

PennyMac Mortgage Investment Trust
Form 424B5
August 16, 2012

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[TABLE OF CONTENTS](#)

[Table of Contents](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-182261

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 16, 2012

PROSPECTUS SUPPLEMENT
(To prospectus dated June 21, 2012)

12,000,000 Shares

PennyMac Mortgage Investment Trust

Common Shares

We are offering 12,000,000 of our common shares of beneficial interest, par value \$0.01 per share, or common shares.

The underwriters have agreed to purchase our common shares from us at a price of \$ _____ per share, which will result in approximately \$ _____ million of total net proceeds to us after deducting expenses. The underwriters may offer our common shares from time to time for sale in one or more transactions on the New York Stock Exchange, or the NYSE, in the over-the-counter market, through negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. One of our trustees has agreed to purchase 25,000 of our common shares in this offering from the underwriters at the same price per share that the underwriters are paying us for such common shares. See "Underwriting."

The underwriters may also exercise their option to purchase up to 1,800,000 additional common shares from us, at the price set forth above, for 30 days after the date of this prospectus supplement.

Our common shares are listed on the NYSE under the trading symbol "PMT." The last reported sale price of our common shares on the NYSE on August 15, 2012 was \$21.70 per share. On August 2, 2012, we declared a dividend on our common shares of \$0.55 per share, payable on August 31, 2012 to shareholders of record on August 16, 2012. Purchasers in this offering will not be entitled to receive that dividend.

We impose certain restrictions on the ownership and transfer of our common shares. You should read the information under the section entitled "Description of Shares of Beneficial Interest Restrictions on Ownership and Transfer" in the accompanying prospectus for a description

of these restrictions.

Investing in our common shares involves certain risks. See "Risk Factors" beginning on page S-3 of this prospectus supplement and in the reports we file with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, incorporated by reference in this prospectus supplement and the accompanying prospectus, to read about factors you should consider before making an investment in our common shares.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the common shares to purchasers on or about August , 2012 through the book-entry facilities of The Depository Trust Company.

BofA Merrill Lynch

Citigroup

Credit Suisse

August , 2012

Table of Contents

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus required to be filed with the Securities and Exchange Commission, or the SEC. We have not, and the underwriters have not, authorized anyone to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, any such free writing prospectus and the documents incorporated by reference is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

TABLE OF CONTENTS

Prospectus Supplement

About This Prospectus Supplement

S-ii

Cautionary Statement Regarding Forward-Looking Statements

S-ii

Summary

S-1

Risk Factors

S-3

Use of Proceeds

S-4

Capitalization

S-5

Underwriting

S-6

Legal Matters

S-13

Experts

S-13

Where You Can Find More Information

S-13

Documents Incorporated By Reference

S-14

Prospectus

About this Prospectus

3

PennyMac Mortgage Investment Trust

4

Risk Factors

4

Cautionary Statement Regarding Forward-Looking Statements

4

Use of Proceeds

7

Ratio of Earnings to Combined Fixed Charges and Preferred Share Distributions

7

Description of Shares of Beneficial Interest

8

Description of Warrants

14

Certain Provisions of Maryland Law and of Our Declaration of Trust and Bylaws

15

U.S. Federal Income Tax Considerations

22

Selling Shareholders

46

Plan of Distribution

47

Legal Matters

49

Experts

49

Where You Can Find More Information

49

Documents Incorporated By Reference

50

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, gives more general information, some of which may not apply to this offering. You should read this entire document, including this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference. In the event that the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information contained in this prospectus supplement. To the extent the information contained in or incorporated by reference into this prospectus supplement differs or varies from the information contained in or incorporated by reference into the accompanying prospectus, the information contained in or incorporated by reference into this prospectus supplement updates and supersedes such information.

Unless otherwise indicated or the context requires otherwise, references in this prospectus supplement to "we," "us," "our" and "our company" mean PennyMac Mortgage Investment Trust and its consolidated subsidiaries, including PennyMac Operating Partnership, L.P., or our operating partnership.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, as well as the documents we incorporate herein and therein by reference, contain certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which are subject to various risks and uncertainties. Forward-looking statements are generally identifiable by use of forward-looking terminology such as "may," "will," "should," "potential," "intend," "expect," "seek," "anticipate," "estimate," "approximately," "believe," "could," "project," "predict," "continue," "plan" or other similar words or expressions. Forward-looking statements are based on certain assumptions, discuss future expectations, describe future plans and strategies, contain financial and operating projections or state other forward-looking information. Examples of forward-looking statements include: (i) projections of our revenues, income, earnings per share, capital structure or other financial items; (ii) descriptions of our plans or objectives for future operations, products or services; (iii) forecasts of our future economic performance, interest rates, profit margins and our share of future markets; and (iv) descriptions of assumptions underlying or relating to any of the foregoing expectations regarding the timing of generating any revenues.

Our ability to predict results or the actual effect of future events, actions, plans or strategies is inherently uncertain. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, our actual results and performance could differ materially from those set forth in the forward-looking statements. There are a number of factors, many of which are beyond our control, that could cause actual results to differ significantly from our expectations.

You should not place undue reliance on any forward-looking statement, each of which speaks only as of the date on which it is made. We expressly state that we have no current intention to update any forward-looking statement, whether as a result of new information, future events or otherwise, unless required by law.

Factors that could cause our actual results and performance to differ materially from historical results or those anticipated include, but are not limited to:

changes in our investment objectives or investment or operational strategies, including any new lines of business or new products and services that may subject us to additional risks;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

volatility in our industry, interest rates and spreads, the debt or equity markets, the general economy or the residential finance and real estate markets specifically, whether the result of market events or otherwise;

events or circumstances which undermine confidence in the financial markets or otherwise have a broad impact on financial markets, such as a credit downgrade of U.S. Government obligations, the sudden instability or collapse of large depository institutions or other significant corporations, terrorist attacks, natural or man-made disasters, or threatened or actual armed conflicts;

changes in general business, economic, market, employment, or in consumer confidence and spending habits and political conditions from those expected;

continued declines in residential real estate and significant changes in U.S. housing prices and/or activity in the U.S. housing market;

the availability of, and level of competition for, attractive risk-adjusted investment opportunities in residential mortgage loans and mortgage-related assets that satisfy our investment objectives and investment strategies;

our success in winning bids to acquire loans;

the concentration of credit and real estate risks to which we are exposed;

the degree and nature of our competition;

changes in personnel and lack of availability of qualified personnel;

our dependence on PNMAC Capital Management, LLC, or PCM, and PennyMac Loan Services, LLC, or PLS, and potential conflicts of interest with PCM, PLS and their affiliated entities, and the performance of such entities;

the availability, terms and deployment of short-term and long-term capital;

the adequacy of our cash reserves and working capital;

our ability to match the interest rates and maturities of our assets with our financing;

the costs and effectiveness of our hedging efforts in relation to our commitments to purchase, our inventory of mortgage loans acquired for sale and our investments in mortgage servicing rights, or MSRs;

the timing and amount of cash flows, if any, from our investments;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

unanticipated increases in financing and other costs, including a rise in interest rates;

the performance, financial condition and liquidity of borrowers;

incomplete or inaccurate information or documentation provided by customers or counterparties, or adverse changes in the financial condition of our customers and counterparties;

the quality and enforceability of the collateral documentation evidencing our ownership and rights in the assets in which we invest;

increased rates of delinquency, default and/or decreased recovery rates on our investments;

our ability to foreclose on our mortgage loan investments and liquidate the resulting real estate in a timely and cost-effective manner or at all;

increased prepayments of the mortgages and other loans underlying our mortgage-backed securities, or MBS, MSRs and other investments;

S-iii

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

the degree to which our hedging strategies may or may not protect us from interest rate volatility;

the effect of the accuracy of, or changes in the estimates we make about, uncertainties and contingencies when measuring and reporting upon our financial condition and income;

our failure to maintain appropriate internal controls over financial reporting;

our ability to obtain and/or maintain licenses and other approvals in those jurisdictions where required to conduct our business;

our ability to comply with various federal, state and local laws that govern our business;

developments in the secondary markets for our mortgage loan products;

legislative and regulatory changes that impact the mortgage loan industry or housing market;

changes in regulations or the occurrence of other events that impact the business, operation or prospects of government-sponsored entities or government agencies such as the Federal Housing Administration or the Veterans Administration;

the Dodd-Frank Wall Street Reform and Consumer Protection Act and any other legislative and regulatory changes that impact the business, operations or governance of publicly-traded companies;

changes in government support of homeownership;

changes in government or government-sponsored home affordability programs;

changes in governmental regulations, accounting treatment, tax rates and similar matters (including changes to laws governing the taxation of real estate investment trusts, or REITs, or the exclusions from registration as an investment company);

limitations imposed on our business and our ability to satisfy complex rules for us to qualify as a REIT for U.S. federal income tax purposes and qualify for an exclusion from the Investment Company Act of 1940 and the ability of certain of our subsidiaries to qualify as REITs or as taxable REIT subsidiaries for U.S. federal income tax purposes, and our ability and the ability of our subsidiaries to operate effectively within the limitations imposed by these rules;

estimates relating to our ability to make distributions to our shareholders in the future;

the effect of public opinion on our reputation; and

the occurrence of natural disasters or other events or circumstances that could impact our operations.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

These factors and the other risk factors described in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein and therein, are not necessarily all of the important factors that could cause our actual results and performance to differ materially from those expressed in or implied by any of our forward-looking statements. Other unknown or unpredictable factors also could adversely affect our actual results and performance. Consequently, there can be no assurance that the results or performance anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to or effects on us.

S-iv

Table of Contents

SUMMARY

This summary highlights information about us and the common shares being offered by this prospectus supplement and the accompanying prospectus. This summary is not complete and may not contain all of the information that you should consider prior to investing in our common shares. For a more complete understanding of our company, we encourage you to read this entire document, including the information incorporated by reference in this document and the other documents to which we have referred.

PennyMac Mortgage Investment Trust

We are a specialty finance company that invests primarily in residential mortgage loans and mortgage-related assets. Our objective is to provide attractive risk-adjusted returns to our investors over the long-term, principally through dividends and secondarily through capital appreciation. We intend to achieve this objective largely by investing in distressed mortgage assets and acquiring, pooling, securitizing or selling newly originated prime credit quality residential mortgage loans, which we refer to as "correspondent lending." We supplement these activities through participation in other mortgage-related activities, which are in various states of analysis, planning or implementation, including: (i) the acquisition of REIT-eligible MBS; (ii) the acquisition of MSRs from liquidating and other institutions; (iii) providing inventory financing of mortgage loans for mortgage lenders; and (iv) to the extent that we transfer correspondent lending loans into private label securitizations in the future, retaining a portion of the securities created in the securitization transaction.

We are externally managed by our affiliate, PCM, pursuant to a management agreement. PCM is an investment adviser registered with the SEC that specializes in, and focuses on, residential mortgage loans. Most of our mortgage loan portfolio is serviced on our behalf by another affiliate, PLS, pursuant to a loan servicing agreement.

We conduct substantially all of our operations, and make substantially all of our investments, through our operating partnership and its subsidiaries. We are the sole limited partner and one of our subsidiaries is the sole general partner of our operating partnership.

We believe that we qualify, and we have elected to be taxed, as a REIT under the Internal Revenue Code of 1986 beginning with our taxable period ended on December 31, 2009.

Recent Developments

We intend to purchase from or through an affiliate of Citigroup Global Markets Inc., one of the underwriters for this offering, a portfolio of residential whole mortgage loans with a purchase price totaling approximately \$191.2 million. Our acquisition of this portfolio is subject to our continuing due diligence and other customary closing conditions and obtaining additional capital adequate to fund the acquisition. We currently expect to acquire this portfolio during September 2012. There can be no assurance that we will acquire this portfolio as described or that the transaction will be completed at all.

Table of Contents

The Offering

Issuer	PennyMac Mortgage Investment Trust
Common shares offered by us	12,000,000 common shares (13,800,000 common shares if the underwriters exercise in full their option to purchase additional common shares) ⁽¹⁾
Common shares to be outstanding after this offering	53,655,398 common shares (55,455,398 common shares if the underwriters exercise in full their option to purchase additional common shares) ⁽²⁾
Use of proceeds	We expect that the net proceeds from this offering will be approximately \$ million after deducting our estimated expenses (or approximately \$ million if the underwriters exercise in full their option to purchase additional common shares). We intend to use the net proceeds from this offering to fund a portion of the purchase price for the portfolio of residential whole mortgage loans described above under "Recent Developments" (if such acquisition is completed), to fund the continued growth of our correspondent lending business, to acquire additional mortgage loans or other investments, including those under existing forward purchase agreements, and for general corporate purposes. See "Use of Proceeds."
Ownership limit	Subject to certain exceptions, our declaration of trust restricts ownership of more than 9.8% by vote or value, whichever is more restrictive, of our outstanding common shares, or 9.8% by vote or value, whichever is more restrictive, of our outstanding shares of beneficial interest in order to protect our status as a REIT for U.S. federal income tax purposes. See "Description of Shares of Beneficial Interest Restrictions on Ownership and Transfer" in the accompanying prospectus.
Listing	Our common shares are listed on the NYSE under the trading symbol "PMT."
Risk factors	An investment in our common shares involves risks, and prospective investors should carefully consider the matters discussed under "Risk Factors" beginning on page S-3 of this prospectus supplement, as well as the reports we file with the SEC pursuant to the Securities Exchange Act of 1934, as amended, or the Exchange Act, incorporated by reference in this prospectus supplement and the accompanying prospectus, before making a decision to invest in our common shares.

(1) On August 2, 2012, we declared a dividend on our common shares of \$0.55 per share, payable on August 31, 2012 to shareholders of record on August 16, 2012. Purchasers in this offering will not be entitled to receive that dividend.

(2) The number of common shares to be outstanding after this offering is based on 41,655,398 common shares outstanding as of August 15, 2012, which excludes 668,914 common shares that are issuable upon the vesting of restricted share units that were granted under our equity incentive plan.

Table of Contents

RISK FACTORS

Investing in our common shares involves risks. You should carefully read and consider the risks described below, as well as the risks described in the section entitled "Risk Factors" in our most recent Annual Report on Form 10-K, which is incorporated by reference into this prospectus supplement and the accompanying prospectus, and the other information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus, before making a decision to invest in our common shares. Each of these risks could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment.

Risks Related to This Offering

The market price and trading volume of our common shares could be volatile and could decline, resulting in a substantial or complete loss of your investment.

The stock markets, including the NYSE, which is the exchange on which we list our common shares, have experienced significant price and volume fluctuations. As a result, the market price of our common shares could be similarly volatile, and investors in our common shares may experience a decrease in the value of their common shares, including decreases unrelated to our operating performance or prospects. Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our common shares include:

actual or anticipated changes in our operating results or business prospects;

changes in earnings estimates by securities analysts;

an inability to meet or exceed securities analysts' estimates or expectations;

difficulties or inability to access capital or extend or refinance existing debt;

publication of research reports about us or our industry by securities analysts;

conditions or trends in our industry or sector;

actual or perceived conflicts of interest with PCM, PLS and their affiliated entities and individuals, including our officers;

strategic decisions by us or our competitors, such as acquisitions, divestments, spin-offs, joint ventures, strategic investments or changes in business strategy;

the passage of legislation or other regulatory developments that adversely affect us or our industry;

hedging or arbitrage trading activity in our common shares;

adverse market reaction to the level of leverage we employ;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

actions by institutional shareholders;

speculation in the press or investment community;

changes in interest rates;

changes in accounting principles;

additions or departures of key personnel at PCM and/or PLS, including our officers, or a change in control at either of these entities;

future sales of our common shares or securities convertible into, or exchangeable or exercisable for, our common shares, or the perception that such sales may occur;

S-3

Table of Contents

failure to maintain our REIT qualification or exclusion from the Investment Company Act of 1940;

the realization of any of the other risk factors contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus; and

general market and economic conditions, including continued volatility in the financial and credit markets.

In the past, securities class action litigation has often been instituted against companies following periods of volatility in their share price. This type of litigation could result in substantial costs and divert our management's attention and resources.

This offering may be dilutive, and there may be future dilution of our common shares.

This offering may have a dilutive effect on our earnings per share, REIT taxable income per share and/or book value per share for the year ending December 31, 2012. The actual amount of dilution, if any, cannot be determined at this time and will be based on numerous factors. Our board of trustees is authorized under our declaration of trust to, among other things, authorize the issuance of additional common shares or the issuance of preferred shares of beneficial interest or securities convertible or exchangeable into equity securities, without shareholder approval. We may issue such additional equity or convertible securities to raise additional capital. Holders of our common shares have no preemptive rights that entitle them to purchase their pro rata share of any offering of shares of any class or series and, therefore, such sales or offerings could result in increased dilution to our shareholders. We cannot predict the size of future issuances or sales of our common shares or other equity securities into the public market or the effect, if any, that such issuances or sales may have on the market price of our common shares.

We may issue debt or equity securities or securities convertible into equity securities, any of which may be senior to our common shares as to distribution and in liquidation.

In the future, we may issue debt or additional equity securities or securities convertible into or exchangeable for equity securities. Such securities may be senior to our common shares as to distributions. We may also enter into debt-like financing that is unsecured or secured by up to all of our assets. In the event of our liquidation, our lenders and holders of our debt and preferred securities, if any, would receive distributions of our available assets before distributions to the holders of our common shares.

USE OF PROCEEDS

We expect that the net proceeds from this offering will be approximately \$ million after deducting our estimated expenses (or approximately \$ million if the underwriters exercise in full their option to purchase additional common shares). We intend to use the net proceeds from this offering to fund a portion of the purchase price for the portfolio of residential whole mortgage loans described above under "Summary Recent Developments" (if such acquisition is completed), to fund the continued growth of our correspondent lending business, to acquire additional mortgage loans or other investments, including those under existing forward purchase agreements, and for general corporate purposes. An affiliate of Citigroup Global Markets Inc., one of the underwriters for this offering, is the seller of the portfolio of residential whole mortgage loans that we have committed to acquire. See "Underwriting."

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

CAPITALIZATION

The following table sets forth our capitalization (a) as of June 30, 2012, and (b) as of June 30, 2012, as adjusted to reflect the sale of the 12,000,000 common shares offered hereby (assuming the underwriters do not exercise their option to purchase additional common shares and assuming an offering price of \$21.70, based upon the last reported sale price of our common shares on August 15, 2012).

	As of June 30, 2012	
	Historical	As Adjusted
	(Dollars in thousands)	
		unaudited
Debt:		
Assets sold under agreements to repurchase	\$ 1,007,712	\$ 1,007,712
Borrowings under forward purchase agreements	16,693	16,693
Total debt	1,024,405	1,024,405
Shareholders' Equity:		
Common shares of beneficial interest authorized, 500,000,000 common shares of \$0.01 par value; issued and outstanding, 41,466,369 (historical) and 53,466,369 shares (as adjusted) ⁽¹⁾	415	535
Additional paid-in capital	767,506	1,027,361
Retained earnings	37,752	37,752
Total equity	805,673	1,065,648
Total capitalization	\$ 1,830,078	\$ 2,090,053

⁽¹⁾ Excludes 115,000 common shares issued subsequent to June 30, 2012 under our ATM equity offering program, and 74,029 common shares related to restricted share units that had vested subsequent to June 30, 2012.

Table of Contents

UNDERWRITING

Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc. and Credit Suisse Securities (USA) LLC are acting as the underwriters of this offering. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of common shares set forth opposite the underwriter's name.

Underwriter	Number of Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Citigroup Global Markets Inc.	
Credit Suisse Securities (USA) LLC	
Total	12,000,000

The underwriting agreement provides that the obligations of the underwriters to purchase the common shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the common shares (other than those covered by the underwriters' option to purchase additional common shares described below) if they purchase any of the common shares.

The underwriters have agreed to purchase the common shares from us at a price of \$ per share, which will result in net proceeds to us, after deducting estimated expenses related to this offering, of approximately \$ million assuming no exercise of the option granted to the underwriters to purchase additional common shares, and \$ million assuming full exercise of that option.

The underwriters propose to offer the common shares offered hereby from time to time for sale in one or more transactions on the NYSE, in the over-the-counter market, through negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. The underwriters may effect such transactions by selling the common shares to or through dealers and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or purchasers of common shares for whom they may act as agents or to whom they may sell as principal. The difference between the price at which the underwriters purchase common shares and the price at which the underwriters resell such common shares may be deemed underwriting compensation.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to 1,800,000 additional common shares at \$ per share. To the extent the option is exercised, each underwriter will be obligated to purchase a number of additional common shares approximately proportionate to that underwriter's initial purchase commitment. Any common shares issued or sold under the option will be issued and sold on the same terms and conditions as the other common shares that are the subject of this offering.

One of our trustees has agreed to purchase 25,000 of our common shares in this offering from the underwriters at \$ per share, which is the same price per share that the underwriters are paying us for such common shares.

We and each of our executive officers and trustees have agreed that, for a period of 30 days from the date of this prospectus supplement, subject to certain exceptions, we and they will not, without the prior written consent of the underwriters:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, or otherwise dispose of or

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

transfer any of our common shares or any securities convertible into or exchangeable or exercisable for our common shares; or

enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of our common shares;

whether any such swap or transaction is to be settled by delivery of common shares or other securities, in cash or otherwise. The underwriters, in their sole discretion, may release any of the securities subject to these lock-up agreements at any time without notice. Notwithstanding the foregoing, during the restricted period, our executive officers and trustees may, without the prior written consent of the underwriters, transfer common shares:

as a bona fide gift or gifts;

as a donation to a charitable organization;

by will or the laws of descent and distribution;

to any trust for the direct or indirect benefit of such executive officer or trustee or their immediate family;

to any corporation, partnership, limited liability company or other entity to the extent such entity is wholly owned by such executive officer or trustee and/or members of their immediate family; or

as forfeitures to satisfy tax withholding obligations of such executive officer or trustee in connection with the vesting of equity awards acquired pursuant to our equity incentive plan;

provided that in the case of the first five bullets above, (i) each transferee or donee agrees in writing to the restrictions set forth above, (ii) no filing by any party shall be required or shall be voluntarily made in connection with such transfer or distribution (other than a filing under Section 16 of the Exchange Act, or a filing made on Schedule 13D or Schedule 13G made after the expiration of the 30-day lock-up period), (iii) each party shall not be required by law to make, and agrees to not voluntarily make, any public announcement of the transfer or disposition and (iv) such executive officer or trustee notifies the underwriters at least three business days prior to the proposed transfer or disposition. If (i) during the last 17 days of the 30-day restricted period, we issue an earnings release or material news or a material event relating to our company occurs; or (ii) prior to the expiration of the 30-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 30-day restricted period, the restrictions described above shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. However, such extension will not apply if, within three business days prior to the 15th calendar day before the last day of the restricted period, we deliver a certificate signed by our Chief Executive Officer or Chief Financial Officer, certifying that (i) our common shares are "actively traded securities" as defined in Regulation M, and (ii) we meet the requirements set forth in Rule 139 under the Securities Act of 1933, as amended, or the Securities Act, for the publication of issuer-specific research reports.

The common shares are listed on the NYSE under the symbol "PMT."

We estimate that the total expenses of the offering that are payable by us will be \$425,000.

In connection with the offering, the underwriters may purchase and sell common shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters' option to purchase additional common shares, and stabilizing purchases.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

Short sales involve secondary market sales by the underwriters of a greater number of common shares than they are required to purchase in the offering.

"Covered" short sales are sales of common shares in an amount up to the number of common shares represented by the underwriters' option to purchase additional common shares.

"Naked" short sales are sales of common shares in an amount in excess of the number of common shares represented by the underwriters' option to purchase additional common shares.

Covering transactions involve purchases of common shares either pursuant to the underwriters' option to purchase additional common shares or in the open market after the distribution has been completed in order to cover short positions.

To close a naked short position, the underwriters must purchase common shares in the open market after the distribution has been completed. 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 common shares in the open market after pricing that could adversely affect investors who purchase in the offering.

To close a covered short position, the underwriters must purchase common shares in the open market after the distribution has been completed or must exercise the option to purchase additional common shares. In determining the source of common shares to close the covered short position, the underwriters will consider, among other things, the price of common shares available for purchase in the open market as compared to the price at which they may purchase common shares through their option to purchase additional common shares.

Stabilizing transactions involve bids to purchase common shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own account, may have the effect of preventing or retarding a decline in the market price of the common shares. They may also cause the price of the common shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the NYSE, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Relationships with the Underwriters and Affiliates

An affiliate of Citigroup Global Markets Inc. is the seller of the portfolio of residential whole mortgage loans that we have committed to acquire, as described above under "Summary Recent Developments." We presently contemplate that a portion of the purchase price for this acquisition would be funded under our existing repurchase facilities with affiliates of Citigroup Global Markets Inc. and/or Credit Suisse Securities (USA) LLC.

The underwriters and their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities.

Table of Contents

The underwriters and their affiliates have performed commercial banking, investment banking and advisory services for us from time to time for which they have received customary fees and reimbursement of expenses. The underwriters and their affiliates may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (the "EEA") that has implemented the Prospectus Directive, as defined below (each, a "Relevant Member State"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), an offer to the public of any common shares that are the subject of the offering contemplated in this prospectus supplement may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any of the common shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

to any legal entity which is a qualified investor as defined in the Prospectus Directive;

by the underwriters to fewer than 100, or, if the Relevant Member State has implemented the relevant provisions of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriters for any such offer; or

in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of common shares shall result in a requirement for us or the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of securities to the public" in relation to the common shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the common shares to be offered so as to enable an investor to decide to purchase the common shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

This prospectus supplement and the accompanying prospectus are not a prospectus for the purposes of the Prospectus Directive. This prospectus supplement and the accompanying prospectus have been prepared on the basis that all offers of the common shares will be made pursuant to an exemption under the Prospectus Directive from the requirement to produce a prospectus in connection with offers of the common shares. Accordingly, any person making or intending to make any offer within the EEA of common shares which are the subject of the offering contemplated in this prospectus supplement and the accompanying prospectus should only do so in circumstances in which no obligation arises for us or the underwriters to produce a prospectus for such offers. Neither we nor the underwriters have authorized, nor do we or they authorize, the making of any offer of the common shares through any financial intermediary, other than offers made by the underwriters which constitute the final sale of the common shares contemplated in this prospectus supplement and the accompanying prospectus.

Table of Contents

Notice to Prospective Investors in the United Kingdom

This prospectus supplement and the accompanying prospectus (this "Communication") have not been approved by any authorized person under section 21 of the Financial Services and Markets Act 2000 and are only being distributed to, and are only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a "relevant person").

Any investment or investment activity to which this Communication relates is available only to relevant persons and will only be engaged with relevant persons. Any person in the United Kingdom that is not a relevant person should not act or rely on this Communication or any of its contents.

Notice to Prospective Investors in France

None of this prospectus supplement, the accompanying prospectus nor any other offering material relating to the common shares described in this prospectus supplement and the accompanying prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The common shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. None of this prospectus supplement, the accompanying prospectus nor any other offering material relating to the common shares has been or will be:

released, issued, distributed or caused to be released, issued or distributed to the public in France; or

used in connection with any offer for subscription or sale of the common shares to the public in France.

Such offers, sales and distributions will be made in France only:

to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d'investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;

to investment services providers authorized to engage in portfolio management on behalf of third parties; or

in a transaction that, in accordance with article L.411-2-II-1^o-or-2^o-or 3^o of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l'épargne*).

The common shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Switzerland

We have not and will not register with the Swiss Financial Market Supervisory Authority ("FINMA") as a foreign collective investment scheme pursuant to Article 119 of the Federal Act on Collective Investment Scheme of 23 June 2006, as amended ("CISA"), and accordingly the common shares being offered pursuant to this prospectus supplement and the accompanying prospectus have not and will not be approved, and may not be licensable, with FINMA. Therefore, the common shares have not been authorized for distribution by FINMA as a foreign collective investment scheme

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

pursuant to Article 119 CISA and the common shares offered hereby may not be offered to the public (as this term is defined in Article 3 CISA) in or from Switzerland. The common shares may solely be offered to "qualified investors," as this term is defined in Article 10 CISA, and in the circumstances set out in Article 3 of the Ordinance on Collective Investment Scheme of 22 November 2006, as amended ("CISO"), such that there is no public offer. Investors, however, do not benefit from protection under CISA or CISO or supervision by FINMA. This prospectus supplement and the accompanying prospectus and any other materials relating to the common shares are strictly personal and confidential to each offeree and do not constitute an offer to any other person. This prospectus supplement and the accompanying prospectus may only be used by those qualified investors to whom they have been handed out in connection with the offer described herein and may neither directly or indirectly be distributed or made available to any person or entity other than recipients of this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in Switzerland or from Switzerland. This prospectus supplement and the accompanying prospectus do not constitute an issue prospectus as that term is understood pursuant to Article 652a and/or 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the common shares on the SIX Swiss Exchange or any other regulated securities market in Switzerland, and consequently, the information presented in this prospectus supplement and the accompanying prospectus does not necessarily comply with the information standards set out in the listing rules of the SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange.

Notice to Prospective Investors in the Dubai International Financial Centre

This document relates to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority. This document is intended for distribution only to persons of a type specified in those rules. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority has no responsibility for reviewing or verifying any documents in connection with exempt offers. The Dubai Financial Services Authority has not approved this document nor taken steps to verify the information set out in it, and has no responsibility for it. The common shares which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the common shares offered should conduct their own due diligence on the common shares. If you do not understand the contents of this document you should consult an authorized financial adviser.

Notice to Prospective Investors in Hong Kong

The common shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the common shares may be issued or may be in the possession of any person for the purpose of issue (in each case 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 in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to common shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

Notice to Prospective Investors in Japan

The common shares offered in this prospectus supplement and the accompanying prospectus have not been registered under the Securities and Exchange Law of Japan. The common shares have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan, except (i) pursuant to an exemption from the registration requirements of the Securities and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Notice to Prospective Investors in Singapore

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common shares may not be circulated or distributed, nor may the common shares 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, in each case subject to compliance with the conditions set forth in the SFA.

Where the common shares 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,

shares, debentures and units of shares and debentures 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 common shares pursuant to an offer made under Section 275 of the SFA except:

to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

where no consideration is or will be given for the transfer; or

where the transfer is by operation of law.

Notice to Prospective Investors in Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia ("Corporations Act")) in relation to the common shares has been or will be lodged with the Australian Securities & Investments Commission ("ASIC"). This document has not been lodged with

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

- (a) you confirm and warrant that you are either:
 - (i) a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
 - (ii) a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
 - (iii) a person associated with us under section 708(12) of the Corporations Act; or
 - (iv) a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and
- (b) you warrant and agree that you will not offer any of the common shares for resale in Australia within 12 months of such common shares being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Notice to Prospective Investors in Chile

The common shares are not registered in the Securities Registry (Registro de Valores) or subject to the control of the Chilean Securities and Exchange Commission (Superintendencia de Valores y Seguros de Chile). This prospectus supplement, the accompanying prospectus and other offering materials relating to the offer of the common shares do not constitute a public offer of, or an invitation to subscribe for or purchase, the common shares in the Republic of Chile, other than to individually identified purchasers pursuant to a private offering within the meaning of Article 4 of the Chilean Securities Market Act (Ley de Mercado de Valores) (an offer that is not "addressed to the public at large or to a certain sector or specific group of the public").

LEGAL MATTERS

Certain legal matters in connection with this offering will be passed upon for us by Sidley Austin LLP, New York, New York, and, with respect to matters of Maryland law, by Venable LLP, Baltimore, Maryland. The validity of the common shares sold in this offering will be passed upon for the underwriters by Sullivan & Cromwell LLP, Los Angeles, California.

EXPERTS

The consolidated financial statements incorporated in this prospectus supplement by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2011, and the effectiveness of PennyMac Mortgage Investment Trust and Subsidiaries' internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any of these documents at the SEC's Public Reference Room at

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

100 F Street, N.E., Washington, D.C. 20549. You may also read and copy any of these documents at the NYSE's office at 20 Broad Street, New York, New York 10005. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available over the Internet at the SEC's website at <http://www.sec.gov>. In addition, copies of our SEC filings are available free of charge through our website (www.pennymac-reit.com) as soon as reasonably practicable after filing with the SEC. The information contained on our website is not part of, or incorporated by reference into, this prospectus supplement or the accompanying prospectus.

This prospectus supplement and the accompanying prospectus are only part of a registration statement on Form S-3 we have filed with the SEC under the Securities Act and therefore omit some of the information contained in the registration statement. We have also filed exhibits to the registration statement which are excluded from this prospectus supplement and the accompanying prospectus, and you should refer to the applicable exhibit for a complete description of any statement referring to any contract or other document. You may inspect or obtain a copy of the registration statement, including the exhibits, as described in the previous paragraph.

DOCUMENTS INCORPORATED BY REFERENCE

SEC rules allow us to incorporate by reference information into this prospectus supplement and the accompanying prospectus. This means that we can disclose important information to you by referring you to another document. Any information referred to in this way is considered part of this prospectus supplement and the accompanying prospectus from the date we file that document. Any reports filed by us with the SEC after the date of this prospectus supplement and before the date that this offering is terminated will automatically update and, where applicable, supersede any information contained in this prospectus supplement and the accompanying prospectus or incorporated by reference herein and therein. We incorporate by reference into this prospectus supplement and the accompanying prospectus the following documents or information filed with the SEC (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2011;

our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2012 and June 30, 2012;

our Definitive Proxy Statement on Schedule 14A filed on April 6, 2012;

our Current Reports on Form 8-K filed on April 4, 2012, May 11, 2012, May 22, 2012, May 30, 2012, June 5, 2012, July 10, 2012, July 31, 2012, August 7, 2012 and August 8, 2012; and

the description of our common shares included in our registration statement on Form 8-A filed on July 23, 2009.

All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus supplement and prior the termination of this offering shall be deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus and will automatically update and supersede the information in this prospectus supplement, the accompanying prospectus and any previously filed documents.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus supplement is delivered, upon his or her written or oral request, a copy of any or all documents referred to above that have been or may be incorporated by reference into this prospectus supplement and the accompanying prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. Requests for those documents should be directed to us as follows: PennyMac Mortgage Investment Trust, 6101 Condor Drive, Moorpark, California 93021, Attn: Investor Relations, Telephone: (818) 224-7442.

Table of Contents

PROSPECTUS

PennyMac Mortgage Investment Trust

Common Shares

Preferred Shares

Warrants to Purchase Common Shares or Preferred Shares

We may offer, issue and sell from time to time, together or separately, the securities described in this prospectus. We will provide the specific terms of any securities we may offer in supplements to this prospectus.

In addition, selling shareholders to be named in a prospectus supplement may offer and sell from time to time these securities in such amounts as set forth in a prospectus supplement.

You should read this prospectus and any applicable prospectus supplement carefully before you invest. This prospectus may not be used to offer and sell any securities unless accompanied by a prospectus supplement describing the amount of and terms of the offering of those securities.

We or any selling shareholder may offer and sell these securities to or through one or more underwriters, dealers or agents, or directly to purchasers on a continuous or delayed basis. We or any selling shareholder reserves the sole right to accept, and together with any underwriters, dealers and agents, reserves the right to reject, in whole or in part, any proposed purchase of securities. The names of any underwriters, dealers or agents involved in the sale of any securities, the specific manner in which they may be offered and any applicable commissions or discounts will be set forth in the prospectus supplement covering the sales of those securities.

Our common shares of beneficial interest, or our common shares, \$0.01 par value per share, are listed on the New York Stock Exchange under the trading symbol "PMT." On June 20, 2012, the closing price of our common shares on the New York Stock Exchange was \$19.37.

Investing in our securities involves risks. You should carefully read and consider the risks described under the section entitled "Risk Factors" included in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, in prospectus supplements relating to specific offerings of securities and in other information that we file with the Securities and Exchange Commission before making a decision to invest in our securities.

We impose certain restrictions on the ownership and transfer of our common shares and our shares of beneficial interest. You should read the information under the section entitled "Description of Shares of Beneficial Interest Restrictions on Ownership and Transfer" in this prospectus for a description of these restrictions.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is June 21, 2012.

Table of Contents

TABLE OF CONTENTS

<u>About This Prospectus</u>	<u>3</u>
<u>PennyMac Mortgage Investment Trust</u>	<u>4</u>
<u>Risk Factors</u>	<u>4</u>
<u>Cautionary Statement Regarding Forward Looking Statements</u>	<u>4</u>
<u>Use of Proceeds</u>	<u>7</u>
<u>Ratio of Earnings to Combined Fixed Charges and Preferred Share Distributions</u>	<u>7</u>
<u>Description of Shares of Beneficial Interest</u>	<u>8</u>
<u>Description of Warrants</u>	<u>14</u>
<u>Certain Provisions of Maryland Law and of Our Declaration of Trust and Bylaws</u>	<u>15</u>
<u>U.S. Federal Income Tax Considerations</u>	<u>22</u>
<u>Selling Shareholders</u>	<u>46</u>
<u>Plan of Distribution</u>	<u>47</u>
<u>Legal Matters</u>	<u>49</u>
<u>Experts</u>	<u>49</u>
<u>Where You Can Find More Information</u>	<u>49</u>
<u>Documents Incorporated By Reference</u>	<u>50</u>

You should rely only on the information contained in or incorporated by reference into this prospectus, any applicable prospectus supplement or any applicable free writing prospectus. We have not authorized any other person to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. This prospectus and any applicable prospectus supplement do not constitute an offer to sell, or a solicitation of an offer to purchase, any securities in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation in such jurisdiction. You should assume that the information appearing in this prospectus, any applicable prospectus supplement, any applicable free writing prospectus and the documents incorporated by reference herein or therein is accurate only as of their respective dates or on the date or dates which are specified in these documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a "shelf" registration statement that we have filed with the Securities and Exchange Commission, or the SEC. By using a shelf registration statement, we or any selling shareholder may sell, at any time and from time to time, in one or more offerings, any combination of the securities described in this prospectus. The exhibits to our registration statement contain the full text of certain contracts and other important documents that we have summarized in this prospectus or that we may summarize in a prospectus supplement. Since these summaries may not contain all the information that you may find important in deciding whether to purchase the securities offered, you should review the full text of these documents. The registration statement and the exhibits can be obtained from the SEC as indicated under the sections entitled "Where You Can Find More Information" and "Documents Incorporated By Reference."

This prospectus only provides you with a general description of the securities we or any selling shareholder may offer, which is not meant to be a complete description of each security. Each time we or any selling shareholder sells securities, we will provide a prospectus supplement that contains specific information about the terms of those securities. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in the prospectus supplement. You should read carefully both this prospectus and any prospectus supplement together with the additional information described under the sections entitled "Where You Can Find More Information" and "Documents Incorporated By Reference."

Unless otherwise indicated or the context requires otherwise, in this prospectus and any prospectus supplement hereto, references to "our company," "we," "us" and "our" mean PennyMac Mortgage Investment Trust and its consolidated subsidiaries, including PennyMac Operating Partnership, L.P., or our operating partnership.

Table of Contents

PENNYMAC MORTGAGE INVESTMENT TRUST

We are a specialty finance company that invests primarily in residential mortgage loans and mortgage-related assets. Our objective is to provide attractive risk-adjusted returns to our investors over the long-term, principally through dividends and secondarily through capital appreciation. We intend to achieve this objective largely by investing in distressed mortgage loans and engaging in correspondent lending in which we acquire, pool, securitize or sell newly originated prime credit quality residential mortgage loans and retain the related mortgage servicing rights. We may supplement these activities through participation in other mortgage-related activities, which are in various states of analysis, planning or implementation, including: (i) the acquisition of REIT-eligible mortgage-backed securities, or MBS; (ii) the acquisition of mortgage servicing rights from liquidating and other institutions; and (iii) providing inventory financing of mortgage loans for mortgage lenders.

We are externally managed by our affiliate, PNMAC Capital Management, LLC, or PCM, pursuant to a management agreement. PCM is an investment adviser registered with the SEC that specializes in, and focuses on, residential mortgage loans. Most of our mortgage loan portfolio is serviced on our behalf primarily by another affiliate, PennyMac Loan Services, LLC, or PLS, pursuant to a loan servicing agreement.

We conduct substantially all of our operations, and make substantially all of our investments, through our operating partnership and its subsidiaries. We are the sole limited partner and one of our subsidiaries is the sole general partner of our operating partnership.

We believe that we qualify, and we have elected to be taxed, as a REIT under the Internal Revenue Code of 1986, or the Internal Revenue Code, beginning with our taxable period ended on December 31, 2009.

Our principal executive offices are located at 6101 Condor Drive, Moorpark, California 93021. Our telephone number is (818) 224-7442. Our website is www.pennymac-reit.com. The information contained on our website is not part of, or incorporated by reference into, this prospectus. We have included our website address only as an inactive textual reference and do not intend it to be an active link to our website.

RISK FACTORS

Investing in our securities involves risks. You should carefully read and consider the risks described under the section entitled "Risk Factors" in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference herein, as well as the other information contained in or incorporated by reference into this prospectus and in any applicable prospectus supplement, before making a decision to invest in our securities. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS

This prospectus and the documents we incorporate herein by reference contain certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which are subject to various risks and uncertainties. Forward-looking statements are generally identifiable by use of forward-looking terminology such as "may," "will," "should," "potential," "intend," "expect," "seek," "anticipate," "estimate," "approximately," "believe," "could," "project," "predict," "continue," "plan" or other similar words or expressions. Forward-looking statements are based on certain assumptions, discuss future expectations, describe future plans and strategies, contain financial and operating projections or state other forward-looking information. Examples of forward-looking

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

statements include: (i) projections of our revenues, income, earnings per share, capital structure or other financial items; (ii) descriptions of our plans or objectives for future operations, products or services; (iii) forecasts of our future economic performance, interest rates, profit margins and our share of future markets; and (iv) descriptions of assumptions underlying or relating to any of the foregoing expectations regarding the timing of generating any revenues.

Our ability to predict results or the actual effect of future events, actions, plans or strategies is inherently uncertain. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, our actual results and performance could differ materially from those set forth in the forward-looking statements. There are a number of factors, many of which are beyond our control, that could cause actual results to differ significantly from our expectations.

You should not place undue reliance on any forward-looking statement, each of which speaks only as of the date on which it is made. We expressly state that we have no current intention to update any forward-looking statement, whether as a result of new information, future events or otherwise, unless required by law.

Factors that could cause our actual results and performance to differ materially from historical results or those anticipated include, but are not limited to:

changes in our investment objectives or investment or operational strategies, including any new lines of business or new products and services that may subject us to additional risks;

volatility in our industry, interest rates and spreads, the debt or equity markets, the general economy or the residential finance and real estate markets specifically, whether the result of market events or otherwise;

events or circumstances which undermine confidence in the financial markets or otherwise have a broad impact on financial markets, such as a credit downgrade of U.S. Government obligations, the sudden instability or collapse of large depository institutions or other significant corporations, terrorist attacks, natural or man-made disasters, or threatened or actual armed conflicts;

changes in general business, economic, market, employment, or in consumer confidence and spending habits and political conditions from those expected;

continued declines in residential real estate and significant changes in U.S. housing prices and/or activity in the U.S. housing market;

the availability of, and level of competition for, attractive risk-adjusted investment opportunities in residential mortgage loans and mortgage-related assets that satisfy our investment objectives and investment strategies;

our success in winning bids to acquire loans;

the concentration of credit and real estate risks to which we are exposed;

the degree and nature of our competition;

changes in personnel and lack of availability of qualified personnel;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

our dependence on PCM and PLS and potential conflicts of interest with PCM, PLS and their affiliated entities, and the performance of such entities;

the availability, terms and deployment of short-term and long-term capital;

the adequacy of our cash reserves and working capital;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

our ability to match the interest rates and maturities of our assets with our financing;

the costs and effectiveness of our hedging efforts in relation to our commitments to purchase, our inventory of mortgage loans acquired for sale and our investments in mortgage servicing rights;

the timing and amount of cash flows, if any, from our investments;

unanticipated increases in financing and other costs, including a rise in interest rates;

the performance, financial condition and liquidity of borrowers;

incomplete or inaccurate information or documentation provided by customers or counterparties, or adverse changes in the financial condition of our customers and counterparties;

the quality and enforceability of the collateral documentation evidencing our ownership and rights in the assets in which we invest;

increased rates of delinquency, default and/or decreased recovery rates on our investments;

our ability to foreclose on our mortgage loan investments and liquidate the resulting real estate in a timely and cost-effective manner or at all;

increased prepayments of the mortgages and other loans underlying our MBS and other investments;

the degree to which our hedging strategies may or may not protect us from interest rate volatility;

the effect of the accuracy of, or changes in the estimates we make about, uncertainties and contingencies when measuring and reporting upon our financial condition and income;

our failure to maintain appropriate internal controls over financial reporting;

our ability to obtain and/or maintain licenses and other approvals in those jurisdictions where required to conduct our business;

our ability to comply with various federal, state and local laws that govern our business;

developments in the secondary markets for our mortgage loan products;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

legislative and regulatory changes that impact the mortgage loan industry or housing market;

changes in regulations or the occurrence of other events that impact the business, operation or prospects of government-sponsored entities or government agencies such as the Federal Housing Administration or the Veterans Administration;

the Dodd-Frank Wall Street Reform and Consumer Protection Act and any other legislative and regulatory changes that impact the business, operations or governance of publicly-traded companies;

changes in government support of homeownership;

changes in government or government-sponsored home affordability programs;

changes in governmental regulations, accounting treatment, tax rates and similar matters (including changes to laws governing the taxation of REITs or the exclusions from registration as an investment company);

limitations imposed on our business and our ability to satisfy complex rules for us to qualify as a REIT for U.S. federal income tax purposes and qualify for an exclusion from the Investment Company Act of 1940 and the ability of certain of our subsidiaries to qualify as REITs or as

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

taxable REIT subsidiaries, or TRSs, for U.S. federal income tax purposes, and our ability and the ability of our subsidiaries to operate effectively within the limitations imposed by these rules;

estimates relating to our ability to make distributions to our shareholders in the future;

the effect of public opinion on our reputation; and

the occurrence of natural disasters or other events or circumstances that could impact our operations.

These factors and the other risk factors described in this prospectus and any prospectus supplement, including the documents incorporated by reference herein and therein, are not necessarily all of the important factors that could cause our actual results and performance to differ materially from those expressed in or implied by any of our forward-looking statements. Other unknown or unpredictable factors also could adversely affect our actual results and performance. Consequently, there can be no assurance that the results or performance anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to or effects on us.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from the offering of securities by us under this prospectus for general corporate purposes, including funding our investment activity, repayment of indebtedness and working capital. Further details relating to the use of the net proceeds from the offering of securities under this prospectus will be set forth in the applicable prospectus supplement.

We will not receive any proceeds from any sales of securities by any selling shareholder.

RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED SHARE DISTRIBUTIONS

The following table sets forth our ratios of earnings to combined fixed charges and preferred share distributions for the periods shown:

	For the period August 4, 2009 (date operations commenced) through December 31, 2009	For the years ended December 31,		For the three months ended March 31, 2012
		2010	2011	
Ratio of earnings to combined fixed charges and preferred share distributions(2)	(1)	30.6	4.8	2.7

(1) We did not have any fixed charges for this period and there are no preferred shares of beneficial interest, or preferred shares, issued and outstanding. Therefore, we have no ratio to calculate for this period.

(2) The ratios of earnings to combined fixed charges and preferred share distributions were computed by dividing earnings as adjusted by fixed charges and preferred share distributions (if applicable). For this purpose, earnings consist of net income from continuing operations plus fixed charges. Fixed charges consist of interest expense. As of the date of this prospectus, there are no preferred shares issued and outstanding and, therefore, there are no amounts for preferred distributions included in the above calculations.

Table of Contents

DESCRIPTION OF SHARES OF BENEFICIAL INTEREST

The following summary of the material terms of our shares of beneficial interest does not purport to be complete and is subject to and qualified in its entirety by reference to the Maryland REIT Law, or the MRL, and to our declaration of trust and our amended and restated bylaws, or our bylaws. We have incorporated by reference our declaration of trust and bylaws as exhibits to the registration statement of which this prospectus is a part.

General

Our declaration of trust provides that we may issue up to 500,000,000 common shares of beneficial interest, \$0.01 par value per share, and 100,000,000 preferred shares of beneficial interest, \$0.01 par value per share. As of June 18, 2012, 41,459,821 common shares were issued and outstanding and no preferred shares were issued and outstanding. Our declaration of trust authorizes our board of trustees to amend our declaration of trust to increase or decrease the aggregate number of authorized shares or the number of authorized shares of any class or series without shareholder approval.

Under Maryland law, shareholders are not personally liable for the obligations of a real estate investment trust solely as a result of their status as shareholders.

Common Shares

The common shares we or any selling shareholder may offer from time to time under this prospectus, when issued, will be duly authorized, fully paid and nonassessable. Subject to the preferential rights, if any, of holders of any other class or series of shares of beneficial interest and to the provisions of our declaration of trust regarding the restrictions on ownership and transfer of our shares, holders of our common shares are entitled to receive distributions on such common shares out of assets legally available therefor if, as and when authorized by our board of trustees and declared by us, and the holders of our common shares are entitled to share ratably in our assets legally available for distribution to our shareholders in the event of our liquidation, dissolution or winding up after payment of or adequate provision for all of our known debts and liabilities.

Subject to the provisions of our declaration of trust regarding the restrictions on ownership and transfer of our shares and except as may otherwise be specified in the terms of any class or series of common shares, each outstanding common share entitles the holder to one vote on all matters submitted to a vote of shareholders, including the election of trustees, and, except as provided with respect to any other class or series of shares of beneficial interest, the holders of our common shares possess the exclusive voting power. There is no cumulative voting in the election of our trustees, which means that the shareholders entitled to cast a majority of the votes entitled to be cast in the election of trustees can elect all of the trustees then standing for election, and the remaining shareholders will not be able to elect any trustees.

Holders of common shares have no preference, conversion, exchange, sinking fund, redemption or appraisal rights and have no preemptive rights to subscribe for any of our securities. Subject to the restrictions on ownership and transfer of our shares contained in our declaration of trust and the terms of any other class or series of common shares, all of our common shares have equal dividend, liquidation and other rights.

Preferred Shares

Our board of trustees may authorize the issuance of preferred shares in one or more series and may determine, with respect to any such series, the rights, preferences, privileges and restrictions of the preferred shares, including:

distribution rights;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

conversion rights;

voting rights;

restrictions on ownership and transfer;

redemption rights and terms of redemptions; and

liquidation preferences.

The preferred shares we or any selling shareholder may offer from time to time under this prospectus, when issued, will be duly authorized, fully paid and nonassessable, and holders of preferred shares will not have any preemptive rights.

The issuance of preferred shares could have the effect of delaying, deferring or preventing a change in control or other transaction that might involve a premium price for our common shares or otherwise be in the best interests of our shareholders. In addition, any preferred shares that we issue could rank senior to our common shares with respect to the payment of distributions, in which case we could not pay any distributions on our common shares until full distributions have been paid with respect to such preferred shares.

The rights, preferences, privileges and restrictions of each series of preferred shares will be fixed by articles supplementary relating to the series. We will describe the specific terms of the particular series of preferred shares in the prospectus supplement relating to that series, which terms will include:

the designation and par value of the preferred shares;

the voting rights, if any, of the preferred shares;

the number of preferred shares offered, the liquidation preference per preferred share and the offering price of the preferred shares;

the distribution rate(s), period(s) and payment date(s) or method(s) of calculation applicable to the preferred shares;

whether distributions will be cumulative or non-cumulative and, if cumulative, the date(s) from which distributions on the preferred shares will accumulate;

the procedures for any auction and remarketing for the preferred shares, if applicable;

the provision for a sinking fund, if any, for the preferred shares;

the provision for, and any restriction on, redemption, if applicable, of the preferred shares;

the provision for, and any restriction on, repurchase, if applicable, of the preferred shares;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

the terms and provisions, if any, upon which the preferred shares will be convertible into common shares, including the conversion price (or manner or calculation) and conversion period;

the terms under which the rights of the preferred shares may be modified, if applicable;

the relative ranking and preferences of the preferred shares as to distribution rights and rights upon the liquidation, dissolution or winding up of our affairs;

any limitation on issuance of any other series of preferred shares, including any series of preferred shares ranking senior to or on parity with the series of preferred shares as to distribution rights and rights upon the liquidation, dissolution or winding up of our affairs;

any listing of the preferred shares on any securities exchange;

Table of Contents

a discussion of any material U.S. federal income tax considerations applicable to the preferred shares;

information with respect to book-entry procedures, if applicable;

in addition to those restrictions described below, any other restrictions on the ownership and transfer of the preferred shares;
and

any additional rights, preferences, privileges or restrictions of the preferred shares.

Power to Reclassify Our Unissued Shares of Beneficial Interest

Our declaration of trust authorizes our board of trustees to classify and reclassify any unissued common or preferred shares into other classes or series of shares of beneficial interest. Prior to the issuance of shares of each class or series, our board of trustees is required by Maryland law and by our declaration of trust to set, subject to the provisions of our declaration of trust regarding the restrictions on ownership and transfer of shares of beneficial interest, the preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends and other distributions, qualifications and terms and conditions of redemption for each class or series. Therefore, our board of trustees could authorize the issuance of a class or series of shares that has priority over our common shares as to voting rights, dividends or upon liquidation or with terms and conditions that could have the effect of delaying, deferring or preventing a change in control or other transaction that might involve a premium price for our common shares or otherwise be in the best interests of our shareholders. No preferred shares are presently outstanding.

Power to Increase or Decrease Authorized Shares of Beneficial Interest and Issue Additional Common Shares and Preferred Shares

We believe that the power of our board of trustees to amend our declaration of trust to increase or decrease the number of authorized shares of beneficial interest, to authorize us to issue additional authorized but unissued common shares or preferred shares and to classify or reclassify unissued common shares or preferred shares and thereafter to issue such classified or reclassified shares of beneficial interest provides us with increased flexibility in structuring possible future financings and acquisitions and in meeting other needs that might arise. The additional classes or series, as well as the additional common shares, will be available for issuance without further action by our shareholders, unless such action is required by applicable law or the rules of any stock exchange or automated quotation system on which our securities may be listed or traded. Although our board of trustees does not intend to do so, it could authorize us to issue a class or series of shares that could, depending upon the terms of the particular class or series, delay, defer or prevent a change in control or other transaction that might involve a premium price for our common shares or otherwise be in the best interests of our shareholders.

Restrictions on Ownership and Transfer

In order for us to qualify as a REIT under the Internal Revenue Code, our shares of beneficial interest must be beneficially owned by 100 or more persons during at least 335 days of a taxable year of 12 months (other than the first year for which an election to be a REIT has been made) or during a proportionate part of a shorter taxable year. Also, not more than 50% of the value of the outstanding shares of beneficial interest may be owned, directly or indirectly, by five or fewer individuals (as defined in the Internal Revenue Code to include certain entities) during the last half of a taxable year (other than the first year for which an election to be a REIT has been made).

Our declaration of trust contains restrictions on the ownership and transfer of our common shares and other outstanding shares of beneficial interest. The relevant sections of our declaration of trust

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

provide that, subject to the exceptions described below, no person or entity may beneficially own, or be deemed to own, by virtue of the applicable constructive ownership provisions of the Internal Revenue Code, more than 9.8% by vote or value, whichever is more restrictive, of our outstanding common shares, which we refer to as the common share ownership limit, or 9.8% by vote or value, whichever is more restrictive, of our outstanding shares of beneficial interest, which we refer to as the aggregate share ownership limit. We refer to the common share ownership limit and the aggregate share ownership limit collectively as the "share ownership limits."

The constructive ownership rules under the Internal Revenue Code are complex and may cause shares of beneficial interest owned actually or constructively by a group of related individuals and/or entities to be owned constructively by one individual or entity. As a result, the acquisition of less than 9.8% by vote or value, whichever is more restrictive, of our outstanding common shares or 9.8% by vote or value, whichever is more restrictive, of our outstanding shares of beneficial interest (or the acquisition of an interest in an entity that owns, actually or constructively, our shares of beneficial interest), could, nevertheless, cause the acquirer, or another individual or entity, to own constructively in excess of 9.8% by vote or value, whichever is more restrictive, of our outstanding common shares or 9.8% by vote or value, whichever is more restrictive, of our outstanding shares of beneficial interest and thereby violate the applicable share ownership limit.

Our board of trustees may, upon receipt of certain representations and undertakings and in its sole discretion, exempt (prospectively or retroactively) any person, in whole or in part, from the share ownership limits and establish a different limit, or excepted holder limit, for a particular shareholder if the person's ownership in excess of the share ownership limits will not then or in the future result in our being "closely held" under Section 856(h) of the Internal Revenue Code (without regard to whether the shareholder's interest is held during the last half of a taxable year) or otherwise cause us to fail to qualify as a REIT or result in our shares of beneficial interest being beneficially owned by fewer than 100 persons (determined without reference to any rules of attribution). As a condition of its exemption or creation of an excepted holder limit, our board of trustees may, but is not required to, require an opinion of counsel or Internal Revenue Service, or IRS, ruling satisfactory to our board of trustees in order to determine or ensure our status as a REIT and may impose any other conditions or restrictions on such a waiver or excepted holder limit as it determines.

In connection with granting an exemption from the share ownership limits, establishing an excepted holder limit or at any other time, our board of trustees may from time to time increase or decrease one or both of the share ownership limits for all other persons and entities; provided, however, that any decrease in a share ownership limit will not be effective for any person whose percentage of ownership of our shares is in excess of such decreased limit until the person's percentage of ownership of our shares equals or falls below the decreased limit (other than a decrease as a result of a retroactive change in existing law, in which case the decrease will be effective immediately), but any further acquisition of our shares in excess of such person's percentage of ownership of our shares will be in violation of the applicable limits; and provided, further, that the share ownership limits may not be increased if, after giving effect to such increase, five or fewer individuals could beneficially own or constructively own in the aggregate more than 49.9% in value of the shares then outstanding. Prior to the modification of the share ownership limits, our board of trustees may, but is not required to, require such opinions of counsel, affidavits, undertakings or agreements as it may deem necessary or advisable in order to determine or ensure our qualification as a REIT.

Our declaration of trust further prohibits:

any person from beneficially or constructively owning, applying certain attribution rules of the Internal Revenue Code, our shares of beneficial interest that would result in our being "closely held" under Section 856(h) of the Internal Revenue Code (without regard to whether the

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

shareholder's interest is held during the last half of a taxable year) or otherwise cause us to fail to qualify as a REIT; and

any person from transferring our shares of beneficial interest if such transfer would result in our shares of beneficial interest being beneficially owned by fewer than 100 persons (determined without reference to any rules of attribution).

Any person who acquires or attempts or intends to acquire beneficial or constructive ownership of our shares of beneficial interest that will or may violate the share ownership limits or any of the other restrictions on ownership and transfer of our shares of beneficial interest described above will be required to immediately give written notice to us or, in the case of a proposed or attempted transaction, give at least 15 days' prior written notice to us, and provide us with such other information as we may request in order to determine the effect of such transfer on our qualification as a REIT. The share ownership limits and the other restrictions on ownership and transfer of our shares of beneficial interest will not apply if our board of trustees determines that it is no longer in our best interest to attempt to qualify, or to continue to qualify, as a REIT or that compliance is no longer required in order for us to qualify as a REIT.

Pursuant to our declaration of trust, if any transfer of our shares of beneficial interest would result in our shares of beneficial interest being beneficially owned by fewer than 100 persons, such transfer will be void *ab initio* and the intended transferee will acquire no rights in such shares. In addition, if any purported transfer of our shares of beneficial interest or any other event would otherwise result in:

any person violating the share ownership limits or any applicable excepted holder limit established by our board of trustees;
or

our being "closely held" under Section 856(h) of the Internal Revenue Code (without regard to whether the shareholder's interest is held during the last half of a taxable year) or otherwise failing to qualify as a REIT,

then that number of shares (rounded up to the nearest whole share) that would cause us to violate such restrictions will be deemed to be transferred to, and held by, a charitable trust for the exclusive benefit of one or more charitable organizations selected by us, and the intended transferee will acquire no rights in such shares. The deemed transfer will be effective as of the close of business on the business day prior to the date of the violative transfer or other event that results in a deemed transfer to the charitable trust. A person who, but for the deemed transfer of the shares to the charitable trust, would have beneficially or constructively owned the shares so transferred is referred to as a "prohibited owner," which, if appropriate in the context, also means any person who would have been the record owner of the shares that the prohibited owner would have so owned.

Any distribution made to the prohibited owner, prior to our discovery that the shares had been deemed to be transferred to the charitable trust as described above, must be repaid to the charitable trustee upon demand for distribution to the beneficiary by the charitable trust. If the transfer to the charitable trust as described above would not be effective, for any reason, to prevent violation of the applicable restriction on ownership and transfer contained in our declaration of trust, then our declaration of trust provides that the transfer of the shares will be void *ab initio*. These rights will be exercised for the exclusive benefit of the charitable beneficiary. Any distribution authorized but unpaid will be paid when due to the charitable trustee.

Shares of beneficial interest transferred to a charitable trust are deemed offered for sale to us, or our designee, at a price per share equal to the lesser of (i) the price paid per share in the transaction that resulted in such transfer to the charitable trust (or, if the event that resulted in the transfer to the charitable trust did not involve a purchase of such shares of beneficial interest at market price, the last sale price reported on the New York Stock Exchange (or other applicable exchange) on the trading day immediately preceding the day of the event that resulted in the transfer of such shares of beneficial

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

interest to the charitable trust) and (ii) the market price on the date we, or our designee, accepts such offer. We have the right to accept such offer until the charitable trustee has sold the shares held in the charitable trust as discussed below. Upon a sale to us, the interest of the charitable beneficiary in the shares sold terminates, the charitable trustee must distribute the net proceeds of the sale to the prohibited owner and any distributions held by the charitable trustee with respect to such shares of beneficial interest must be distributed to the charitable beneficiary.

If we do not buy the shares, the charitable trustee must, within 20 days of receiving notice from us of a transfer of shares to the charitable trust, sell the shares to a person or entity designated by the charitable trustee who could own the shares without violating the share ownership limits or the other restrictions on ownership and transfer of our shares described above. After that sale, the charitable trustee must distribute to the prohibited owner an amount equal to the lesser of (i) the price paid by the prohibited owner for the shares in the transaction that resulted in the transfer to the charitable trust (or, if the event that resulted in the transfer to the charitable trust did not involve a purchase of such shares at market price, the last sale price reported on the New York Stock Exchange (or other applicable exchange) on the trading day immediately preceding the day of the event which resulted in the transfer to the charitable trust) and (ii) the sales proceeds (net of any commissions and other expenses of sale) received by the charitable trust for the shares. Any net sales proceeds in excess of the amount payable to the prohibited owner will be immediately paid to the charitable beneficiary, together with any distributions thereon. In addition, if, prior to discovery by us that shares of beneficial interest have been transferred to a charitable trust, such shares of beneficial interest are sold by a prohibited owner, then such shares will be deemed to have been sold on behalf of the charitable trust and, to the extent that the prohibited owner received an amount for or in respect of such shares that exceeds the amount that such prohibited owner was entitled to receive, such excess amount must be paid to the charitable trustee upon demand. The prohibited owner has no rights in the shares held by the charitable trust.

The charitable trustee will be designated by us and will be unaffiliated with us and with any prohibited owner. Prior to the sale of any shares by the charitable trust, the charitable trustee will receive, in trust for the charitable beneficiary, all distributions made by us with respect to such shares and may also exercise all voting rights with respect to such shares.

Subject to Maryland law, effective as of the date that the shares have been transferred to the charitable trust, the charitable trustee will have the authority, at the charitable trustee's sole discretion:

to rescind as void any vote cast by a prohibited owner prior to our discovery that the shares have been transferred to the charitable trust; and

to recast the vote in accordance with the desires of the charitable trustee acting for the benefit of the beneficiary of the charitable trust.

However, if we have already taken irreversible action, then the charitable trustee may not rescind and recast the vote.

If our board of trustees determines that a proposed transfer would violate any of the restrictions on ownership and transfer of our shares of beneficial interest set forth in our declaration of trust, our board of trustees may take such action as it deems advisable to refuse to give effect to or to prevent such transfer, including, but not limited to, causing us to redeem shares of beneficial interest, refusing to give effect to the transfer on our books or instituting proceedings to enjoin the transfer.

Every owner of more than 5% (or such lower percentage as required by the Internal Revenue Code or the regulations promulgated thereunder) of all classes or series of our shares, including common shares, must give written notice to us within 30 days after the end of each taxable year stating the name and address of such owner, the number of shares of each class and series of shares that the owner beneficially owns and a description of the manner in which such shares are held. Each such

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

owner must provide to us such additional information as we may request in order to determine the effect, if any, of such beneficial ownership on our status as a REIT and to ensure compliance with the restrictions on ownership and transfer of our shares. In addition, each shareholder must, upon demand, provide to us such information as we may request, in good faith, in order to determine our status as a REIT and to comply with the requirements of any taxing authority or governmental authority or to determine such compliance.

These ownership and transfer restrictions could delay, defer or prevent a change in control or other transaction that might involve a premium price for our common shares or otherwise be in the best interest of our shareholders.

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is Computershare Shareowner Services LLC.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase common shares or preferred shares. Warrants may be issued independently or together with any securities or may be attached to or separate from the securities. Each series of warrants will be issued under a separate warrant agreement to be entered into by us with a bank or trust company, as warrant agent, as specified in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

We will describe the specific terms of any warrants we may offer in the prospectus supplement relating to those warrants, which terms will include:

the title of the warrants;

the aggregate number of warrants;

the price or prices at which the warrants will be issued;

the designation, amount and terms of the securities purchasable upon exercise of the warrants;

any provisions for adjustment of the number of securities purchasable upon exercise of the warrants or the exercise price of the warrants;

the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of the warrants issued with each security;

if applicable, the date on and after which the warrants and the securities purchasable upon exercise of the warrants will be separately transferable;

the price or prices at which the securities purchasable upon exercise of the warrants may be purchased;

the minimum or maximum number of warrants which may be exercised at any one time;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;

a discussion of any material U.S. federal income tax considerations applicable to the exercise of the warrants;

information with respect to book-entry procedures, if applicable; and

any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Table of Contents

Each warrant will entitle the holder of the warrant to purchase for cash the amount of common shares or preferred shares, as applicable, at the exercise price stated or determinable in the applicable prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date shown in the applicable prospectus supplement, unless otherwise specified in such prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void. Warrants may be exercised as described in the applicable prospectus supplement. When the warrant holder makes the payment and properly completes and signs the warrant certificate at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as possible, forward the common shares or preferred shares, as applicable, that the warrant holder has purchased. If the warrant holder exercises the warrant for less than all of the warrants represented by the warrant certificate, we will issue a new warrant certificate for the remaining warrants.

CERTAIN PROVISIONS OF MARYLAND LAW AND OF OUR DECLARATION OF TRUST AND BYLAWS

The following summary of certain provisions of Maryland law and of our declaration of trust and bylaws does not purport to be complete, and is subject to and qualified in its entirety by reference to Maryland law and our declaration of trust and bylaws. We have incorporated by reference our declaration of trust and bylaws as exhibits to the registration statement of which this prospectus is a part.

Classification of Board of Trustees

Pursuant to our declaration of trust, our board of trustees is divided into three classes of trustees. Trustees of each class are chosen for three-year terms upon the expiration of their current terms, and every year one class of our trustees is elected by our shareholders. We believe that classification of our board of trustees helps to assure the continuity and stability of our business strategies and policies as determined by our board of trustees. Holders of our common shares do not have the right to cumulative voting in the election of trustees. Consequently, at each annual meeting of shareholders, the shareholders entitled to cast a majority of the votes entitled to be cast in the election of trustees are able to elect all of the successors of the class of trustees whose terms expire at the meeting.

The classified board provision in our declaration of trust could have the effect of making the replacement of incumbent trustees more time consuming and difficult. Two separate meetings of shareholders, instead of one, will generally be required to effect a change in a majority of our trustees. Thus, the classified board provision could increase the likelihood that incumbent trustees will retain their positions. The staggered terms of trustees could delay, defer or prevent a change of control or other transaction that might involve a premium price for our common shares or otherwise be in the best interests of our shareholders.

Number of Trustees; Vacancies

Our declaration of trust and bylaws provide that the number of our trustees may be established by our board of trustees but may not be more than 15. Our declaration of trust and bylaws currently provide that any vacancy may be filled only by a majority of the remaining trustees. Pursuant to our declaration of trust, we have elected to be subject to the provision of Subtitle 8 of Title 3 of the Maryland General Corporation Law, or the MGCL, regarding the filling of vacancies on our board of trustees. Accordingly, except as may be provided by our board of trustees in setting the terms of any class or series of shares, any and all vacancies on our board of trustees may be filled only by the affirmative vote of a majority of the remaining trustees in office, even if the remaining trustees do not constitute a quorum, and any individual elected to fill such vacancy will serve for the remainder of the full term of the class in which the vacancy occurred and until a successor is duly elected and qualifies.

Table of Contents

Each of our trustees is elected by our shareholders to serve for the applicable term of the class to which he or she was elected, pursuant to our classified board provisions, and until his or her successor is duly elected and qualifies. A plurality of all votes cast in the election of trustees at a meeting of shareholders at which a quorum is present is sufficient to elect a trustee. The presence in person or by proxy of shareholders entitled to cast a majority of all the votes entitled to be cast at a meeting constitutes a quorum.

Removal of Trustees

Our declaration of trust provides that, subject to the rights of holders of any class or series of preferred shares, a trustee may be removed only for "cause," and then only by the affirmative vote of at least two-thirds of the votes entitled to be cast generally in the election of trustees. For this purpose, "cause" means, with respect to any particular trustee, conviction of a felony or a final judgment of a court of competent jurisdiction holding that such trustee caused demonstrable, material harm to us through bad faith or active and deliberate dishonesty. These provisions, when coupled with the exclusive power of our board of trustees to fill vacancies on our board of trustees, generally precludes shareholders from (i) removing incumbent trustees except for "cause" and with a substantial affirmative vote and (ii) filling the vacancies created by such removal with their own nominees.

Business Combinations

Under certain provisions of the MGCL applicable to Maryland real estate investment trusts, certain "business combinations," including a merger, consolidation, share exchange or, in certain circumstances, an asset transfer or issuance or reclassification of equity securities, between a Maryland real estate investment trust and an "interested shareholder" (generally, any person who beneficially owns 10% or more of the voting power of the real estate investment trust's outstanding voting shares or an affiliate or associate of the real estate investment trust who, at any time within the two-year period prior to the date in question, was the beneficial owner of 10% or more of the voting power of the then outstanding voting shares of the real estate investment trust) or an affiliate of such an interested shareholder, are prohibited for five years after the most recent date on which the interested shareholder becomes an interested shareholder. Thereafter, any such business combination must be recommended by the board of trustees of such real estate investment trust and approved by the affirmative vote of at least (a) 80% of the votes entitled to be cast by holders of outstanding voting shares of the real estate investment trust and (b) two-thirds of the votes entitled to be cast by holders of voting shares of the real estate investment trust other than shares held by the interested shareholder with whom (or with whose affiliate) the business combination is to be effected or held by an affiliate or associate of the interested shareholder, unless, among other conditions, the real estate investment trust's shareholders receive a minimum price (as defined in the MGCL) for their shares and the consideration is received in cash or in the same form as previously paid by the interested shareholder for its shares. Under the MGCL, a person is not an "interested shareholder" if the board of trustees approved in advance the transaction by which the person otherwise would have become an interested shareholder. A real estate investment trust's board of trustees may provide that its approval is subject to compliance with any terms and conditions determined by it.

These provisions of the MGCL do not apply, however, to business combinations that are approved or exempted by a board of trustees prior to the time that the interested shareholder becomes an interested shareholder. Pursuant to the statute, our board of trustees has by resolution exempted business combinations between us and any other person from these provisions of the MGCL, provided that the business combination is first approved by our board of trustees and, consequently, the five year prohibition and the supermajority vote requirements will not apply to such business combinations. As a result, any person approved by our board of trustees will be able to enter into business combinations with us that may not be in the best interests of our shareholders without compliance by us with the

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

supermajority vote requirements and other provisions of the statute. This resolution, however, may be altered or repealed in whole or in part at any time. If this resolution is repealed, or our board of trustees does not otherwise approve a business combination, the statute may discourage others from trying to acquire control of us and increase the difficulty of consummating any offer.

Control Share Acquisitions

The MGCL provides that holders of "control shares" of a Maryland real estate investment trust acquired in a "control share acquisition" have no voting rights with respect to the control shares except to the extent approved by the affirmative vote of two-thirds of the votes entitled to be cast on the matter, excluding shares of beneficial interest in a real estate investment trust in respect of which any of the following persons is entitled to exercise or direct the exercise of the voting power of such shares in the election of trustees: (1) a person who makes or proposes to make a control share acquisition, (2) an officer of the real estate investment trust or (3) an employee of the real estate investment trust who is also a trustee of the real estate investment trust. "Control shares" are voting shares which, if aggregated with all other such shares owned by the acquirer, or in respect of which the acquirer is able to exercise or direct the exercise of voting power (except solely by virtue of a revocable proxy), would entitle the acquirer to exercise voting power in electing trustees within one of the following ranges of voting power: (A) one-tenth or more but less than one-third, (B) one-third or more but less than a majority or (C) a majority of all voting power. Control shares do not include shares that the acquirer is then entitled to vote as a result of having previously obtained shareholder approval. A "control share acquisition" means the acquisition of issued and outstanding control shares, subject to certain exceptions.

A person who has made or proposes to make a control share acquisition, upon satisfaction of certain conditions (including an undertaking to pay expenses), may compel our board of trustees to call a special meeting of shareholders to be held within 50 days of demand to consider the voting rights of the shares. If no request for a meeting is made, the real estate investment trust may itself present the question at any shareholders' meeting.

If voting rights are not approved at the meeting or if the acquirer does not deliver an acquiring person statement as required by the statute, then, subject to certain conditions and limitations, the real estate investment trust may redeem any or all of the control shares (except those for which voting rights have previously been approved) for fair value determined, without regard to the absence of voting rights for the control shares, as of the date of the last control share acquisition by the acquirer or of any meeting of shareholders at which the voting rights of such shares are considered and not approved. If voting rights for control shares are approved at a shareholders' meeting and the acquirer becomes entitled to vote a majority of the shares entitled to vote, all other shareholders may exercise appraisal rights. The fair value of the shares as determined for purposes of such appraisal rights may not be less than the highest price per share paid by the acquirer in the control share acquisition.

The control share acquisition statute does not apply to (a) shares acquired in a merger, consolidation or share exchange if the real estate investment trust is a party to the transaction or (b) acquisitions approved or exempted by the declaration of trust or bylaws of the real estate investment trust.

Our bylaws contain a provision exempting from the control share acquisition statute any and all acquisitions by any person of our shares. There is no assurance that such provision will not be amended or eliminated at any time in the future.

Subtitle 8

Subtitle 8 of Title 3 of the MGCL permits a Maryland real estate investment trust with a class of equity securities registered under the Securities Exchange Act of 1934, or the Exchange Act, and at

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

least three independent trustees to elect to be subject, by provision in its declaration of trust or bylaws or a resolution of its board of trustees and notwithstanding any contrary provision in the declaration of trust or bylaws, to any or all of five provisions:

a classified board;

a two-thirds vote requirement for removing a trustee;

a requirement that the number of trustees be fixed only by vote of the trustees;

a requirement that a vacancy on the board be filled only by the remaining trustees and for the remainder of the full term of the class of trustees in which the vacancy occurred; and

a majority requirement for the calling of a special meeting of shareholders.

Pursuant to our declaration of trust, we have elected to be subject to the provision of Subtitle 8 that requires that vacancies on our board may be filled only by the remaining trustees and for the remainder of the full term of the trusteeship in which the vacancy occurred. Through provisions in our declaration of trust and bylaws unrelated to Subtitle 8, we already (1) have a classified board, (2) require the affirmative vote of the shareholders entitled to cast at least two-thirds of all of the votes entitled to be cast generally in the election of trustees to remove any trustee from the board, which removal will be allowed only for cause, (3) vest in the board the exclusive power to fix the number of trusteeships, (4) require that a vacancy on the board be filled only by the remaining trustees and (5) require, unless called by our chairman, chief executive officer, president or the board of trustees, the request of shareholders entitled to cast not less than a majority of the votes entitled to be cast at such meeting on such matter to call a special meeting of shareholders to consider and vote on any matter that may properly be considered by our shareholders.

Meetings of Shareholders

Pursuant to our declaration of trust and bylaws, a meeting of our shareholders for the purpose of the election of trustees and the transaction of any other business properly before the meeting will be held annually after the delivery of our annual report on a date and at the time and place set by our board of trustees. In addition, our chairman, chief executive officer, president or board of trustees may call a special meeting of our shareholders. Subject to the provisions of our bylaws, a special meeting of our shareholders to act on any matter that may properly be considered by our shareholders will also be called by our secretary upon the written request of the shareholders entitled to cast not less than a majority of all the votes entitled to be cast at the meeting on such matter and accompanied by the information required by our bylaws.

Mergers; Extraordinary Transactions

Under the MRL, a Maryland real estate investment trust generally cannot merge with another entity unless advised by its board of trustees and approved by the affirmative vote of shareholders entitled to cast at least two-thirds of the votes entitled to be cast on the matter unless a lesser percentage (but not less than a majority of all of the votes entitled to be cast on the matter) is set forth in the real estate investment trust's declaration of trust. Our declaration of trust provides that mergers may be approved by a majority of all of the votes entitled to be cast on the matter. Our declaration of trust also provides that we may sell or transfer all or substantially all of our assets if advised by our board of trustees and approved by the affirmative vote of a majority of all the votes entitled to be cast on the matter. However, many of our operating assets are held by our subsidiaries, and these subsidiaries may be able to sell all or substantially all of their assets or merge with another entity without the approval of our shareholders.

Table of Contents

Amendment to Our Declaration of Trust and Bylaws

Under the MRL, a Maryland real estate investment trust generally cannot amend its declaration of trust unless advised by its board of trustees and approved by the affirmative vote of shareholders entitled to cast at least two-thirds of the votes entitled to be cast on the matter unless a different percentage (but not less than a majority of all of the votes entitled to be cast on the matter) is set forth in the trust's declaration of trust.

Except for amendments to the provisions of our declaration of trust related to (a) the removal of trustees and (b) the vote required to amend the removal provision itself (each of which require the affirmative vote of shareholders entitled to cast at least two-thirds of all the votes entitled to be cast on the matter) and certain amendments described in our declaration of trust that require only approval by our board of trustees, our declaration of trust may be amended only if advised by our board of trustees and approved by the affirmative vote of a majority of all the votes entitled to be cast on the matter.

Our board of trustees has the exclusive power to adopt, alter or repeal any provision of our bylaws and to make new bylaws.

Our Termination

Our declaration of trust provides for us to have a perpetual existence. Our termination must be approved by the affirmative vote of a majority of our entire board of trustees and a majority of all of the votes entitled to be cast on the matter.

Advance Notice of Trustee Nominations and New Business

Our bylaws provide that, with respect to an annual meeting of shareholders, nominations of individuals for election to our board of trustees at an annual meeting and the proposal of business to be considered by shareholders may be made only (1) pursuant to our notice of the meeting, (2) by or at the direction of our board of trustees or (3) by a shareholder of record who is entitled to vote at the meeting in the election of each individual so nominated or on such other business and has complied with the advance notice provisions set forth in our bylaws. Our bylaws currently require the shareholder generally to provide notice to our secretary containing the information required by our bylaws not less than 120 days nor more than 150 days prior to the first anniversary of the date of our proxy statement for the solicitation of proxies for election of trustees at the preceding year's annual meeting (or, if we did not mail a proxy statement for the preceding year's annual meeting, the date of the notice of the preceding year's annual meeting).

With respect to special meetings of shareholders, only the business specified in our notice of meeting may be brought before the meeting. Nominations of individuals for election to our board of trustees at a special meeting may be made only (1) by or at the direction of our board of trustees or (2) provided that our board of trustees has determined that trustees will be elected at such meeting, by a shareholder of record who is entitled to vote at the meeting in the election of each individual so nominated and has complied with the advance notice provisions set forth in our bylaws. Such shareholder may nominate one or more individuals for election as a trustee if the shareholder's notice containing the information required by our bylaws is delivered to our secretary not earlier than the 120th day prior to such special meeting and not later than 5:00 p.m., eastern time, on the later of (1) the 90th day prior to such special meeting or (2) the tenth day following the day on which public announcement is first made of the date of the special meeting and the proposed nominees of our board of trustees to be elected at the meeting.

Table of Contents

Anti-takeover Effect of Certain Provisions of Maryland Law and of Our Declaration of Trust and Bylaws

If the applicable exemption in our bylaws is repealed and the applicable resolution of our board of trustees is repealed, the control share acquisition provisions and the business combination provisions of the MGCL, respectively, as well as the provisions in our declaration of trust and bylaws, as applicable, relating to the removal of trustees and filling of vacancies on our board of trustees, the provisions in our declaration of trust regarding the classification of our board and the restrictions on ownership and transfer of shares of beneficial interest, together with the advance notice and shareholder-requested special meeting provisions of our bylaws, alone or in combination, could serve to delay, deter or prevent a change in control or other transaction that might involve a premium price for our common shares or otherwise be in the best interests of our shareholders.

Indemnification and Limitation of Trustees' and Officers' Liability

Maryland law permits a Maryland real estate investment trust to include in its declaration of trust a provision eliminating the liability of its trustees and officers to the real estate investment trust and its shareholders for money damages except for liability resulting from (1) actual receipt of an improper benefit or profit in money, property or services or (2) active and deliberate dishonesty that is established by a final judgment and is material to the cause of action. Our declaration of trust contains a provision that limits the liability of our trustees and officers to the maximum extent permitted by Maryland law.

Our declaration of trust authorizes us, and our bylaws require us, to the maximum extent permitted by Maryland law, to indemnify (1) any present or former trustee or officer or (2) any individual who, while serving as our trustee or officer and at our request, serves or has served as a trustee, director, officer, partner, member, manager, employee or agent of another real estate investment trust, corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or any other enterprise from and against any claim or liability to which such person may become subject or which such person may incur by reason of his or her service in such capacity or capacities, and to pay or reimburse his or her reasonable expenses in advance of final disposition of such a proceeding. Our declaration of trust and bylaws also permit us to indemnify and advance expenses to any person who served any predecessor of ours in any of the capacities described above and to any employee or agent of ours or a predecessor of ours. We also have entered into indemnification agreements with our trustees and executive officers that address similar matters.

Maryland law permits a Maryland real estate investment trust to indemnify and advance expenses to its trustees, officers, employees and agents to the same extent as is permitted for directors and officers of Maryland corporations under the MGCL. The MGCL permits a Maryland corporation to indemnify its present and former directors and officers, among others, against judgments, penalties, fines, settlements and reasonable expenses actually incurred by them in connection with any proceeding to which they may be made or threatened to be made a party by reason of their service in those or other capacities unless it is established that (1) the act or omission of the director or officer was material to the matter giving rise to the proceeding and (A) was committed in bad faith or (B) was the result of active and deliberate dishonesty, (2) the director or officer actually received an improper personal benefit in money, property or services or (3) in the case of any criminal proceeding, the director or officer had reasonable cause to believe that the act or omission was unlawful. Under the MGCL, a Maryland corporation also may not indemnify for an adverse judgment in a suit by or in the right of the corporation in which the director or officer was adjudged liable to the corporation or for a judgment of liability on the basis that a personal benefit was improperly received. A court may order indemnification if it determines that the director or officer is fairly and reasonably entitled to indemnification even though the director or officer did not meet the prescribed standard of conduct. However, indemnification for an adverse judgment in a suit by or in the right of the corporation or for

Table of Contents

a judgment of liability on the basis that a personal benefit was improperly received is limited to expenses. In addition, the MGCL permits a Maryland corporation to advance reasonable expenses to a director or officer upon the corporation's receipt of (1) a written affirmation by the director or officer of his good faith belief that he has met the standard of conduct necessary for indemnification by the corporation and (2) a written undertaking by him or on his behalf to repay the amount paid or reimbursed by the corporation if it is ultimately determined that the standard of conduct was not met.

REIT Qualification

Our declaration of trust provides that our board of trustees may revoke or otherwise terminate our REIT election, without approval of our shareholders, if it determines that it is no longer in our best interest to continue to qualify as a REIT.

Table of Contents

U.S. FEDERAL INCOME TAX CONSIDERATIONS

General

The following is a summary of the material U.S. federal income tax consequences of our election to qualify as a REIT and an investment in our shares of beneficial interest if we qualify as a REIT. Sidley Austin LLP has acted as our tax counsel and has reviewed this summary. For purposes of this section under the heading "U.S. Federal Income Tax Considerations," references to "we," "our," "us" and "our company" mean only PennyMac Mortgage Investment Trust and not its subsidiaries or other lower tier entities, except as otherwise indicated. This summary is based upon the Internal Revenue Code, the regulations promulgated by the U.S. Treasury, rulings and other administrative pronouncements issued by the IRS, and judicial decisions, all as currently in effect, and all of which are subject to differing interpretations or to change, possibly with retroactive effect. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences described below. No advance ruling has been or will be sought from the IRS regarding any matter discussed in this prospectus. This summary is also based upon the assumption that our operation and the operation of our subsidiaries and affiliated entities will continue to be in accordance with our declaration of trust or our subsidiaries' respective organizational documents, as the case may be. This summary is for general information only, and does not purport to discuss all aspects of U.S. federal income taxation that may be important to a particular investor in light of its investment or tax circumstances, or to investors subject to special tax rules, such as:

depository institutions;

insurance companies;

broker dealers;

regulated investment companies;

holders who receive our shares of beneficial interest through the exercise of employee share options or otherwise as compensation;

persons holding our shares of beneficial interest as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or other integrated investment;

persons subject to the alternative minimum tax;

partnerships and trusts;

persons who hold our shares of beneficial interest on behalf of another person as nominee;

and, except to the extent discussed below:

tax-exempt organizations; and

persons (other than non-U.S. holders, as defined below) whose functional currency is not the U.S. dollar.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

This summary assumes that investors will hold our shares of beneficial interest as a capital asset, which generally means as property held for investment.

If a partnership, including for this purpose any entity that is treated as a partnership for U.S. federal income tax purposes, holds our shares of beneficial interest, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. An investor that is a partnership and the partners in such partnership should consult their tax advisors about the U.S. federal income tax consequences of the acquisition, ownership and disposition of our shares of beneficial interest.

Table of Contents

The U.S. federal income tax treatment of holders of our shares of beneficial interest depends in some instances on determinations of fact and interpretations of complex provisions of U.S. federal income tax law for which no clear precedent or authority may be available. In addition, the tax consequences to any particular shareholder holding our shares of beneficial interest will depend on the shareholder's particular tax circumstances. For example, a shareholder that is a partnership or trust which has issued an equity interest to certain types of tax-exempt organizations may be subject to a special entity level tax if we make distributions attributable to "excess inclusion income." See " Taxation of PennyMac Mortgage Investment Trust Taxable Mortgage Pools and Excess Inclusion Income" below. A similar tax may be payable by persons who hold our shares of beneficial interest as nominee on behalf of such a tax-exempt organization. You are urged to consult your tax advisor regarding the U.S. federal, state, local and foreign income and other tax consequences to you in light of your particular investment or tax circumstances of acquiring, holding, exchanging or otherwise disposing of our shares of beneficial interest.

Taxation of PennyMac Mortgage Investment Trust

We elected to be taxed as a REIT under the Internal Revenue Code commencing with our short taxable year ended December 31, 2009, and generally will not be subject to U.S. federal taxes on our income to the extent we currently distribute all of our income to our shareholders and maintain our qualification as a REIT. However, a significant portion of our assets may be held by TRSs, the net income of which may be subject to federal and state corporate income taxes.

In the opinion of Sidley Austin LLP, commencing with our taxable year ended December 31, 2009, we have been organized and have operated in conformity with the requirements for qualification and taxation as a REIT under the Internal Revenue Code, and our proposed future method of operation will enable us to continue to meet the requirements for qualification and taxation as a REIT under the Internal Revenue Code. It must be emphasized that the opinion of Sidley Austin LLP is based on various assumptions relating to our organization and operation and is conditioned upon fact based representations and covenants made by our management regarding our organization, assets, income and the past, present and future conduct of our business operations. While we intend to operate so that we will qualify as a REIT, given the highly complex nature of the rules governing REITs, the ongoing importance of factual determinations, and the possibility of future changes in our circumstances, no assurance can be given by Sidley Austin LLP or us that we will so qualify for any particular year. The opinion will be expressed as of the date issued. Sidley Austin LLP will have no obligation to advise us or the holders of our shares of beneficial interest of any subsequent change in the matters stated, represented or assumed, or of any subsequent change in the applicable law. You should be aware that opinions of counsel are not binding on the IRS, and no assurance can be given that the IRS will not challenge the conclusions set forth in such opinions.

Qualification and taxation as a REIT depend on our ability to meet on a continuing basis, through actual operating results, distribution levels and diversity of share ownership, various qualification requirements imposed upon REITs by the Internal Revenue Code, the compliance with which will not be reviewed by Sidley Austin LLP. Our ability to qualify as a REIT also requires that we satisfy certain asset tests, some of which depend upon the fair market values of assets directly or indirectly owned by us. Such values may not be susceptible to a precise determination. Accordingly, no assurance can be given that our actual results of operations for any taxable year satisfy such requirements for qualification and taxation as a REIT.

Taxation of REITs in General

As indicated above, qualification and taxation as a REIT depends upon our ability to meet, on a continuing basis, various qualification requirements imposed upon REITs by the Internal Revenue Code. The material qualification requirements are summarized below under " Requirements for

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

Qualification General." While we intend to operate so that we qualify as a REIT, no assurance can be given that the IRS will not challenge our qualification, or that we will be able to operate in accordance with the REIT requirements in the future. See " Failure to Qualify."

If we qualify as a REIT, we will generally be entitled to a deduction for dividends that we pay and therefore will not be subject to U.S. federal corporate income tax on our net income that is currently distributed to our shareholders. This treatment substantially eliminates the "double taxation" at the corporate and shareholder levels that generally results from investment in a corporation. Rather, income generated by a REIT generally is taxed only at the shareholder level upon a distribution of dividends by the REIT.

The rate at which most domestic shareholders that are individuals, trusts and estates are taxed on corporate dividends is a maximum of 15% (the same as the current rate for long-term capital gains) for taxable years beginning on or prior to December 31, 2012. With certain exceptions, however, dividends received by our shareholders from us or from other entities that are taxed as REITs are generally not eligible for such 15% rate, and will be taxed at rates applicable to ordinary income. Such shareholders, however, would generally be subject to tax at such preferred rates (for taxable years beginning on or prior to December 31, 2012) on dividends paid by us to the extent that the dividends are attributable to dividends paid by one or more TRSs. See " Taxation of Shareholders Taxation of Taxable Domestic Shareholders Distributions."

Net operating losses, foreign tax credits and other tax attributes of a REIT generally do not pass through to the shareholders of the REIT, subject to special rules for certain items such as capital gains and qualified dividend income recognized by REITs. See " Taxation of Shareholders."

If we qualify as a REIT, we will nonetheless be subject to U.S. federal tax in the following circumstances:

We will be taxed at regular corporate rates on any undistributed income, including undistributed net capital gains.

The earnings of each TRS we own will be subject to U.S. federal corporate income taxation, and the amount of such taxes may be material.

We may be subject to the "alternative minimum tax" on our items of tax preference, including the limitation on deductions of any net operating losses.

If we have net income from prohibited transactions, which are, in general, sales or other dispositions of property held primarily for sale to customers in the ordinary course of business, other than foreclosure property, such income will be subject to a 100% tax. See " Prohibited Transactions" and " Foreclosure Property" below.

If we elect to treat property that we acquire in connection with a foreclosure of a mortgage loan or certain leasehold terminations as "foreclosure property," we may thereby avoid a 100% tax on gain from a resale of that property (if the sale would otherwise constitute a prohibited transaction), but the income from the sale or operation of the property may be subject to corporate income tax at the highest applicable rate (currently 35%).

If we derive "excess inclusion income" from an interest in certain mortgage loan securitization structures (i.e., from a taxable mortgage pool, or TMP, or a residual interest in a Real Estate Mortgage Investment Conduit, or REMIC), we could be subject to corporate level U.S. federal income tax (currently at a 35% rate) to the extent that such income is allocable to specified types of tax-exempt shareholders known as "disqualified organizations" that are not subject to unrelated business income tax. Similar rules will apply if we own an equity interest in a TMP through a subsidiary REIT of our operating partnership. To the extent that we own a REMIC residual interest or a TMP through a TRS, we will not be subject to this tax directly, but will

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

indirectly bear such tax economically as the shareholder of such a TRS. See " Taxable Mortgage Pools and Excess Inclusion Income" below.

If we should fail to satisfy the 75% gross income test or the 95% gross income test, as discussed below, but nonetheless maintain our qualification as a REIT because there is a reasonable cause for the failure and other applicable requirements are met, we may be subject to a 100% tax on an amount based on the magnitude of the failure adjusted to reflect the profit margin associated with our gross income.

If we should fail to satisfy the asset or other requirements applicable to REITs, as described below, yet nonetheless maintain our qualification as a REIT because there is reasonable cause for the failure and other applicable requirements are met, we may be subject to an excise tax. In that case, the amount of the tax will be at least \$50,000 per failure, and, in the case of certain asset test failures, will be determined as the amount of net income generated by the assets in question multiplied by the highest corporate tax rate (currently 35%) if that amount exceeds \$50,000 per failure.

If we should fail to distribute during each calendar year at least the sum of (a) 85% of our REIT ordinary income for such year, (b) 95% of our REIT capital gain net income for such year, and (c) any undistributed taxable income from prior periods, we would be subject to a non-deductible 4% excise tax on the excess of the required distribution over the sum of (i) the amounts actually distributed, plus (ii) retained amounts on which income tax is paid at the corporate level.

We may be required to pay monetary penalties to the IRS in certain circumstances, including if we fail to meet record keeping requirements intended to monitor our compliance with rules relating to the composition of a REIT's shareholders, as described below under " Requirements for Qualification General."

A 100% tax may be imposed on transactions between a REIT and a TRS that do not reflect arm's length terms.

If we acquire appreciated assets from a corporation that is not a REIT (i.e., a corporation taxable under subchapter C of the Internal Revenue Code) in a transaction in which the adjusted tax basis of the assets in our hands is determined by reference to the adjusted tax basis of the assets in the hands of the subchapter C corporation, we may be subject to tax on such appreciation at the highest corporate income tax rate then applicable if we subsequently recognize gain on a disposition of any such assets during the ten year period following their acquisition from the subchapter C corporation.

In addition, we and our subsidiaries may be subject to a variety of taxes, including payroll taxes and state, local and foreign income, property and other taxes on our and their assets and operations. We could also be subject to tax in situations and on transactions not presently contemplated.

Requirements for Qualification General

The Internal Revenue Code defines a REIT as a corporation, trust or association:

- (i) that is managed by one or more trustees or directors;
- (ii) the beneficial ownership of which is evidenced by transferable shares of beneficial interest, or by transferable certificates of beneficial interest;
- (iii) that would be taxable as a domestic corporation but for the special Internal Revenue Code provisions applicable to REITs;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

- (iv) that is neither a financial institution nor an insurance company subject to specific provisions of the Internal Revenue Code;
- (v) the beneficial ownership of which is held by 100 or more persons;
- (vi) in which, during the last half of each taxable year, not more than 50% in value of the outstanding shares of beneficial interest is owned, directly or indirectly, by five or fewer "individuals" (as defined in the Internal Revenue Code to include specified tax-exempt entities); and
- (vii) which meets other tests described below, including with respect to the nature of its income and assets.

The Internal Revenue Code provides that conditions (i) through (iv) must be met during the entire taxable year, and that condition (v) must be met during at least 335 days of a taxable year of 12 months, or during a proportionate part of a shorter taxable year. Conditions (v) and (vi) need not be met during an entity's initial tax year as a REIT (i.e., 2009 in our case). Our declaration of trust contains restrictions regarding the ownership and transfer of our shares of beneficial interest, which are intended to assist us in satisfying the share ownership requirements described in conditions (v) and (vi) above.

To monitor compliance with the share ownership requirements, we are generally required to maintain records regarding the actual ownership of our shares of beneficial interest. To do so, we must demand written statements each year from the record holders of significant percentages of our shares of beneficial interest in which the record holders are to disclose the actual owners of the shares of beneficial interest (i.e., the persons required to include the dividends paid by us in their gross income). A list of those persons failing or refusing to comply with this demand must be maintained as part of our records. Failure by us to comply with these record keeping requirements could subject us to monetary penalties. A shareholder that fails or refuses to comply with the demand is required by Treasury Regulations to submit a statement with its tax return disclosing the actual ownership of the shares of beneficial interest and other information.

In addition, an entity generally may not elect to become a REIT unless its taxable year is the calendar year. We have adopted December 31 as our year end, and thereby satisfy this requirement.

The Internal Revenue Code provides relief from violations of the REIT gross income requirements, as described below under "Income Tests," in cases in which a violation is due to reasonable cause and not willful neglect, and other requirements are met, including the payment of a penalty tax that is based upon the magnitude of the violation. In addition, certain provisions of the Internal Revenue Code extend similar relief in the case of certain violations of the REIT asset requirements (see "Asset Tests" below) and other REIT requirements, again provided that the violation is due to reasonable cause and not willful neglect, and other conditions are met, including the payment of a penalty tax. If we fail to satisfy any of the various REIT requirements, there can be no assurance that these relief provisions would be available to enable us to maintain our qualification as a REIT, and, if available, the amount of any resultant penalty tax could be substantial.

Effect of Subsidiary Entities

Ownership of Partnership Interests and Disregarded Entities. In the case of a REIT that is a partner in an entity that is treated as a partnership for U.S. federal income tax purposes, Treasury Regulations provide that the REIT is deemed to own its proportionate share of the partnership's assets, and to earn its proportionate share of the partnership's income, for purposes of the asset and gross income tests applicable to REITs, as described below. A REIT's proportionate share of a partnership's assets and income is based on the REIT's capital interest in the partnership (except that for purposes of the 10% value test, our proportionate share of the partnership's assets is based on our proportionate interest in

Table of Contents

the equity and certain debt securities issued by the partnership). In addition, the assets and gross income of the partnership are deemed to retain the same character in the hands of the REIT. Thus, our proportionate share of the assets and items of income of our operating partnership and any other subsidiary partnerships will be treated as assets and items of income of our company for purposes of applying the REIT requirements described below. A summary of certain rules governing the U.S. federal income taxation of partnerships and their partners is provided below under " Other Tax Considerations Tax Aspects of Our Investments in Our Operating Partnership and in Affiliated Partnerships."

If a REIT owns a corporate subsidiary that is a qualified REIT subsidiary, that subsidiary is generally disregarded for U.S. federal income tax purposes, and all assets, liabilities and items of income, deduction and credit of the subsidiary are treated as assets, liabilities and items of income, deduction and credit of the REIT itself, including for purposes of the gross income and asset tests applicable to REITs, as summarized below. A qualified REIT subsidiary is any corporation, other than a TRS, as described below, that is wholly-owned by a REIT, or by other disregarded subsidiaries, or by a combination of the two. Other entities that are wholly-owned by a REIT, including single member limited liability companies that have not elected to be taxed as corporations for U.S. federal income tax purposes, are also generally disregarded as separate entities for U.S. federal income tax purposes, including for purposes of the REIT income and asset tests. Disregarded subsidiaries, along with any partnerships in which we hold an equity interest, are sometimes referred to herein as "pass through subsidiaries."

In the event that a disregarded subsidiary of ours ceases to be wholly-owned for example, if any equity interest in the subsidiary is acquired by a person other than us or another disregarded subsidiary of ours or is classified as a TRS, the subsidiary's separate existence would no longer be disregarded for U.S. federal income tax purposes. Instead, it would have multiple owners and would be treated as either a partnership or a taxable corporation. Such an event could, depending on the circumstances, adversely affect our ability to satisfy the various asset and gross income requirements applicable to REITs, including the requirement that REITs generally may not own, directly or indirectly, more than 10% of the securities of another corporation unless it is a TRS or a qualified REIT subsidiary. See " Asset Tests" and " Income Tests."

Our share of any gain realized by our operating partnership or any other pass-through subsidiary on the sale of any property held as inventory or primarily for sale to customers in the ordinary course of business will be treated as income from a prohibited transaction that is subject to a 100% tax. Under existing law, whether property is held as inventory or primarily for sale to customers in the ordinary course of a trade or business depends upon all of the facts and circumstances of the particular transaction. We intend that our operating partnership will conduct its operations so that no asset owned by it or its pass-through subsidiaries will be considered to be held for sale to customers, and that a sale of any such asset will not be in the ordinary course of business. In order to avoid the prohibited transactions tax, we intend to engage in certain sales of loans through a TRS, which will be subject to corporate income tax on any income or gain derived from the loans it holds and sells, and not at the REIT level.

Taxable REIT Subsidiaries. A REIT, in general, may jointly elect with subsidiary corporations, whether or not wholly-owned, to treat the subsidiary corporation as a TRS. A REIT generally may not own more than 10% of the securities of a taxable corporation, as measured by voting power or value, unless the corporation elects to be a TRS. The separate existence of a TRS or other taxable corporation, unlike a disregarded subsidiary as discussed above, is not ignored for U.S. federal income tax purposes. Accordingly, such a TRS would generally be subject to corporate income tax on its earnings, which may reduce the cash flow generated by us and our subsidiaries in the aggregate, and our ability to make distributions to our shareholders.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

A parent REIT is not treated as holding the assets of a taxable subsidiary corporation or as receiving any income that the subsidiary earns. Rather, the stock issued by the subsidiary is an asset in the hands of the parent REIT, and the REIT recognizes as income the dividends, if any, that it receives from the subsidiary. This treatment can affect the income and asset test calculations that apply to the parent REIT, as described below. Because a parent REIT does not include the assets and income of such subsidiary corporations in determining the parent's compliance with the REIT requirements, such entities may be used by the parent REIT to indirectly undertake activities that the REIT rules might otherwise preclude it from doing directly or through pass through subsidiaries (for example, activities that give rise to certain categories of income such as management or market-rate servicing fees).

Certain restrictions imposed on TRSs are intended to ensure that such entities will be subject to appropriate levels of U.S. federal income taxation. First, a TRS may not deduct its net interest expense in any year to an affiliated REIT to the extent that such payments exceed, generally, 50% of the TRS's adjusted taxable income for that year determined without regard to such net interest expense (although the TRS may carry forward to, and deduct in, a succeeding year the disallowed interest amount if the 50% test is satisfied in that year). In addition, if amounts paid to a REIT or deducted by a TRS due to transactions between the REIT and a TRS exceeded the amount that would be paid to or deducted by a party in an arm's-length transaction, the REIT generally will be subject to an excise tax equal to 100% of such excess. We intend to scrutinize all of our transactions with any of our subsidiaries that are treated as a TRS in an effort to ensure that we do not become subject to this excise tax; however, we cannot assure you that we will be successful in avoiding this excise tax.

We intend to hold a significant amount of assets in one or more TRSs, subject to the limitation that securities in TRSs may not represent more than 25% of our assets. In general, we intend that loans that we originate or buy with an intention of selling (as in the case of our correspondent lending business) in a manner that might expose us to a 100% tax on "prohibited transactions" will be originated or sold by a TRS. The TRS through which any such sales are made may be treated as a dealer for U.S. federal income tax purposes. As a dealer, the TRS would in general mark all the loans it holds on the last day of each taxable year to their market value, and would recognize ordinary income or loss on such loans with respect to such taxable year as if they had been sold for that value on that day. In addition, such TRS may further elect to be subject to the mark-to-market regime described above in the event that the TRS is properly classified as a "trader" as opposed to a "dealer" for U.S. federal income tax purposes.

The same TRS may also be the entity through which most loan modifications are made. See "Cash/Income Differences/Phantom Income". In this circumstance, modified loans held by that TRS would be subject to the same mark to market regime as the other assets of the TRS, if applicable, in determining the taxable income of the TRS each year.

We also expect that some or all of the real property that we may acquire by foreclosure or similar process will be held in one or more TRSs and that any income or gain realized with respect to such real property will be subject to corporate income taxation.

Cash/Income Differences/Phantom Income. Due to the nature of the assets in which we will invest, we may be required to recognize taxable income from those assets in advance of our receipt of cash flow on or proceeds from disposition of such assets, and may be required to report taxable income in early periods that exceeds the economic income ultimately realized on such assets.

It is expected that we may acquire debt instruments in the secondary market for less than their face amount. The discount at which such debt instruments are acquired may reflect doubts about their ultimate collectability rather than current market interest rates. The amount of such discount will nevertheless generally be treated as "market discount" for U.S. federal income tax purposes. Market discount on a debt instrument accrues on the basis of the constant yield to maturity of the debt instrument, and is reported as income when, and to the extent that, any payment of principal of the

Table of Contents

debt instrument is made. Payments on residential mortgage loans are ordinarily made monthly, and consequently accrued market discount may have to be included in income each month as if the debt instrument were assured of ultimately being collected in full. If that turned out not to be the case, and we eventually collected less on the debt instrument than the amount we paid for it plus the market discount we had previously reported as income, there would be a bad debt deduction available to us at that time. Nevertheless, our (and our shareholders') ability to benefit from that bad debt deduction would depend on our having taxable income in that later taxable year. REITs may not carry back net operating losses, so this possible "income early, losses later" phenomenon could adversely affect us and our shareholders if it were persistent and in significant amounts.

Many of the MBS that we buy will likely have been issued with original issue discount. In general, we will be required to accrue original issue discount based on the constant yield to maturity of the MBS, and to treat it as taxable income in accordance with applicable U.S. federal income tax rules even though smaller or no cash payments are received on such debt instrument. As in the case of the market discount discussed in the preceding paragraph, the constant yield in question will be determined and income will be accrued based on the assumption that all future payments due on MBS in question will be made, with consequences similar to those described in the previous paragraph if all payments on the MBS are not made.

In addition, pursuant to our investment strategy, including our potential involvement in public-private joint ventures with the federal government, or otherwise, we may acquire distressed debt investments that are subsequently modified by agreement with the borrower. If the amendments to the outstanding debt are "significant modifications" under the applicable Treasury Regulations, the modified debt may be considered to have been reissued to us in a debt-for-debt exchange with the borrower. In that event, we may be required to recognize income to the extent the principal amount of the modified debt exceeds our adjusted tax basis in the unmodified debt, and would hold the modified loan with a cost basis equal to its principal amount for U.S. federal tax purposes. To the extent that such modifications are made with respect to a debt instrument held by our TRS treated as a dealer as described in the immediately preceding section of this discussion, such a TRS would be required at the end of each taxable year, including the taxable year in which any such modification were made, to mark the modified debt instrument to its fair market value as if the debt instrument were sold. In that case, the TRS would recognize a loss at the end of the taxable year in which the modification were made to the extent the fair market value of such debt instrument were less than its principal amount after the modification.

Moreover, in the event that any debt instruments or MBS acquired by us are delinquent as to mandatory principal and interest payments, or in the event a borrower with respect to a particular debt instrument acquired by us encounters financial difficulty rendering it unable to pay stated interest as due, we may nonetheless be required to continue to recognize the unpaid interest as taxable income. Similarly, we may be required to accrue interest income with respect to subordinate MBS at the stated rate regardless of whether corresponding cash payments are received.

Finally, we may be required under the terms of indebtedness that we incur (including certain securitizations), to use cash received from interest payments to make principal payments on that indebtedness, with the effect of recognizing income but not having a corresponding amount of cash available for distribution to our shareholders.

Due to each of these potential timing differences between income recognition or expense deduction and cash receipts or disbursements, there is a significant risk that we may have substantial taxable income in excess of cash available for distribution. In that event, we may need to borrow funds or take other action to satisfy the REIT distribution requirements for the taxable year in which this "phantom income" is recognized. See " Annual Distribution Requirements."

Table of Contents

Income Tests

To qualify as a REIT, we annually must satisfy two gross income requirements. First, at least 75% of our gross income for each taxable year, excluding gross income from sales of inventory or dealer property in "prohibited transactions," and certain hedging transactions generally must be derived from investments relating to real property or mortgages on real property, including interest income derived from mortgage loans collateralized by real property (including certain types of MBS), "rents from real property," dividends received from other REITs, and gains from the sale of real estate assets, as well as "qualified temporary investment income." "Qualified temporary investment income" includes any income which is (i) attributable to stock or debt instruments, (ii) attributable to the temporary investment of "new capital" (i.e., generally, any amount received by a REIT in exchange for its stock (other than pursuant to a dividend reinvestment plan) or certain public offerings of certain of its debt obligations), and (iii) received or accrued during the one-year period beginning on the date on which the REIT received such capital. Second, at least 95% of our gross income in each taxable year, excluding gross income from prohibited transactions and certain hedging transactions, must be derived from some combination of such income from investments in real property (i.e., income that qualifies under the 75% income test described above), as well as other dividends, interest and gain from the sale or disposition of stock or securities, none of which need have any relation to real property.

Interest income constitutes qualifying mortgage interest for purposes of the 75% income test (as described above) to the extent that the obligation is collateralized by a mortgage on real property. If we receive interest income with respect to a mortgage loan that is collateralized by both real property and other property, and the highest principal amount of the loan outstanding during a taxable year exceeds the fair market value of the real property on the date that we acquired or originated the mortgage loan, the interest income will be apportioned between the real property and the other collateral, and our income from the arrangement will qualify for purposes of the 75% income test only to the extent that the interest is allocable to the real property. Even if a loan is not collateralized by real property, or is undercollateralized, the income that it generates may nonetheless qualify for purposes of the 95% income test. The IRS recently issued Revenue Procedure 2011-16, which interprets the "principal amount" of the loan to be the face amount of the loan, despite the Internal Revenue Code's requirement that taxpayers treat any market discount (discussed above) as interest rather than principal.

We believe that all of the mortgage loans that we acquire are secured only by real property and no other property value is taken into account in our underwriting and pricing. Accordingly, we believe that the interest apportionment rules and Revenue Procedure 2011-16 will not apply to our portfolio. Nevertheless, if the IRS were to assert successfully that our mortgage loans were secured by other property, that the interest apportionment rules applied for purposes of our REIT testing, and that the position taken in Revenue Procedure 2011-16 should be applied to our portfolio, then depending upon the value of the real property securing our loans and their face amount, and the sources of our gross income generally, we might not be able to meet the 75% income test.

To the extent that the terms of a loan provide for contingent interest that is based on the cash proceeds realized upon the sale of the property securing the loan, or a shared appreciation provision, income attributable to the participation feature will be treated as gain from sale of the underlying property, which generally will be qualifying income for purposes of both the 75% and 95% gross income tests if the property is not held as inventory or dealer property.

To the extent that a REIT derives interest income from a mortgage loan, or income from the rental of real property (discussed below), where all or a portion of the amount of interest or rental income payable is contingent, such income generally will qualify for purposes of the gross income tests only if it is based upon the gross receipts or sales, and not the net income or profits, of the borrower or lessee. This limitation does not apply, however, where the borrower or lessee leases substantially all

Table of Contents

of its interest in the property to tenants or subtenants, to the extent that the rental income derived by the borrower or lessee, as the case may be, would qualify as rents from real property had it been earned directly by a REIT.

We and our subsidiaries may also invest in REMICs and may invest in other types of asset-backed securities, or ABS, MBS or residential mortgage-backed securities, or RMBS. See below under " Asset Tests" for a discussion of the effect of such investments on our qualification as a REIT.

We may indirectly receive distributions from TRSs or other corporations that are not REITs or qualified REIT subsidiaries. These distributions will be classified as dividend income to the extent of the earnings and profits of the distributing corporation. Such non-REIT dividends will generally constitute qualifying income for purposes of the 95% gross income test, but not the 75% gross income test. Any dividends received by us from another REIT, however, will be qualifying income in our hands for purposes of both the 95% and 75% income tests.

Any income or gain derived by us or our pass through subsidiaries from (i) instruments that hedge risks of changes in interest rates, with respect to indebtedness incurred or to be incurred by us or our pass through subsidiaries in order to acquire or carry "real estate assets" (as described below under " Asset Tests") or (ii) any transaction primarily entered into to manage the risk of currency fluctuations with respect to any item of income or gain that would be qualifying income under either the 95% gross income test or the 75% gross income test will be excluded from gross income for purposes of the 95% gross income test and the 75% gross income test, provided that specified requirements are met, including that the instrument be properly identified as a hedge, along with the risk that it hedges, within prescribed time periods. Income and gain from all other hedging transactions will only be qualifying income for purposes of the 95% and 75% income tests if the hedge meets certain requirements and we elect to integrate it with a specified asset and to treat the integrated position as a synthetic debt instrument. We intend to structure any hedging transactions in a manner that does not jeopardize our qualification as a REIT. We may conduct some or all of our hedging activities through a TRS or other corporate entity, the income from which may be subject to U.S. federal income tax, rather than participating in the arrangements directly or through pass through subsidiaries. No assurance can be given, however, that our hedging activities will not give rise to income that does not qualify for purposes of either or both of the REIT income tests, and will not adversely affect our ability to satisfy the REIT qualification requirements.

To the extent we recognize any foreign currency gain with respect to income that qualifies for purposes of the 75% gross income test, then such foreign currency gain will not constitute gross income for purposes of the 75% and 95% gross income tests. To the extent we recognize any foreign currency gain with respect to income that qualifies for purposes of the 95% gross income test, then such foreign currency gain will not constitute gross income for purposes of the 95% gross income test, but will generally be included in gross income and treated as nonqualifying income for purposes of the 75% gross income test, except to the extent that such foreign currency gain qualifies pursuant to the immediately preceding sentence.

If we fail to satisfy one or both of the 75% or 95% gross income tests for any taxable year, we may still qualify as a REIT for the year if we are entitled to relief under applicable provisions of the Internal Revenue Code. These relief provisions will be generally available if our failure to meet the gross income tests was due to reasonable cause and not due to willful neglect and we file a schedule of the source of our gross income in accordance with Treasury Regulations. It is not possible to state whether we would be entitled to the benefit of these relief provisions in all circumstances. If these relief provisions are inapplicable to a particular set of circumstances involving us, we will not qualify as a REIT. As discussed above under " Taxation of REITs in General," even where these relief provisions apply, a tax would be imposed based upon the amount by which we fail to satisfy the particular gross income test.

Table of Contents

Asset Tests

We, at the close of each calendar quarter, must also satisfy four tests relating to the nature of our assets. First, at least 75% of the value of our total assets must be represented by some combination of "real estate assets," cash, cash items, U.S. government securities and, under some circumstances, stock or debt instruments purchased with new capital. For this purpose, real estate assets include interests in real property, such as land, buildings, leasehold interests in real property, stock of other corporations that qualify as REITs, and some kinds of MBS and mortgage loans. Assets that do not qualify for purposes of the 75% test are subject to the additional asset tests described below.

The second asset test is that the value of any one issuer's securities owned by us may not exceed 5% of the value of our total assets. Third, we may not own more than 10% of any one issuer's outstanding securities, as measured by either voting power or value. The 5% and 10% asset tests do not apply to securities of TRSs, qualified REIT subsidiaries, any other entity that is disregarded as an entity separate from us, and any equity interest we may hold in a partnership. Fourth, the aggregate value of all securities of TRSs (other than securities that are "real estate assets") held by a REIT may not exceed 25% of the value of the REIT's total assets.

A significant portion of our assets may be held from time to time in TRSs, and the need to satisfy the requirement that securities issued by TRSs not exceed 25% of the value of our assets may require dividends to be distributed by such TRSs to us at times when it may be beneficial not to do so. We may, in turn, distribute all or a portion of such dividends to our shareholders at times when we might not otherwise wish to declare and pay such dividends. See " Annual Distribution Requirements." TRS distributions classified as dividends, however, will generally not constitute "good" income for purposes of the 75% gross income test discussed above. It is possible that we may wish to distribute a dividend from a TRS in order to reduce the value of our TRS securities below 25% of our assets, but be unable to do so without violating the requirement that 75% of our gross income in the taxable year be derived from real estate assets. Although there are other measures we can take in such circumstances in order to remain in compliance, there can be no assurance that we will be able to comply with both of these tests in all market conditions.

Notwithstanding the general rule, as noted above, that for purposes of the REIT income and asset tests, a REIT is treated as owning its share of the underlying assets of a subsidiary partnership, if a REIT holds indebtedness issued by a partnership, the indebtedness will be subject to, and may cause a violation of, the asset tests, unless it is a qualifying mortgage asset, or other conditions are met. Similarly, although stock of another REIT is a qualifying asset for purposes of the REIT asset tests, any non-mortgage debt held by us that is issued by another REIT will generally not so qualify (however, debt issued by REITs will not be treated as "securities" for purposes of the 10% value test, as explained below).

Certain relief provisions are available to REITs to satisfy the asset requirements or to maintain REIT qualification notwithstanding certain violations of the asset and other requirements. One such provision allows a REIT which fails one or more of the asset requirements to nevertheless maintain its REIT qualification if (a) it provides the IRS with a description of each asset causing the failure, (b) the failure is due to reasonable cause and not willful neglect, (c) the REIT pays a tax equal to the greater of (i) \$50,000 per failure and (ii) the product of the net income generated by the assets that caused the failure multiplied by the highest applicable corporate tax rate (currently 35%), and (d) the REIT either disposes of the assets causing the failure within six months after the last day of the quarter in which it identifies the failure, or otherwise satisfies the relevant asset tests within that time period.

In the case of *de minimis* violations of the 10% and 5% asset tests, a REIT may maintain its qualification despite a violation of such requirements if (a) the value of the assets causing the violation does not exceed the lesser of 1.0% of the REIT's total assets and \$10,000,000, and (b) the REIT either

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

disposes of the assets causing the failure within six months after the last day of the quarter in which it identifies the failure, or the relevant tests are otherwise satisfied within that time period.

Certain securities will not cause a violation of the 10% value test described above. Such securities include instruments that constitute "straight debt." A security does not qualify as "straight debt" where a REIT (or a controlled TRS of the REIT) owns other securities of the issuer of that security which do not qualify as straight debt, unless the value of those other securities constitute, in the aggregate, 1.0% or less of the total value of that issuer's outstanding securities. In addition to straight debt, the Internal Revenue Code provides that certain other securities will not violate the 10% value test. Such securities include (a) any loan made to an individual or an estate, (b) certain rental agreements in which one or more payments are to be made in subsequent years (other than agreements between a REIT and certain persons related to the REIT), (c) any obligation to pay rents from real property, (d) securities issued by governmental entities that are not dependent in whole or in part on the profits of (or payments made by) a non-governmental entity, (e) any security (including debt securities) issued by another REIT, and (f) any debt instrument issued by a partnership if the partnership's income is of a nature that it would satisfy the 75% gross income test described above under "Income Tests." In applying the 10% value test, a debt security issued by a partnership is not taken into account to the extent, if any, of the REIT's proportionate interest in that partnership.

Any interests in a REMIC held by us or our pass through subsidiaries will generally qualify as real estate assets, and income derived from REMIC interests will generally be treated as qualifying income for purposes of the REIT income tests described above. If less than 95% of the assets of a REMIC are real estate assets, however, then only a proportionate part of our interest in the REMIC, and its income derived from the interest, qualifies for purposes of the REIT asset and income tests.

Where a REIT holds a "residual interest" in a REMIC, or in a TMP, from which it derives "excess inclusion income," the REIT will be required to either distribute the excess inclusion income or pay tax on it (or a combination of the two), even though the income may not be received in cash by the REIT. To the extent that distributed excess inclusion income is allocable to a shareholder, the income (i) would not be allowed to be offset by any net operating losses otherwise available to the shareholder, (ii) would be subject to tax as unrelated business taxable income in the hands of most types of shareholders that are otherwise generally exempt from U.S. federal income tax, and (iii) would result in the application of U.S. federal income tax withholding at the maximum rate (30%), without reduction of any otherwise applicable income tax treaty, to the extent allocable to foreign shareholders. Moreover, any excess inclusion income received by a REIT that is allocable to specified categories of tax-exempt investors which are not subject to unrelated business income tax, such as government entities, will be subject to corporate level income tax in the REIT's hands, whether or not it is distributed. See "Taxable Mortgage Pools and Excess Inclusion Income."

In the event that we are treated as investing in a mortgage loan that is not fully secured by real property, recently issued Revenue Procedure 2011-16 may apply to determine what portion of the mortgage loan will be treated as a real estate asset for purposes of the 75% asset test. Pursuant to Revenue Procedure 2011-16, the IRS has announced that it will not challenge a REIT's treatment of a loan as a real estate asset in its entirety to the extent that the value of the loan is equal to or less than the value of the real property securing the loan at the relevant testing date. However, uncertainties exist regarding the application of Revenue Procedure 2011-16, particularly with respect to the proper treatment under the asset tests of mortgage loans acquired at a discount that increase in value following their acquisition, and no assurance can be given that the IRS would not challenge our treatment of such assets.

We hold certain loans to one or more of our TRSs that are secured by real property or mortgages. We treat these loans as qualifying assets for purposes of the REIT assets tests to the extent that they are secured, directly or indirectly, by real property. As a result, we do not treat such loans as subject to

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

the limitation that securities from TRSs must constitute less than 25% of our total assets. While we believe that loans to a TRS are treated as qualifying real estate assets for purposes of the REIT asset tests to the extent they are secured by real property, the U.S. federal income tax treatment of such loans is not entirely clear. If the IRS were to successfully challenge our treatment of these mortgage loans as qualifying real estate assets, our ability to meet the REIT asset tests and other REIT requirements could be adversely affected.

We believe that our holdings of securities and other assets will comply with the foregoing REIT asset requirements, and we intend to monitor compliance on an ongoing basis. No independent appraisals will be obtained, however, to support our conclusions as to the value of our total assets, or the value of any particular security or securities. Moreover, values of some assets, including instruments issued in securitization transactions, may not be susceptible to a precise determination, and values are subject to change in the future. Furthermore, the proper classification of an instrument as debt or equity for U.S. federal income tax purposes may be uncertain in some circumstances, which could affect the application of the REIT asset requirements. Accordingly, there can be no assurance that the IRS will not contend that our interests in our subsidiaries or in the securities of other issuers cause a violation of the REIT asset tests.

Annual Distribution Requirements

To qualify as a REIT, we are required to distribute dividends, other than capital gain dividends, to our shareholders in an amount at least equal to:

- (a) the sum of
 - (1) 90% of our "REIT taxable income," computed without regard to our net capital gains and the deduction for dividends paid, and
 - (2) 90% of our net income, if any (after tax), from foreclosure property (as described below), minus
- (b) the sum of specified items of non-cash income.

These distributions generally must be paid in the taxable year to which they relate, or in the following taxable year if declared before we timely file our tax return for the year and if paid with or before the first regular dividend payment after such declaration. For distributions to be counted for this purpose, and to give rise to a tax deduction by us, they must not be "preferential dividends." A dividend is not a preferential dividend if it is pro rata among all outstanding shares of beneficial interest within a particular class, and is in accordance with the preferences among different classes of shares of beneficial interest as set forth in the REIT's organizational documents.

To the extent that we distribute at least 90%, but less than 100%, of our "REIT taxable income," as adjusted, we will be subject to tax at ordinary corporate tax rates on the retained portion. We may elect to retain, rather than distribute, our net long-term capital gains and pay tax on such gains. In this case, we could elect to have our shareholders include their proportionate share of such undistributed long-term capital gains in income, and to receive a corresponding credit for their share of the tax paid by us. Shareholders would then increase the adjusted basis of their shares of beneficial interest by the difference between the designated amounts of capital gains from us that they include in their taxable income, and the tax paid on their behalf by us with respect to that income.

To the extent that a REIT has available net operating losses carried forward from prior tax years, such losses may reduce the amount of distributions that it must make in order to comply with the REIT distribution requirements. Any distributions made with respect to such tax years into which net operating losses have been carried forward from prior tax years will nevertheless be taxable as dividends to the extent of current earnings or profits for such tax year.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

If we should fail to distribute during each calendar year at least the sum of (a) 85% of our REIT ordinary income for such year, (b) 95% of our REIT capital gain net income for such year, and (c) any undistributed taxable income from prior periods, we would be subject to a non-deductible 4% excise tax on the excess of such required distribution over the sum of (x) the amounts actually distributed and (y) the amounts of income retained on which we have paid corporate income tax.

It is possible that we, from time to time, may not have sufficient cash to meet the distribution requirements due to timing differences between (a) the actual receipt of cash, including receipt of distributions from our subsidiaries, and (b) the inclusion of items in income by us for U.S. federal income tax purposes. This may be especially an issue with respect to our investments in distressed or modified debt instruments. See " Effect of Subsidiary Entities Cash/Income Differences/Phantom Income." In the event that such timing differences occur, in order to meet the distribution requirements, it might be necessary to arrange for short term, or possibly long term, borrowings, or to make distributions in the form of our shares of beneficial interest or taxable in kind distributions of property.

We may be able to rectify a failure to meet the distribution requirements for a year by paying "deficiency dividends" to shareholders in a later year, which may be included in our deduction for dividends paid for the earlier year. In this case, we may be able to avoid losing our REIT qualification or being taxed on amounts distributed as deficiency dividends. However, we will be required to pay interest and a penalty based on the amount of any deduction taken for deficiency dividends.

Failure to Qualify

If we failed to satisfy one or more requirements for REIT qualification, other than the gross income tests and the asset tests, we could avoid disqualification if our failure is due to reasonable cause and not to willful neglect and we pay a penalty of \$50,000 for each such failure. In addition, there are relief provisions for a failure of the gross income tests and asset tests, as described above under " Income Tests" and " Asset Tests."

If we failed to qualify for taxation as a REIT in any taxable year, and the relief provisions described above did not apply, we would be subject to tax, including any applicable alternative minimum tax, on our taxable income at regular corporate rates. Distributions to shareholders in any year in which we were not a REIT would not be deductible by us, nor would they be required to be made. In this situation, to the extent of current and accumulated earnings and profits, distributions to domestic shareholders that are individuals, trusts and estates would generally be taxable at capital gains rates (through taxable years beginning on or before December 31, 2012), and, subject to limitations of the Internal Revenue Code, corporate distributees may be eligible for the dividends received deduction. Such preferred rates are set to expire for taxable years beginning after December 31, 2012. See " Other Tax Considerations Sunset of Reduced Tax Rate Provisions." Unless we were entitled to relief under specific statutory provisions, we would also be disqualified from re-electing to be taxed as a REIT for the four taxable years following the taxable year during which qualification was lost. It is not possible to state whether, in all circumstances, we would be entitled to this statutory relief.

Prohibited Transactions

Net income derived by a REIT from a prohibited transaction is subject to a 100% tax. Any foreign currency gain (as defined in Section 988(b)(1) of the Internal Revenue Code) and any foreign currency loss (as defined in Section 988(b)(2) of the Internal Revenue Code) in connection with a prohibited transaction will be taken into account in determining the amount of income subject to the 100% tax. The term "prohibited transaction" generally includes a sale or other disposition of property (other than foreclosure property, as discussed below) that is held primarily for sale to customers in the ordinary course of a trade or business. We intend to conduct our operations so that no asset owned by us or our

Table of Contents

pass through subsidiaries will be held for sale to customers, and that a sale of any such asset will not be in the ordinary course of our business. Whether property is held "primarily for sale to customers in the ordinary course of a trade or business" depends, however, on the particular facts and circumstances. No assurance can be given that any property sold by us will not be treated as property held for sale to customers, or that we can comply with certain safe harbor provisions of the Internal Revenue Code that would prevent such treatment. The 100% tax does not apply to gains from the sale of property that is held through a TRS or other taxable corporation, although such income will be subject to tax in the hands of the corporation at regular corporate rates. Therefore, in order to avoid the prohibited transactions tax, we intend to engage in certain sales of loans and other activities that could potentially give rise to income from a prohibited transaction through a TRS and not at the REIT level.

Foreclosure Property

Foreclosure property is real property and any personal property incident to such real property (i) that is acquired by a REIT as the result of the REIT having bid on the property at foreclosure, or having otherwise reduced the property to ownership or possession by agreement or process of law, after there was a default (or default was imminent) on a lease of the property or a mortgage loan held by the REIT and collateralized by the property, (ii) for which the related loan or lease was acquired by the REIT at a time when default was not imminent or anticipated, and (iii) for which such REIT makes a proper election to treat the property as foreclosure property. REITs generally are subject to tax at the maximum corporate rate (currently 35%) on any net income from foreclosure property, including any gain from the disposition of the foreclosure property, other than income that would otherwise be qualifying income for purposes of the 75% gross income test. Any gain from the sale of property for which a foreclosure property election has been made will not be subject to the 100% tax on gains from prohibited transactions described above, even if the property would otherwise constitute inventory or dealer property in the hands of the selling REIT. To the extent that we receive any income from foreclosure property that is not qualifying income for purposes of the 75% gross income test, we intend to make an election to treat the related property as foreclosure property.

Taxable Mortgage Pools and Excess Inclusion Income

An entity, or a portion of an entity, may be classified as a TMP under the Internal Revenue Code if (i) substantially all of its assets consist of debt obligations or interests in debt obligations, (ii) more than 50% of those debt obligations are real estate mortgages or interests in real estate mortgages as of specified testing dates, (iii) the entity has issued debt obligations (liabilities) that have two or more maturities, and (iv) the payments required to be made by the entity on its debt obligations (liabilities) "bear a relationship" to the payments to be received by the entity on the debt obligations that it holds as assets. Under Treasury Regulations, if less than 80% of the assets of an entity (or a portion of an entity) consist of debt obligations, these debt obligations are considered not to comprise "substantially all" of its assets, and therefore the entity would not be treated as a TMP. Our financing and securitization arrangements may give rise to TMPs, with the consequences as described below.

Where an entity, or a portion of an entity, is classified as a TMP, it is generally treated as a taxable corporation for U.S. federal income tax purposes. In the case of a REIT, or a portion of a REIT, or a disregarded subsidiary of a REIT, that is a TMP, however, special rules apply. We may enter into transactions that could result in us or a portion of our assets being treated as a TMP for U.S. federal income tax purposes. Specifically, we may securitize our assets and such securitizations will likely result in us owning interests in a TMP. We would be precluded from holding equity interests in such a securitization through our operating partnership. Accordingly, we would likely enter into such transactions at a subsidiary REIT level, and will be precluded from selling to outside investors equity interests in such securitizations or from selling any debt securities issued in connection with such securitizations that might be considered to be equity interests for U.S. federal income tax purposes.

Table of Contents

If a REIT, including a subsidiary REIT formed by our operating partnership, owns, directly or indirectly through one or more qualified REIT subsidiaries or other entities that are disregarded as a separate entity for U.S. federal income tax purposes 100% of the equity interests in the TMP, the TMP will be a qualified REIT subsidiary and, therefore, ignored as an entity separate from the REIT for U.S. federal income tax purposes and would not generally affect the tax qualification of the REIT. Rather, the consequences of the TMP classification would generally, except as described below, be limited to the REIT's shareholders.

If such a subsidiary REIT of our operating partnership owns less than 100% of the ownership interests in a subsidiary that is a TMP, the foregoing rules would not apply. Rather, the subsidiary would be treated as a corporation for U.S. federal income tax purposes, and would be subject to corporate income tax. In addition, this characterization would alter the REIT income and asset test calculations of such a subsidiary REIT and could adversely affect such REIT's compliance with those requirements, which, in turn, could affect our compliance with the REIT requirements. We do not expect that we, or any subsidiary REIT owned by our operating partnership, would form any subsidiary that would become a TMP, in which we own some, but less than all, of the ownership interests, and we intend to monitor the structure of any TMPs in which we have an interest to ensure that they will not adversely affect our qualification as a REIT. If a subsidiary REIT through which we held TMP securitizations were to fail to qualify as a REIT, our TMP securitizations will be treated as separate taxable corporations for U.S. federal income tax purposes that could not be included in any consolidated corporate tax return.

The U.S. Treasury has not yet issued regulations to govern the treatment of shareholders of a REIT, a portion of which is a TMP, as described below. A portion of the REIT's income from the TMP arrangement, which might be non-cash accrued income, could be treated as "excess inclusion income."

The REIT's excess inclusion income, including any excess inclusion income from a residual interest in a REMIC, would be allocated among its shareholders. A shareholder's share of excess inclusion income (i) would not be allowed to be offset by any net operating losses otherwise available to the shareholder, (ii) would be subject to tax as unrelated business taxable income in the hands of most types of shareholders that are otherwise generally exempt from U.S. federal income tax, and (iii) would result in the application of U.S. federal income tax withholding at the maximum rate (30%), without reduction for any otherwise applicable income tax treaty, to the extent allocable to most types of foreign shareholders. See "Taxation of Shareholders." Under recently issued IRS guidance, to the extent that excess inclusion income is allocated from a TMP to a tax-exempt shareholder of a REIT that is not subject to unrelated business income tax (such as government entities), the REIT will be subject to tax on this income at the highest applicable corporate tax rate (currently 35%). In that case, the REIT could reduce distributions to such shareholder by the amount of such tax paid by the REIT attributable to such shareholder's ownership. Treasury Regulations provide that such a reduction in distributions would not give rise to a preferential dividend that could adversely affect the REIT's compliance with its distribution requirements. See "Annual Distribution Requirements." Our declaration of trust contemplates that any tax imposed on us in these circumstances may to the extent feasible reduce distributions to the shareholder whose status caused that tax to be imposed, or we may bear such tax as a general corporate expense.

The manner in which excess inclusion income is calculated is not clear under current law. As required by IRS guidance, we intend to make such determinations based on what we believe to be a reasonable method. However, there can be no assurance that the IRS will not challenge our method of making any such determinations. If the IRS were to disagree with any such determinations made or with the method used by us, the amount of any excess inclusion income required to be taken into account by one or more shareholders (as described above) could be significantly increased. Tax-exempt investors, foreign investors and taxpayers with net operating losses should carefully consider the tax consequences described above, and are urged to consult their tax advisors.

Table of Contents

Taxation of Shareholders

Taxation of Taxable Domestic Shareholders

Distributions. Provided that we qualify as a REIT, distributions made to our taxable domestic shareholders out of current or accumulated earnings and profits, and not designated as capital gain dividends, will generally be taken into account by them as ordinary income and will not be eligible for the dividends received deduction for corporations. With certain exceptions, dividends received from REITs are not eligible for taxation at the preferential income tax rates (15% maximum U.S. federal income tax rate through taxable years beginning on or before December 31, 2012) for qualified dividends received by domestic shareholders that are individuals, trusts and estates from taxable C corporations. Such shareholders, however, are taxed at the preferential rates on dividends designated by and received from REITs to the extent that the dividends are attributable to (i) income retained by the REIT in the prior taxable year on which the REIT was subject to corporate level income tax (less the amount of tax), (ii) dividends received by the REIT from TRSs or other taxable C corporations, or (iii) income in the prior taxable year from the sales of "built in gain" property acquired by the REIT from C corporations in carryover basis transactions (less the amount of corporate tax on such income).

Distributions from us that are designated as capital gain dividends will generally be taxed to shareholders as long-term capital gains, to the extent that they do not exceed our actual net capital gain for the taxable year, without regard to the period for which the shareholder has held its shares of beneficial interest. A similar treatment will apply to long-term capital gains retained by us, to the extent that we elect the application of provisions of the Internal Revenue Code that treat shareholders of a REIT as having received, for U.S. federal income tax purposes, undistributed capital gains of the REIT, while passing through to shareholders a corresponding credit for taxes paid by the REIT on such retained capital gains. See "Taxation of PennyMac Mortgage Investment Trust Annual Distribution Requirements." Corporate shareholders may be required to treat up to 20% of some capital gain dividends as ordinary income. Long-term capital gains are generally taxable at maximum U.S. federal rates of 15% (through taxable years beginning on or before December 31, 2012 and currently scheduled to increase to 20% for taxable years beginning thereafter) in the case of shareholders who are individuals, trusts and estates, and 35% in the case of shareholders that are corporations. Capital gains attributable to the sale of depreciable real property held for more than 12 months are subject to a 25% maximum U.S. federal income tax rate for taxpayers who are taxed as individuals, to the extent of previously claimed depreciation deductions.

Distributions in excess of current and accumulated earnings and profits will generally represent a return of capital and will not be taxable to a shareholder to the extent that they do not exceed the adjusted basis of the shareholder's shares of beneficial interest in respect of which the distributions were made, but rather, will reduce the adjusted basis of these shares of beneficial interest. To the extent that such distributions exceed the adjusted basis of a shareholder's shares of beneficial interest, they will be included in income as long-term capital gain, or short-term capital gain if the shares of beneficial interest have been held for one year or less. In addition, any dividend declared by us in October, November or December of any year and payable to a shareholder of record on a specified date in any such month will be treated as both paid by us and received by the shareholder on December 31 of such year, provided that the dividend is actually paid by us before the end of January of the following calendar year.

Earnings and profits are allocated to distributions with respect to preferred stock before they are allocated to distributions with respect to common stock. Therefore, depending on our earnings and profits, distributions with respect to our preferred shares (as compared to distributions with respect to our common shares) are more likely to be treated as dividends than as a return of capital or a distribution in excess of basis.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

To the extent that a REIT has available net operating losses and capital losses carried forward from prior tax years, such losses may reduce the amount of distributions that must be made in order to comply with the REIT distribution requirements. See " Taxation of PennyMac Mortgage Investment Trust Annual Distribution Requirements." Such losses, however, are not passed through to shareholders and do not offset income of shareholders from other sources. In addition, any distributions made with respect to such tax years into which net operating losses have been carried forward from prior tax years will nevertheless be taxable as dividends to the extent of current earnings or profits for such tax year.

In certain circumstances, we may make a taxable distribution of our shares of beneficial interest as part of a distribution in which shareholders may elect to receive shares of beneficial interest or (subject to a limit measured as a percentage of the total distribution) cash. In this circumstance, a shareholder generally must include the sum of the value of our shares of beneficial interest and the amount of cash received in its gross income as dividend income to the extent that such shareholder's share of the distribution is made out of its share of the portion of our current and accumulated earnings and profits allocable to such distribution. The value of any of our shares of beneficial interest received as part of a distribution is generally equal to the amount of cash that could have been received instead of our shares of beneficial interest. Depending on the circumstances of the shareholder, the tax on the distribution may exceed the amount of the distribution received in cash, in which case such shareholder would have to pay the tax using cash from other sources. A shareholder that received our shares of beneficial interest pursuant to a distribution generally has a tax basis in such shares of beneficial interest equal to the amount of cash that would have been received instead of our shares of beneficial interest as described above, and a holding period in such shares of beneficial interest that begins on the day following the payment date for the distribution.

If excess inclusion income from a TMP or REMIC residual interest is allocated to any of our shareholders, that income will be taxable in the hands of the shareholder and would not be offset by any net operating losses of the shareholder that would otherwise be available. See " Taxation of PennyMac Mortgage Investment Trust Taxable Mortgage Pools and Excess Inclusion Income."

Dispositions of Our Shares of Beneficial Interest. In general, a shareholder must treat any gain or loss recognized upon a sale or other disposition of our shares of beneficial interest as capital gain or loss. Any capital gains recognized by individuals, trusts and estates upon the sale or disposition of our shares of beneficial interest generally will be treated as long-term capital gains and will be subject to a maximum U.S. federal income tax rate of 15% (through taxable years beginning on or before December 31, 2012 and currently scheduled to increase to 20% for taxable years beginning thereafter) if the shares of beneficial interest are held for more than one year, and will be treated as short-term capital gains taxed at ordinary income rates if the shares of beneficial interest are held for one year or less. Gains recognized by shareholders that are corporations are subject to U.S. federal income tax currently at a maximum rate of 35%, whether or not classified as long-term capital gains. Capital losses recognized by a shareholder upon the disposition of our shares of beneficial interest held for more than one year at the time of disposition will be considered long-term capital losses, and are generally available only to offset capital gain income of the shareholder but not ordinary income (except in the case of individuals, who may offset up to \$3,000 of ordinary income each year). In addition, any loss upon a sale or exchange of our shares of beneficial interest by a shareholder who has held the shares of beneficial interest for six months or less, after applying holding period rules, will be treated as a long-term capital loss to the extent of distributions received from us that are required to be treated by the shareholder as long-term capital gain.

If an investor recognizes a loss upon a subsequent disposition of our shares of beneficial interest or other securities in an amount that exceeds a prescribed threshold, it is possible that the provisions of recently adopted Treasury Regulations involving "reportable transactions" could apply, with a resulting requirement to separately disclose the loss generating transaction to the IRS. While these regulations

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

are directed towards "tax shelters," they are written quite broadly, and apply to transactions that would not typically be considered tax shelters. The Internal Revenue Code imposes significant penalties for failure to comply with these requirements. You are encouraged to consult your tax advisors concerning any possible disclosure obligation with respect to the receipt or disposition of our shares of beneficial interest or other securities, or transactions that might be undertaken directly or indirectly by us. Moreover, you should be aware that we and other participants in the transactions involving us (including their advisors) might be subject to disclosure or other requirements pursuant to these regulations.

Recently Enacted Legislation. Recently enacted legislation will impose a 3.8% tax on the net investment income (which includes taxable dividends and gain recognized on a disposition of our shares of beneficial interest) of certain individuals, trusts and estates, for taxable years beginning after December 31, 2012. You are encouraged to consult with your own tax advisor regarding the possible implications of this legislation on your investment in our shares of beneficial interest.

Information Reporting and Backup Withholding. We will report to our shareholders and to the IRS the amount of distributions we pay during each calendar year and the amount of tax we withhold, if any. Under the backup withholding rules, you may be subject to backup withholding at a current rate of 28% with respect to distributions unless you:

- (a) are a corporation or come within certain other exempt categories and, when required, demonstrate this fact; or
- (b) provide a taxpayer identification number, certify as to no loss of exemption from backup withholding, and otherwise comply with the applicable requirements of the backup withholding rules.

Any amount paid as backup withholding will be creditable against your income tax liability.

Taxation of Foreign Shareholders

The following is a summary of certain U.S. federal income and estate tax consequences of the ownership and disposition of our shares of beneficial interest applicable to non-U.S. holders of our shares of beneficial interest. A "non-U.S. holder" is any person other than:

- (a) a citizen or resident of the U.S.;
- (b) a corporation or partnership created or organized under the laws of the U.S., or of any state thereof, or the District of Columbia;
- (c) an estate, the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source; or
- (d) a trust if a U.S. court is able to exercise primary supervision over the administration of such trust and one or more U.S. fiduciaries have the authority to control all substantial decisions of the trust.

The discussion is based on current law, and is for general information only. It addresses only selected, and not all, aspects of U.S. federal income and estate taxation.

In General. For most foreign investors, investment in a REIT that invests principally in mortgage loans and MBS is not the most tax-efficient way to invest in such assets. That is because receiving distributions of income derived from such assets in the form of REIT dividends subjects most foreign investors to withholding taxes that direct investment in those asset classes, and the direct receipt of interest and principal payments with respect to them, would not. The principal exceptions are foreign sovereigns and their agencies and instrumentalities, which may be exempt from withholding taxes on

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

REIT dividends under the Internal Revenue Code, and certain foreign pension funds or similar entities able to claim an exemption from withholding taxes on REIT dividends under the terms of a bilateral tax treaty between their country of residence and the United States.

Ordinary Dividends. The portion of distributions received by non-U.S. holders payable out of our earnings and profits which are not attributable to our capital gains and which are not effectively connected with a U.S. trade or business of the non-U.S. holder will be subject to U.S. withholding tax at the rate of 30%, unless reduced or eliminated by treaty. Reduced treaty rates are not available to the extent that income is attributable to our excess inclusion income allocable to the foreign shareholder. See " Taxation of PennyMac Mortgage Investment Trust Taxable Mortgage Pools and Excess Inclusion Income."

In general, non-U.S. holders will not be considered to be engaged in a U.S. trade or business solely as a result of their ownership of our shares of beneficial interest. In cases where the dividend income from a non-U.S. holder's investment in our shares of beneficial interest is, or is treated as, effectively connected with the non-U.S. holder's conduct of a U.S. trade or business, the non-U.S. holder generally will be subject to U.S. tax at graduated rates, in the same manner as domestic shareholders are taxed with respect to such dividends, such income must generally be reported on a U.S. income tax return filed by or on behalf of the non-U.S. holder, and the income may also be subject to the 30% branch profits tax in the case of a non-U.S. holder that is a corporation.

Non-Dividend Distributions. Unless our shares of beneficial interest constitute a U.S. real property interest, or a USRPI, which we do not anticipate, distributions by us which are not dividends out of our earnings and profits will not be subject to U.S. income tax. If it cannot be determined at the time at which a distribution is made whether or not the distribution will exceed current and accumulated earnings and profits, the distribution will be subject to withholding at the rate applicable to dividends. However, the non-U.S. holder may seek a refund from the IRS of any amounts withheld if it is subsequently determined that the distribution was, in fact, in excess of our current and accumulated earnings and profits. However, if, contrary to our expectation, our shares of beneficial interest constitute a USRPI, as described below, distributions by us in excess of the sum of our earnings and profits plus the shareholder's basis in our shares of beneficial interest will be taxed under the Foreign Investment in Real Property Tax Act of 1980, or FIRPTA, at the rate of tax, including any applicable capital gains rates, that would apply to a domestic shareholder of the same type (e.g., an individual or a corporation, as the case may be), and the collection of the tax will be enforced by a refundable withholding at a rate of 10% of the amount by which the distribution exceeds the shareholder's share of our earnings and profits.

Capital Gain Dividends. Under FIRPTA, a distribution made by us to a non-U.S. holder, to the extent attributable to gains from dispositions of USRPIs held by us directly or through pass through subsidiaries, or USRPI capital gains, will, except as described below, be considered effectively connected with a U.S. trade or business of the non-U.S. holder and will be subject to U.S. income tax, enforced by withholding, at the rates applicable to U.S. individuals or corporations, without regard to whether the distribution is designated as a capital gain dividend. See above under " Ordinary Dividends" for a discussion of the consequences of income that is effectively connected with a U.S. trade or business. Distributions subject to FIRPTA may also be subject to a 30% branch profits tax in the hands of a non-U.S. holder that is a corporation. However, a distribution is not a USRPI capital gain if the underlying asset that was sold represented an interest held by us solely as a creditor, and is therefore not a USRPI, which is likely to be the case for a substantial majority of our assets. Capital gain dividends received by a non-U.S. holder from a REIT that are attributable to dispositions by that REIT of assets other than USRPIs are not subject to U.S. income or withholding tax, unless (i) the gain is effectively connected with the non-U.S. holder's U.S. trade or business, in which case the non-U.S. holder would be subject to the same treatment as U.S. holders with respect to such gain, or

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

(ii) the non-U.S. holder is a nonresident alien individual who was present in the U.S. for 183 days or more during the taxable year and has a "tax home" in the U.S., in which case the non-U.S. holder will incur a 30% tax on his, her or its capital gains.

Notwithstanding the foregoing, dividends attributable to USRPI capital gains paid by us to non-U.S. holders are not subject to FIRPTA (and are generally treated the same as an ordinary dividend from us (see " Ordinary Dividends")) if the dividends are paid with respect to a class of our shares of beneficial interest that is regularly traded on an established securities market in the U.S., as long as the non-U.S. holder has not owned more than 5% of such class of shares of beneficial interest at any time during the one year period ending on the date such dividend is received. There can be no assurance that our shares of beneficial interest will be, or will continue to be, "regularly traded" on an established securities market within the meaning of this provision.

Dispositions of Our Shares of Beneficial Interest. Unless our shares of beneficial interest constitute a USRPI, which we do not anticipate, a sale of the shares of beneficial interest by a non-U.S. holder generally will not be subject to U.S. taxation under FIRPTA. Our shares of beneficial interest will not be treated as a USRPI if less than 50% of our assets throughout a prescribed testing period consist of interests in real property located within the U.S., excluding, for this purpose, interests in real property held solely as a creditor. We expect that most of our assets throughout any relevant testing period will not be real property, but instead will constitute debt instruments, or securities treated as debt instruments, and stock in TRSs.

Even if, contrary to our expectations, the foregoing test is not met, our shares of beneficial interest nonetheless will not constitute a USRPI if we are a "domestically controlled qualified investment entity." A domestically controlled qualified investment entity includes a REIT in which, at all times during a specified testing period, less than 50% in value of its shares of beneficial interest is held directly or indirectly by non-U.S. holders. We also expect that we will be a domestically controlled qualified investment entity and, therefore, that the gain on the sale of our shares of beneficial interest should not be subject to taxation under FIRPTA. However, because our shares of beneficial interest are publicly traded, no assurance can be given that we will be a domestically controlled qualified investment entity.

If our shares of beneficial interest constitute a USRPI and we do not constitute a domestically controlled qualified investment entity, but our shares of beneficial interest are "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, a non-U.S. holder's sale of shares of beneficial interest nonetheless would not be subject to tax under FIRPTA as a sale of a USRPI, provided that the selling non-U.S. holder held 5% or less of our outstanding shares of beneficial interest at all times during a specified testing period.

If gain on the sale of our shares of beneficial interest were subject to taxation under FIRPTA, the non-U.S. holder would be required to file a U.S. federal income tax return and would be subject to the same treatment as a U.S. shareholder with respect to such gain, subject to applicable alternative minimum tax and a special alternative minimum tax in the case of non-resident alien individuals, and the purchaser of the shares of beneficial interest could be required to withhold 10% of the purchase price and remit such amount to the IRS.

Gain from the sale of our shares of beneficial interest that would not otherwise be subject to FIRPTA will nonetheless be taxable in the U.S. to a non-U.S. holder in two cases: (a) if the non-U.S. holder's investment in our shares of beneficial interest is effectively connected with a U.S. trade or business conducted by such non-U.S. holder, the non-U.S. holder will be subject to the same treatment as a U.S. shareholder with respect to such gain, or (b) if the non-U.S. holder is a nonresident alien individual who was present in the U.S. for 183 days or more during the taxable year and has a "tax home" in the U.S., the nonresident alien individual will be subject to a 30% tax on the individual's capital gain.

Table of Contents

HIRE Act. Legislation enacted in 2010 will generally impose a 30% withholding tax on U.S. source payments, such as dividends on our common and preferred shares, and the gross proceeds from disposition of such shares paid to (1) a foreign financial institution (as that term is defined in Section 1471(d)(4) of the Internal Revenue Code) unless that foreign financial institution enters into an agreement with the U.S. Treasury Department to collect and disclose information regarding U.S. account holders of that foreign financial institution (including certain account holders that are foreign entities that have U.S. owners) and satisfies other requirements, and (2) specified other non-U.S. entities unless such an entity provides the payor with a certification identifying the direct and indirect U.S. owners of the entity and complies with other requirements. Under specified circumstances, a non-U.S. Holder of our shares may be eligible for refunds or credits of those taxes. Proposed Treasury Regulations and preliminary IRS guidance indicate that the withholding provisions described above will apply to payments of dividends on our shares made on or after January 1, 2014 and to payments of gross proceeds of a disposition of our shares on or after January 1, 2015. You are encouraged to consult with your own tax advisor regarding the possible implications of this legislation on your investment in our shares.

Estate Tax. Our shares of beneficial interest owned or treated as owned by an individual who is not a citizen or resident (as specially defined for U.S. federal estate tax purposes) of the U.S. at the time of death will be includable in the individual's gross estate for U.S. federal estate tax purposes, unless an applicable estate tax treaty provides otherwise, and may therefore be subject to U.S. federal estate tax.

Taxation of Tax-Exempt Shareholders

Tax-exempt entities, including qualified employee pension and profit sharing trusts and individual retirement accounts, generally are exempt from U.S. federal income taxation. However, they may be subject to taxation on their unrelated business taxable income, or UBTI. While some investments in real estate may generate UBTI, the IRS has ruled that dividend distributions from a REIT to a tax-exempt entity do not constitute UBTI. Based on that ruling, and provided that (i) a tax-exempt shareholder has not held our shares of beneficial interest as "debt financed property" within the meaning of the Internal Revenue Code (i.e., where the acquisition or holding of the property is financed through a borrowing by the tax-exempt shareholder), and (ii) our shares of beneficial interest are not otherwise used in an unrelated trade or business, distributions from us and income from the sale of our shares of beneficial interest generally should not give rise to UBTI to a tax-exempt shareholder except as described in the following paragraph.

To the extent, however, that we (or a part of us, or a disregarded subsidiary of ours) are a TMP, or if we hold residual interests in a REMIC, a portion of the dividends paid to a tax-exempt shareholder that is allocable to excess inclusion income will be subject to tax as UBTI. If, however, excess inclusion income is allocable to some categories of tax-exempt shareholders that are not subject to UBTI, we might be subject to corporate level tax on such income, and, in that case and to the extent feasible, may reduce the amount of distributions to those shareholders whose ownership gave rise to the tax or we may bear such tax as a general corporate expense. See "Taxation of PennyMac Mortgage Investment Trust Taxable Mortgage Pools and Excess Inclusion Income." As required by IRS guidance, we intend to notify our shareholders if a portion of a dividend paid by us is attributable to excess inclusion income.

Tax-exempt shareholders that are social clubs, voluntary employee benefit associations, supplemental unemployment benefit trusts, and qualified group legal services plans exempt from U.S. federal income taxation under Sections 501(c)(7), (c)(9), (c)(17) and (c)(20) of the Internal Revenue Code, respectively, are subject to different UBTI rules, which generally will require them to characterize distributions from us as UBTI.

Table of Contents

In certain circumstances, a pension trust that owns more than 10% of our shares of beneficial interest could be required to treat a percentage of the dividends from us as UBTI if we are a "pension held REIT." We will not be a pension held REIT unless we are required to "look through" one or more pension trust shareholders in order to satisfy the REIT closely held rules and either (A) one pension trust owns more than 25% of the value of our shares of beneficial interest, or (B) a group of pension trusts, each individually holding more than 10% of the value of our shares of beneficial interest, collectively owns more than 50% of such shares of beneficial interest. Certain restrictions on ownership and transfer of our shares of beneficial interest should generally prevent a tax-exempt entity from owning more than 10% of the value of our shares of beneficial interest, or us from becoming a pension held REIT.

Tax-exempt shareholders are urged to consult their tax advisor regarding the U.S. federal, state, local and foreign income and other tax consequences of owning our common shares of beneficial interest.

Other Tax Considerations

Tax Aspects of Our Investments in our Operating Partnership and in Affiliated Partnerships

We may hold direct or indirect interests in various partnerships, including in our operating partnership and any other subsidiary partnerships or limited liability companies we form or acquire. In general, partnerships and limited liability companies are "pass through" entities which are not subject to U.S. federal income tax. Rather, partners and members are allocated their proportionate shares of the items of income, gain, loss, deduction and credit of a partnership or limited liability company, and are potentially subject to tax thereon, without regard to whether the partners or members receive a distribution from the partnership or limited liability company. We will include our proportionate share of the foregoing items of the partnerships and limited liability companies we hold an interest in for purposes of the various REIT income tests and in the computation of our REIT taxable income. See "Taxation of PennyMac Mortgage Investment Trust Income Tests." Any resultant increase in our REIT taxable income will increase our distribution requirements (see "Taxation of PennyMac Mortgage Investment Trust Annual Distribution Requirements"), but will not be subject to U.S. federal income tax in our hands provided that the income is distributed by us to our shareholders. Moreover, for purposes of the REIT asset tests (see "Taxation of PennyMac Mortgage Investment Trust Asset Tests"), we will include our proportionate share of assets held by such partnerships and limited liability companies.

Classification as Partnerships

In order for a partnership or limited liability company to be classified for U.S. federal income tax purposes as a partnership (or an entity that is disregarded for U.S. federal income tax purposes if the entity has only one owner or member), it must not be taxable as a corporation or an association taxable as a corporation for U.S. federal income tax purposes. An organization with at least two owners or members will be classified as a partnership, rather than as a corporation, for U.S. federal income tax purposes if it:

is treated as a partnership under the Treasury Regulations relating to entity classification (the "check the box regulations"); and

is not a "publicly traded partnership."

Under the check the box regulations, an unincorporated entity with at least two owners or members may elect to be classified either as an association taxable as a corporation or as a partnership. If such an entity does not make an election, it generally will be treated as a partnership for U.S. federal income tax purposes. We intend that our operating partnership and any other partnership or

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

limited liability company in which we hold an interest will be classified as a partnership for U.S. federal income tax purposes (or else a disregarded entity where there are not at least two separate beneficial owners).

A publicly traded partnership is a partnership whose interests are traded on an established securities market or are readily tradable on a secondary market (or a substantial equivalent). A publicly traded partnership is generally treated as a corporation for U.S. federal income tax purposes, but will not be so treated for any taxable year for which at least 90% of the partnership's gross income consists of specified passive income, including real property rents, gains from the sale or other disposition of real property, interest, and dividends (the "90% passive income exception"). Our operating partnership will be structured, operated and maintained so as not to be treated as a "publicly traded partnership." We have not requested, and do not intend to request, a ruling from the IRS that our operating partnership and any other partnership or limited liability company in which we hold an interest will be classified as partnerships that are not taxable as corporations for U.S. federal income tax purposes. If for any reason our operating partnership or any other partnership or limited liability company in which we hold an interest were taxable as a corporation, rather than as a partnership, for U.S. federal income tax purposes, we might not qualify as a REIT. See "Taxation of PennyMac Mortgage Investment Trust Income Tests," "Taxation of PennyMac Mortgage Investment Trust Asset Tests" and "Taxation of PennyMac Mortgage Investment Trust Failure to Qualify." In addition, any change in a partnership's status for tax purposes might be treated as a taxable event, in which case we might incur tax liability without any related cash distribution. See "Taxation of PennyMac Mortgage Investment Trust Annual Distribution Requirements." Further, items of income and deduction of such partnership would not pass through to its partners, and its partners would be treated as shareholders for tax purposes. Consequently, such partnership would be required to pay income tax at corporate rates on its net income, and distributions to its partners would constitute dividends that would not be deductible in computing such partnership's taxable income.

Legislative or Other Actions Affecting REITs

The rules dealing with U.S. federal income taxation are constantly under review by persons involved in the legislative process and by the IRS and the U.S. Treasury. Changes to the U.S. federal tax laws and interpretations thereof could adversely affect an investment in our shares of beneficial interest.

Sunset of Reduced Tax Rate Provisions

Several of the tax considerations described herein are subject to a sunset provision. The sunset provisions generally provide that for taxable years beginning after December 31, 2012, certain provisions that are currently in the Internal Revenue Code will revert back to a prior version of those provisions. These provisions currently include provisions related to the reduced maximum income tax rate for long-term capital gains of 15% (rather than 20%) for taxpayers taxed at individual rates, the application of the 15% tax rate to qualified dividend income, the reduced maximum income tax rate for ordinary income of 35% (rather than 39.6%) for taxpayers taxed at individual rates and certain other tax rate provisions described herein. Prospective shareholders are urged to consult their own tax advisors regarding the effect of sunset provisions on an investment in our shares.

State, Local and Foreign Taxes

We and our subsidiaries and shareholders may be subject to state, local or foreign taxation in various jurisdictions, including those in which we or they transact business, own property or reside. We may own properties located in numerous jurisdictions, and may be required to file tax returns in some or all of those jurisdictions. The state, local or foreign tax treatment of us and our shareholders may not conform to the U.S. federal income tax treatment discussed above. We may pay foreign property

Table of Contents

taxes, and dispositions of foreign property or operations involving, or investments in, foreign property may give rise to foreign income or other tax liability in amounts that could be substantial. Any foreign taxes incurred by us do not pass through to shareholders as a credit against their U.S. federal income tax liability. Prospective investors are encouraged to consult their tax advisors regarding the application and effect of state, local and foreign income and other tax laws on an investment in our shares of beneficial interest or other securities.

SELLING SHAREHOLDERS

Selling shareholders may use this prospectus in connection with resales of securities they hold as described in the applicable prospectus supplement. Information about selling shareholders, where applicable, will be set forth in a prospectus supplement.

Table of Contents

PLAN OF DISTRIBUTION

We or any selling shareholder may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

through underwriters or dealers;

directly by us or any selling shareholder to purchasers;

in a rights offering;

in "at the market" offerings, within the meaning of Rule 415(a)(4) of the Securities Act of 1933, or the Securities Act, to or through a market maker or into an existing trading market on an exchange or otherwise;

through agents;

through a combination of any of these methods, or

through any other method permitted by applicable law and described in a prospectus supplement.

The prospectus supplement with respect to any offering of securities will include the following information:

the terms of the offering;

the names of any underwriters or agents;

the name or names of any managing underwriter or underwriters;

the purchase price or initial public offering price of the securities;

the net proceeds from the sale of the securities;

any delayed delivery arrangements;

any underwriting discounts, commissions and other items constituting underwriters' compensation;

any discounts or concessions allowed or reallocated or paid to dealers;

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

any commissions paid to agents; and

any securities exchange on which the securities may be listed.

Sale through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all of the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If we or any selling shareholder offers securities in a subscription rights offering to our existing shareholders, we or any selling shareholder may enter into a standby underwriting agreement with

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

dealers, acting as standby underwriters. We or any selling shareholder may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we or any selling shareholder does not enter into a standby underwriting agreement, we or any selling shareholder may retain a dealer-manager to manage a subscription rights offering for us or such selling shareholder.

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include over-allotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we or any selling shareholder offers through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we or any selling shareholder sells our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we or any selling shareholder offers.

If dealers are used in the sale of securities, we or any selling shareholder will sell the securities to them as principals. They may then resell those securities to the public at fixed prices or at varying prices determined by the dealers at the time of resale. We will include in the applicable prospectus supplement the names of the dealers and the terms of the transaction.

Direct Sales and Sales through Agents

We or any selling shareholder may sell the securities directly. In this case, no underwriters or agents would be involved. We or any selling shareholder may also sell the securities through agents designated by us or such selling shareholder from time to time. In the applicable prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We or any selling shareholder may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any sales of these securities in the applicable prospectus supplement.

Remarketing Arrangements

Securities may also be offered and sold, if so indicated in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us or any selling shareholder. Any remarketing firm will be identified and the terms of its agreements, if any, with us or any selling shareholder and its compensation will be described in the applicable prospectus supplement.

Edgar Filing: PennyMac Mortgage Investment Trust - Form 424B5

Table of Contents

Delayed Delivery Contracts

If we so indicate in the applicable prospectus supplement, we or any selling shareholder may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities from us or such selling shareholder at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the applicable prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

General Information

We or any selling shareholder may have agreements with the underwriters, dealers, agents and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the underwriters, dealers, agents or remarketing firms may be required to make. Underwriters, dealers, agents and remarketing firms may be customers of, engage in transactions with or perform services for us or any selling shareholder in the ordinary course of their businesses.

In compliance with the Financial Industry Regulatory Authority, or FINRA, guidelines, the maximum commission or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus or any applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters will be passed upon for us by Sidley Austin LLP, New York, New York, and, with respect to matters of Maryland law, by Venable LLP, Baltimore, Maryland. In addition, the description of U.S. federal income tax consequences contained in the section entitled "U.S. Federal Income Tax Considerations" is based on the opinion of Sidley Austin LLP. If the validity of any securities is also passed upon by counsel for the underwriters, dealers or agents of an offering of those securities, that counsel will be named in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K, and the effectiveness of the Company's and its subsidiaries' internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any of these documents at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may also read and copy any of these documents at the New York Stock Exchange's office at 20 Broad Street, New York, New York 10005. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available over the Internet at the SEC's website at <http://www.sec.gov>. In addition, copies of our SEC filings are available free of charge through our website (www.pennymac-reit.com) as soon as reasonably practicable after filing with the SEC. The information contained on our website is not part of, or incorporated by reference into, this prospectus.

Table of Contents

This prospectus is only part of a registration statement on Form S-3 we have filed with the SEC under the Securities Act and therefore omits some of the information contained in the registration statement. We have also filed exhibits and schedules to the registration statement which are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect or obtain a copy of the registration statement, including the exhibits and schedules, as described in the previous paragraph.

DOCUMENTS INCORPORATED BY REFERENCE

SEC rules allow us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document. Any information referred to in this way is considered part of this prospectus from the date we file that document. Any reports filed by us with the SEC after the date of this prospectus and before the date that the offering of securities by means of this prospectus is terminated will automatically update and, where applicable, supersede any information contained in this prospectus or incorporated by reference into this prospectus. We incorporate by reference into this prospectus the following documents or information filed with the SEC (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2011;

our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2012;

our Definitive Proxy Statement on Schedule 14A filed on April 6, 2012;

our Current Reports on Form 8-K filed on April 4, 2012, May 11, 2012, May 22, 2012, May 30, 2012 and June 5, 2012; and

the description of our common shares included in our registration statement on Form 8-A filed on July 23, 2009.

All documents that we file (but not those that we furnish) pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and prior the termination of the offering of any of the securities covered under this prospectus shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, the applicable prospectus supplement and any previously filed documents.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above that have been or may be incorporated by reference into this prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. Requests for those documents should be directed to us as follows: PennyMac Mortgage Investment Trust, 6101 Condor Drive, Moorpark, California 93021, Attn: Investor Relations, Telephone: (818) 224-7442.

12,000,000 Shares

PennyMac Mortgage Investment Trust

Common Shares

PROSPECTUS SUPPLEMENT

August , 2012

**BofA Merrill Lynch
Citigroup
Credit Suisse**
