



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3233

April 3, 2018

Via E-Mail

Mr. Peter Federico
Chief Financial Officer
MTGE Investment Corp.
2 Bethesda Metro Center, 12th Floor
Bethesda, Maryland 20814

Re: MTGE Investment Corp.
Form 10-K for the Fiscal Year Ended December 31, 2017
Filed February 27, 2018
Form 8-K filed February 5, 2018
File No. 001-35260

Dear Mr. Federico:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for fiscal year ended December 31, 2017

Management's Discussion and Analysis of Financial Condition and Results of Operation

Financial Condition, page 47

1. We note that your presentation of "Total securities investments" includes Agency securities and Non-agency securities as presented on the balance sheet, and "TBA notional fair value." Your presentation appears to be a non-GAAP presentation. Please tell us how you considered the disclosures required by Item 10(e)(1)(i)(B) and (C) of Regulation S-K.

Net Interest Margin Components, page 67

2. Please tell us, and disclosed in future filings, how you derived the amount of TBA securities - average implied asset yield, TBA securities - implied funding cost and Non-agency repurchase agreements, and how these amounts were used in your calculation of Net interest margin, excluding "catch-up" amortization.

Note 7. Fair Value Measurements, page 111

3. We note you disclose that you determine the fair value of your investment securities based upon fair value estimates obtained from multiple third-party pricing services and dealers. Also, we note your disclosure that third-party pricing sources use various valuation approaches, including market and income approaches, and you disclose various inputs but no specific techniques. Please describe the specific valuation techniques used, and the inputs applicable to such valuation techniques, to determine the fair value of securities categorized within Level 2. Refer to ASC 820-10-50-2.bbb.

Form 8-K filed February 5, 2018

Exhibit 99.1, page 10

4. We note your presentation of "Adjusted net interest and dollar roll income, excluding "catch-up" premium amortization." In future earnings releases please revise to disclose how you derived the amount of both "TBA dollar roll income - implied interest income" and "TBA dollar roll income - implied interest expense." Also, include a statement regarding the usefulness of this information to investors as required by Item 10(e)(1)(i)(C) of Regulation S-K.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Jorge L. Bonilla at (202) 551-3414 or me at (202) 551-3629 with any questions.

Sincerely,

/s/ Kevin Woody

Kevin Woody
Branch Chief
Office of Real Estate and
Commodities