.

In addition, we will not acquire any preferred stock of a series unless:

if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on all outstanding shares of such series of preferred stock for all past dividend periods and the then current dividend period; or

if that series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends on the preferred stock of such series for the then current dividend period.

However, at any time we may purchase or acquire preferred stock of that series (1) pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding preferred stock of such series or (2) by conversion into or exchange for shares of our capital stock ranking junior to the preferred stock of such series as to dividends and upon liquidation.

If fewer than all of the outstanding shares of preferred stock of any series are to be redeemed, we will determine the number of shares that may be redeemed pro rata from the holders of record of such shares in proportion to the number of such shares held or for which redemption is requested by such holder or by any other equitable manner that we determine. Such determination will reflect adjustments to avoid redemption of fractional shares.

Unless otherwise specified in the prospectus supplement, we will mail notice of redemption at least 30 days but not more than 60 days before the redemption date to each holder of record of preferred stock to be redeemed at the address shown on our stock transfer books. Each notice shall state:

the redemption date;

the number of shares and series of preferred stock to be redeemed;

the redemption price;

the place or places where certificates for such preferred stock are to be surrendered for payment of the redemption price;

TABLE OF CONTENTS

that dividends on the shares to be redeemed will cease to accrue on such redemption date;
the date on which the holder s conversion rights, if any, as to such shares shall terminate; and
the specific number of shares to be redeemed from each such holder if fewer than all the shares of any series are to be redeemed.

If notice of redemption has been given and we have set aside the funds necessary for such redemption in trust for the benefit of the holders of any shares called for redemption, then from and after the redemption date, dividends will cease to accrue on such shares, and all rights of the holders of such shares will terminate, except the right to receive the redemption price.

Voting Rights. Holders of preferred stock will not have any voting rights, except as required by law or as indicated in the applicable prospectus supplement.

Unless otherwise provided for under the terms of any series of preferred stock, no consent or vote of the holders of shares of preferred stock or any series thereof shall be required for any amendment to our restated certificate of incorporation that would increase the number of authorized shares of preferred stock or the number of authorized shares of any series thereof or decrease the number of authorized shares of preferred stock or the number of authorized shares of any series thereof (but not below the number of authorized shares of preferred stock or such series, as the case may be, then outstanding).

Conversion Rights. The terms and conditions, if any, upon which any series of preferred stock is convertible into our common stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include the number of shares of common stock into which the shares of preferred stock are convertible, the conversion price, rate or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at our option or at the option of the holders of the preferred stock, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption.

Transfer Agent and Registrar. The transfer agent and registrar for the preferred stock will be set forth in the applicable prospectus supplement.

Warrants

As of February 28, 2014, we had outstanding warrants to purchase 865,381 of shares of our common stock, at an exercise price of $10.40 per share, which expire on January 25, 2015. The warrants have a net exercise provision under which the holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net number of shares of our common stock based on the fair market value of the underlying shares of our common stock at the time of exercise of the warrant, after deduction of the aggregate exercise price. The warrants also contain provisions for the adjustment of the exercise price in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations and upon the issuance of shares of our common stock for no consideration or at a price less than the exercise price, excluding certain shares of our common stock issuable upon exercise of options, warrants or conversion of convertible securities. If the exercise price is adjusted as a result of a lower-priced issuance, the exercise price of the warrants will be reduced based on a weighted average of the difference between the exercise price of the warrants and the issuance price of the shares.

Registration Rights

We have entered into a third amended and restated stockholders agreement, dated August 9, 2012, which we refer to as the stockholders agreement, with certain existing holders of our common stock and the holders of warrants to

purchase our common stock described above. As of February 28, 2014, holders of an aggregate of up to 8,363,728 shares of our common stock, including shares of our common stock issuable upon exercise of outstanding warrants, having rights under the stockholders agreement, which we refer to as registrable shares, have the right to require us to register such shares under the Securities Act under specified circumstances. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. If not otherwise exercised, the rights described below will expire on the earliest to occur of (a) October 16, 2015, (b) the date on which no stockholder holds any registrable shares or (c) the sale of all or substantially all of our assets or business by merger, sale of assets or otherwise. The

TABLE OF CONTENTS

summary of the registration rights below is qualified by reference to the stockholders agreement, a copy of which is filed as an exhibit to the registration statement of which this prospectus forms a part.

Demand Registration Rights. Subject to specified limitations set forth in the stockholders agreement, at any time, each holder having rights under the stockholders agreement and holding at least 1,500,000 shares of our common stock or the holders of at least 30% of the then outstanding registrable shares, acting together, may request in writing that we register all or a portion of the registrable shares under the Securities Act so long as the total amount of registrable shares registered have an aggregate value of at least $25.0 million based on the then current market price or fair value. We are not obligated to file a registration statement pursuant to this provision on more than three occasions, and prior to the date of this prospectus, we have filed one registration statement upon demand by certain holders of registrable shares.

Form S-3 Registration Rights. In addition, provided that we are eligible for the use of Form S-3, or any successor form, the holders of registrable shares may make unlimited requests that we register all or a portion of their registrable shares on Form S-3, or any successor form, so long as registrable shares held by such holders have an aggregate value of at least $5.0 million based on the then current market price or fair value. Subject to specified limitations set forth in the stockholders agreement, we are obligated to use our commercially reasonable efforts to file a Form S-3, or any successor form, as soon as practicable, and in any event within 30 days, after the request for such registration.

Upon receipt of any request for demand or Form S-3 registration, we are required to promptly provide written notice of such proposed registration to all other holders of registrable shares, and subject to specified exceptions in the case of an underwritten public offering, such other holders will be entitled to elect to have their registrable shares included in such demand or Form S-3 registration.

Incidental Registration Rights. If we propose to file a registration statement under the Securities Act either for our own account or for the account of other stockholders (other than in connection with a registration statement on Form S-8 or Form S-4 or to cover securities proposed to be issued in exchange for securities or assets of another corporation), the holders of registrable shares will be entitled to notice of the registration and, subject to specified exceptions, we will be required to use our commercially reasonable efforts to register all or a portion of any registrable shares then held by such holders that they request that we register. In the event that any registration in which the holders of registrable shares participate pursuant to our stockholders agreement is an underwritten public offering, we agree to enter into an underwriting agreement containing customary representation and warranties and covenants, including without limitation customary provisions with respect to indemnification by us of the underwriters of such offering.

Other Provisions.

In the event that any registration in which the holders of registrable shares participate pursuant to the stockholders agreement is an underwritten public offering, the number of registrable shares to be included may, in specified circumstances, be limited due to market conditions.

We are required to pay all registration expenses, including registration and filing fees, exchange listing fees, printing expenses and accounting fees and the fees and expenses of one counsel to represent the selling stockholders, other than any underwriting discounts and commissions, related to any registration effected in accordance with the stockholders agreement. The stockholders agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions in the registration statement attributable to them.

Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of The NASDAQ Global Select Market. We may utilize these additional shares for a variety of corporate purposes, including for future public offerings to raise additional capital, or facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that

TABLE OF CONTENTS

could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a controlling interest in our company by means of a merger, tender offer, proxy contest or otherwise. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock, and the likelihood that such holders will receive dividend payments and payments upon liquidation.

Anti-Takeover Effects of Delaware Law and Our Restated Certificate of Incorporation and Restated By-Laws

The provisions of Delaware law and our restated certificate of incorporation and restated by-laws could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Delaware Business Combination Statute. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which we refer to as the DGCL. With some exception, Section 203 of the DGCL prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation. The shares held by the interested stockholder are not counted as outstanding when calculating the two-thirds of the outstanding voting stock needed for approval. For purposes of Section 203 of the DGCL, a business combination is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an interested stockholder is a person who, together with his or her affiliates and associates, owns, or within three years prior, did own, 15% or more of the corporation s outstanding voting stock.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our restated by-laws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, a stockholder must first have given timely notice of the proposal in writing to our secretary. For an annual meeting, a stockholder s notice generally must be delivered not less than 90 days nor more than 120 days prior to the first anniversary of the previous year s annual meeting date; *provided*, that if the date of the annual meeting is more than 30 days before or more than 30 days after the anniversary of the previous year s annual meeting date, such stockholder s notice must be delivered not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the close of business on the 10th day following the day on which public announcement of the date of such meeting is first made by us. For a special meeting, the notice must generally be delivered not earlier than the 90th day prior to the meeting and not later than the later of (1) the 60th day prior to the meeting or (2) the 10th day following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in the restated by-laws. If it is determined that business was not properly brought before a meeting in accordance with our by-law provisions, such business will not be conducted at the meeting.

Special Meetings of Stockholders. Special meetings of the stockholders may be called only by our board of directors pursuant to a resolution adopted by a majority of the total number of directors.

TABLE OF CONTENTS

No Stockholder Action by Written Consent. Any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders provided, however, our restated certificate of incorporation provides that if any one stockholder, together with its affiliates, collectively holds a majority of the voting power of the then-outstanding shares of our capital stock, action may be taken without a meeting and vote, through the written consent of holders of the requisite number of votes necessary to authorize or take such action at a meeting.

Board of Directors. We do not have a classified board of directors. All of our directors are elected annually. The number of directors comprising our board of directors is fixed from time to time by the board of directors.

Removal of Directors by Stockholders. Our restated bylaws provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 80% of the votes that all our stockholders would be entitled to cast in an annual election of directors, and our restated certificate of incorporation and restated bylaws provide that any vacancy on our board of directors, including a vacancy resulting from an increase in the size of our board of directors, may be filled only by vote of a majority of our directors then in office.

Super Majority Stockholder Vote Required for Certain Actions. The DGCL provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation s certificate of incorporation or by-laws, unless the corporation s certificate of incorporation or by-laws, as the case may be, requires a greater percentage. Our restated certificate of incorporation requires the affirmative vote of the holders of at least 80% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section of the prospectus entitled Anti-Takeover Effects of Delaware Law and Our Restated Certificate of Incorporation and Restated By-Laws. This 80% stockholder vote would be in addition to any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. The affirmative vote of at least 80% of our outstanding voting stock is also required for any amendment to, or repeal of, our restated by-laws by the stockholders. Our restated by-laws may be amended or repealed by a simple majority vote of the board of directors.

Directors Liability

We have entered into indemnification agreements with each of our directors and officers. The indemnification agreements and our restated certificate of incorporation and restated by-laws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

TABLE OF CONTENTS

DESCRIPTION OF DEPOSITARY SHARES

General

We may, at our option, elect to offer fractional shares of preferred stock, which we call depositary shares, rather than full shares of preferred stock. If we do, we will issue to the public receipts, called depositary receipts, for depositary shares, each of which will represent a fraction, to be described in the applicable prospectus supplement, of a share of a particular series of preferred stock. Unless otherwise provided in the prospectus supplement, each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in a share of preferred stock represented by the depositary share, to all the rights and preferences of the preferred stock represented by the depositary share. Those rights include dividend, voting, redemption, conversion and liquidation rights.

The shares of preferred stock underlying the depositary shares will be deposited with a bank or trust company selected by us to act as depositary under a deposit agreement between us, the depositary and the holders of the depositary receipts. The depositary will be the transfer agent, registrar and dividend disbursing agent for the depositary shares.

The depositary shares will be evidenced by depositary receipts issued pursuant to the deposit agreement. Holders of depositary receipts agree to be bound by the deposit agreement, which requires holders to take certain actions such as filing proof of residence and paying certain charges.

The summary of terms of the depositary shares contained in this prospectus is not a complete description of the terms of the depositary shares. You should refer to the form of the deposit agreement, our certificate of incorporation and the certificate of designation for the applicable series of preferred stock that are, or will be, filed with the SEC.

Dividends and Other Distributions

The depositary will distribute all cash dividends or other cash distributions, if any, received in respect of the preferred stock underlying the depositary shares to the record holders of depositary shares in proportion to the numbers of depositary shares owned by those holders on the relevant record date. The relevant record date for depositary shares will be the same date as the record date for the underlying preferred stock.

If there is a distribution other than in cash, the depositary will distribute property (including securities) received by it to the record holders of depositary shares, unless the depositary determines that it is not feasible to make the distribution. If this occurs, the depositary may, with our approval, adopt another method for the distribution, including selling the property and distributing the net proceeds from the sale to the holders.

Liquidation Preference

If a series of preferred stock underlying the depositary shares has a liquidation preference, in the event of the voluntary or involuntary liquidation, dissolution or winding up of us, holders of depositary shares will be entitled to receive the fraction of the liquidation preference accorded each share of the applicable series of preferred stock, as set forth in the applicable prospectus supplement.

Withdrawal of Stock

Unless the related depositary shares have been previously called for redemption, upon surrender of the depositary receipts at the office of the depositary, the holder of the depositary shares will be entitled to delivery, at the office of the depositary to or upon his or her order, of the number of whole shares of the preferred stock and any money or other property represented by the depositary shares. If the depositary receipts delivered by the holder evidence a number of depositary shares in excess of the number of depositary shares representing the number of whole shares of preferred stock to be withdrawn, the depositary will deliver to the holder at the same time a new depositary receipt evidencing the excess number of depositary shares. In no event will the depositary deliver fractional shares of preferred stock upon surrender of depositary receipts. Holders of preferred stock thus withdrawn may not thereafter deposit those shares under the deposit agreement or receive depositary receipts evidencing depositary shares therefor.

Redemption of Depositary Shares

Whenever we redeem shares of preferred stock held by the depositary, the depositary will redeem as of the same redemption date the number of depositary shares representing shares of the preferred stock so

TABLE OF CONTENTS

redeemed, so long as we have paid in full to the depositary the redemption price of the preferred stock to be redeemed plus an amount equal to any accumulated and unpaid dividends on the preferred stock to the date fixed for redemption. The redemption price per depositary share will be equal to the redemption price and any other amounts per share payable on the preferred stock multiplied by the fraction of a share of preferred stock represented by one depositary share. If less than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot or pro rata or by any other equitable method as may be determined by the depositary.

After the date fixed for redemption, depositary shares called for redemption will no longer be deemed to be outstanding and all rights of the holders of depositary shares will cease, except the right to receive the monies payable upon redemption and any money or other property to which the holders of the depositary shares were entitled upon redemption upon surrender to the depositary of the depositary receipts evidencing the depositary shares.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of the preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary receipts relating to that preferred stock. The record date for the depositary receipts relating to the preferred stock will be the same date as the record date for the preferred stock. Each record holder of the depositary shares on the record date will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the number of shares of preferred stock represented by that holder s depositary shares. The depositary will endeavor, insofar as practicable, to vote the number of shares of preferred stock represented by the depositary shares in accordance with those instructions, and we will agree to take all action that may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote any shares of preferred stock except to the extent it receives specific instructions from the holders of depositary shares representing that number of shares of preferred stock.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary receipts will pay transfer, income and other taxes and governmental charges and such other charges (including those in connection with the receipt and distribution of dividends, the sale or exercise of rights, the withdrawal of the preferred stock and the transferring, splitting or grouping of depositary receipts) as are expressly provided in the deposit agreement to be for their accounts. If these charges have not been paid by the holders of depositary receipts, the depositary may refuse to transfer depositary shares, withhold dividends and distributions and sell the depositary shares evidenced by the depositary receipt.

Amendment and Termination of the Deposit Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended by agreement between us and the depositary. However, any amendment that materially and adversely alters the rights of the holders of depositary shares, other than fee changes, will not be effective unless the amendment has been approved by the holders of a majority of the outstanding depositary shares. The deposit agreement may be terminated by the depositary or us only if:

all outstanding depositary shares have been redeemed; or

there has been a final distribution of the preferred stock in connection with our dissolution and such distribution has been made to all the holders of depositary shares.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering to us notice of its election to do so, and we may remove the depositary at any time. Any resignation or removal of the depositary will take effect upon our appointment of a successor depositary and its acceptance of such appointment. The successor depositary must be appointed within 60 days after delivery of the notice of resignation or removal and must be a bank or trust company having its principal office in the United States and having the requisite combined capital and surplus as set forth in the applicable agreement.

TABLE OF CONTENTS

Notices

The depositary will forward to holders of depositary receipts all notices, reports and other communications, including proxy solicitation materials received from us, that are delivered to the depositary and that we are required to furnish to the holders of the preferred stock. In addition, the depositary will make available for inspection by holders of depositary receipts at the principal office of the depositary, and at such other places as it may from time to time deem advisable, any reports and communications we deliver to the depositary as the holder of preferred stock.

Limitation of Liability

Neither we nor the depositary will be liable if either we or it is prevented or delayed by law or any circumstance beyond its control in performing its obligations. Our obligations and those of the depositary will be limited to performance in good faith of our and their duties thereunder. We and the depositary will not be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. We and the depositary may rely upon written advice of counsel or accountants, on information provided by persons presenting preferred stock for deposit, holders of depositary receipts or other persons believed to be competent to give such information and on documents believed to be genuine and to have been signed or presented by the proper party or parties.

TABLE OF CONTENTS

DESCRIPTION OF PURCHASE CONTRACTS AND PURCHASE UNITS

We may issue purchase contracts, including contracts obligating holders to purchase from or sell to us, and obligating us to sell to or purchase from the holders, a specified number of shares of our common stock, preferred stock or depositary shares at a future date or dates, which we refer to in this prospectus as purchase contracts. The price per share of common stock, preferred stock or depositary shares and the number of shares of each may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula set forth in the purchase contracts. The purchase contracts may be issued separately or as part of units, often known as purchase units, consisting of one or more purchase contracts and beneficial interests in debt securities or any other securities described in the applicable prospectus supplement or any combination of the foregoing, securing the holders obligations to purchase the common stock, preferred stock or depositary shares under the purchase contracts.

The purchase contracts may require us to make periodic payments to the holders of the purchase units or vice versa, and these payments may be unsecured or prefunded on some basis. The purchase contracts may require holders to secure their obligations under those contracts in a specified manner, including pledging their interest in another purchase contract.

The applicable prospectus supplement will describe the terms of the purchase contracts and purchase units, including, if applicable, collateral or depositary arrangements.

TABLE OF CONTENTS

DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, common stock, preferred stock or depositary shares. We may offer warrants separately or together with one or more additional warrants, debt securities, common stock, preferred stock or depositary shares, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the accompanying prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;

whether the warrants are to be sold separately or with other securities as parts of units;

whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

any applicable material U.S. federal income tax consequences;

the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

the designation and terms of any equity securities purchasable upon exercise of the warrants;

the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;

if applicable, the designation and terms of the debt securities, common stock, preferred stock or depositary shares with which the warrants are issued and, the number of warrants issued with each security;

if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, common stock, preferred stock or depositary shares will be separately transferable;

the number of shares of common stock, the number of shares of preferred stock or the number of depositary shares purchasable upon exercise of a warrant and the price at which those shares may be purchased;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

information with respect to book-entry procedures, if any;

the antidilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;

any redemption or call provisions; and

any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

TABLE OF CONTENTS

FORMS OF SECURITIES

Each debt security, depositary share, purchase contract, purchase unit and warrant will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Unless the applicable prospectus supplement provides otherwise, certificated securities will be issued in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the debt securities, depositary shares, purchase contracts, purchase units or warrants represented by these global securities. The depositary maintains a computerized system that will reflect each investor s beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Registered Global Securities

We may issue the registered debt securities, depositary shares, purchase contracts, purchase units and warrants in the form of one or more fully registered global securities that will be deposited with a depositary or its nominee identified in the applicable prospectus supplement and registered in the name of that depositary or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

If not described below, any specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the applicable indenture, deposit agreement, purchase contract, warrant agreement or purchase unit agreement. Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their

names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture, deposit agreement, purchase contract, purchase unit agreement or warrant agreement. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture, deposit agreement, purchase contract, purchase unit agreement or warrant agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take

TABLE OF CONTENTS

any action that a holder is entitled to give or take under the applicable indenture, deposit agreement, purchase contract, purchase unit agreement or warrant agreement, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities, and any payments to holders with respect to depositary shares, warrants, purchase agreements or purchase units, represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of us, the trustees, the warrant agents, the unit agents or any other agent of ours, agent of the trustees or agent of the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment to holders of principal, premium, interest or other distribution of underlying securities or other property on that registered global security, will immediately credit participants accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in street name, and will be the responsibility of those participants.

If the depositary for any of the securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary s instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We or a selling stockholder may sell securities:

to or through underwriters, brokers or dealers;
through agents;
directly to one or more purchasers in negotiated sales or competitively bid transactions;
through a block trade in which the broker or dealer engaged to handle the block trade will attempt to sell the securities as agent, but may position and resell a portion of the block as principal to facilitate the transaction; or
through a combination of any of the above methods of sale.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders.

We or any selling stockholder may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act, and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions:

at a fixed price, or prices, which may be changed from time to time;
at market prices prevailing at the time of sale;
at prices related to such prevailing market prices; or
at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

the name of the agent or any underwriters;
the public offering or purchase price and the proceeds we will receive from the sales of securities;
any discounts and commissions to be allowed or paid to the agent or underwriters;
all other items constituting underwriting compensation;
any discounts and commissions to be allowed or re-allowed or paid to dealers; and
any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which the prospectus is delivered, we or any selling stockholder will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby

TABLE OF CONTENTS

underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Remarketing firms, agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

We may pay expenses incurred with respect to the registration of the shares of common stock owned by any selling stockholders.

If so indicated in the applicable prospectus supplement, we or any selling stockholder will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or one or more of our respective affiliates or any selling stockholder in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallot in connection with the offering, creating a short position for their own accounts. In addition, to cover overallotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than three scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the third business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than three scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

TABLE OF CONTENTS

To comply with the securities laws of some states, if applicable, the securities may be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, the validity of the securities in respect of which this prospectus is being delivered will be passed upon by Wilmer Cutler Pickering Hale and Dorr LLP.

EXPERTS

The consolidated financial statements of Intercept Pharmaceuticals, Inc. (a development stage enterprise) as of December 31, 2012 and December 31, 2013 and for each of the years in the three-year period ended December 31, 2013 and the information included in the cumulative from inception presentation for the period September 4, 2002 (inception) to December 31, 2013, incorporated by reference in this prospectus from Intercept Pharmaceuticals, Inc. s Annual Report on Form 10-K for the year ended December 31, 2013, have been so included in reliance on the report of KPMG LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The information incorporated by reference in this prospectus and included in the cumulative from inception presentation from September 4, 2002 (inception) to December 31, 2007 (not presented separately therein), has been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

TABLE OF CONTENTS

$400,000,000

% Convertible Senior Notes due 2023

June , 2016

Joint Book-Running Managers

RBC Capital Markets

UBS Investment Bank

BofA Merrill Lynch
Citigroup
Credit Suisse
