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

FORM S-8

REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

AG MORTGAGE INVESTMENT TRUST, INC.

(Exact name of registrant as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization) 27-5254382 (I.R.S. employer identification number)

245 Park Avenue, 26th Floor New York, New York 10167 (212) 692-2000

AG Mortgage Investment Trust, Inc. 2020 Equity Incentive Plan

(Full title of the plan)

Jenny B. Neslin General Counsel AG Mortgage Investment Trust, Inc. 245 Park Avenue, 26th floor New York, New York 10167 Telephone: (212) 692-2000

 $(Name,\,address\,\,and\,\,telephone\,\,number,\,including\,\,area\,\,code,\,of\,\,agent\,\,for\,\,service)$

Copies of communications to:

Robert K. Smith, Esq. Hunton Andrews Kurth LLP 2200 Pennsylvania Ave NW Washington, DC 20037 Telephone: (202) 955-1500

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

 $\text{Large accelerated filer } \square \qquad \text{Accelerated filer } \boxtimes \qquad \text{Non-accelerated filer } \square \qquad \text{Smaller reporting company } \boxtimes \qquad \text{Emerging growth company } \square$

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

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price(2)	Amount of registration fee
Common Stock, \$0.01 par value per share	2,000,000	\$3.99	\$7,970,000	\$869.53

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this registration statement also covers an indeterminate number of additional shares that may be necessary to adjust the number of shares reserved for issuance under the AG Mortgage Investment Trust, Inc. 2020 Equity Incentive Plan (the "Plan") as a result of any future stock split, stock dividend or similar adjustment of the outstanding shares of Common Stock.
- (2) Estimated pursuant to Rule 457(c) and Rule 457(h) of the Securities Act solely for the purpose of calculating the registration fee, and based upon the average of the high and low sales price of the Common Stock as reported on the New York Stock Exchange on May 3, 2021.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information specified in Part I are not required to be filed with the Securities and Exchange Commission (the "Commission") as part of this Registration Statement on Form S-8 in accordance with Rule 428 of the Securities Act of 1933, as amended (the "Securities Act"). The documents containing information specified in the instructions to Part I of Form S-8 will be sent or given to individuals participating in the Plan as specified by Rule 428(b)(1) of the Securities Act. Those documents and the documents incorporated by reference into this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed by the registrant (the "Company") with the Commission are incorporated by reference in this Registration Statement:

- (a) The Company's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the Commission on February 23, 2021;
- (b) The information specifically incorporated by reference into the Company's Annual Report on Form 10-K for the year ended December 31, 2020 from the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on April 16, 2021;
 - (c) The Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021, filed with the Commission on May 7, 2021;
 - (d) The Company's Current Reports on Form 8-K filed with the Commission on February 11, 2021, March 18, 2021 and April 5, 2021; and
- (e) the description of the Company's Common Stock contained or incorporated in the Company's Registration Statement on Form 8-A, filed with the Commission on April 25, 2011 (File No. 001-35151), as updated by the description contained in Exhibit 4.5 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the SEC on February 23, 2021, and including any other amendments or reports filed for the purpose of updating such descriptions.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (other than portions of those documents furnished or otherwise not deemed to be filed), prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this Registration Statement shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in this Registration Statement or in any other contemporaneously or subsequently filed document which also is or is deemed to be incorporated by reference in this Registration Statement modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Maryland law permits a Maryland corporation to include in its charter a provision eliminating the liability of its directors and officers to the corporation and its stockholders 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 established by a final judgment as being material to the cause of action. Our charter contains a provision that eliminates such liability to the maximum extent permitted by Maryland law.

The MGCL requires a Maryland corporation (unless its charter provides otherwise, which our charter does not) to indemnify a director or officer who has been successful, on the merits or otherwise, in the defense of any proceeding to which he or she is made or threatened to be made a party by reason of his or her service in that capacity. 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. However, under the MGCL, a Maryland corporation may not indemnify a director or officer for an adverse judgment in a suit by or in the right of 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 or was adjudged liable on the basis that personal benefit was improperly received, is limited to expenses. In addition, the MGCL permits a 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 or her good faith belief that he or she has met the standard of conduct necessary for indem

Our charter authorizes us to obligate ourselves and our bylaws obligate us, to the fullest extent permitted by Maryland law in effect from time to time, to indemnify and, without requiring a preliminary determination of the ultimate entitlement to indemnification, pay or reimburse reasonable expenses in advance of final disposition of a proceeding to:

- · any present or former director or officer; and
- any individual who, while our director or officer and at our request, serves or has served as a director, officer, partner or trustee of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

Our charter and bylaws also permit us to indemnify and advance expenses to any person who served a predecessor of ours in any of the capacities described above and to any employee or agent of us or a predecessor of us.

We have entered into indemnification agreements with each of our directors and executive officers that provide for indemnification to the maximum extent permitted by Maryland law.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed herewith or incorporated by reference as part of the registration Statement:

Exhibit No.	Description				
4.1	Articles of Amendment and Restatement of AG Mortgage Investment Trust, Inc., incorporated by reference to Exhibit 3.1 of Amendment No. 2 to the Company's Registration Statement on Form S-11, filed with the Securities and Exchange Commission on April 18, 2011 ("Pre-Effective Amendment No. 2").				
4.2	Articles of Amendment to Articles of Amendment and Restatement of AG Mortgage Investment Trust, Inc., incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 5, 2017.				
4.3	Amended and Restated Bylaws of AG Mortgage Investment Trust, Inc., incorporated by reference to Exhibit 3.2 of Pre- Effective Amendment No. 2.				
4.4	Articles Supplementary of 8.25% Series A Cumulative Redeemable Preferred Stock, incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on August 2, 2012.				
4.5	<u>Articles Supplementary of 8.00% Series B Cumulative Redeemable Preferred Stock, incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on September 24, 2012.</u>				
4.6	Articles Supplementary of 8.000% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, incorporated by reference to Exhibit 3.5 of the Company's Registration Statement on Form 8-A12B, filed with the Securities and Exchange Commission on September 16, 2019.				
4.7	Specimen Common Stock Certificate of AG Mortgage Investment Trust, Inc., incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed with the Commission on May 7, 2021.				
4.8	AG Mortgage Investment Trust, Inc. 2020 Equity Incentive Plan, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed with the Securities and Exchange Commission on May 7, 2021.				
4.9	Form of Award Agreement Under the AG Mortgage Investment Trust, Inc. 2020 Equity Incentive Plan, incorporated by reference to Exhibit 10.60 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 3030, filed with the Securities and Exchange Commission on August 8, 2020.				
5.1	Opinion of Venable LLP.*				
23.1	Consent of Venable LLP (included in the opinion filed as Exhibit 5.1 to this registration statement).*				
23.2	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.*				
24.1	Power of Attorney (included on signature page hereto).*				

^{*} Filed herewith.

Item 9. Undertakings.

(a) Rule 415 offering.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement;

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) Filings incorporating subsequent Exchange Act Documents by Reference.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Filing of Registration Statement on Form S-8.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on May 7, 2021.

/s/ David N. Roberts

By: David N. Roberts

Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below constitutes and appoints Jenny B. Neslin and Anthony W. Rossiello, his or her true and lawful attorneys-in-fact and agents, each acting alone, with full powers of substitution and resubstitution, for him or her or in his or her name, place and stead, in any and all capacities to sign any and all amendments or post-effective amendments to this registration statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated, as of May 7, 2021.

By:	/s/ David N. Roberts David N. Roberts	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)
By:	/s/ Anthony Rossiello Anthony Rossiello	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)
By:	/s/ T.J. Durkin T.J. Durkin	President and Director
By:	/s/ Debra Hess Debra Hess	Director
By:	/s/ Dianne Hurley Dianne Hurley	Director
By:	/s/ Joseph LaManna Joseph LaManna	Director
By:	/s/ Peter Linneman Peter Linneman	Director

[LETTERHEAD OF VENABLE LLP]

May 7, 2021

AG Mortgage Investment Trust, Inc. 245 Park Avenue, 26th Floor New York, New York 10167

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have served as Maryland counsel to AG Mortgage Investment Trust, Inc., a Maryland corporation (the "Company"), in connection with certain matters of Maryland law arising out of the registration by the Company of up to 2,000,000 shares (the "Shares") of common stock, par value \$0.01 per share (the "Common Stock"), of the Company that the Company may issue pursuant to the AG Mortgage Investment Trust, Inc. 2020 Equity Incentive Plan (the "Plan"), covered by the above-referenced Registration Statement, and all amendments thereto (the "Registration Statement"), filed by the Company with the United States Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "1933 Act"), on or about the date hereof.

In connection with our representation of the Company, and as a basis for the opinion hereinafter set forth, we have examined originals, or copies certified or otherwise identified to our satisfaction, of the following documents (hereinafter collectively referred to as the "Documents"):

- 1. The Registration Statement;
- 2. The charter of the Company (the "Charter"), certified by the State Department of Assessments and Taxation of Maryland (the "SDAT");
- 3. The Amended and Restated Bylaws of the Company, certified as of the date hereof by an officer of the Company;
 - 4. A certificate of the SDAT as to the good standing of the Company, dated as of a recent date;
 - 5. The Plan;
- 6. Resolutions (the "Resolutions") adopted by the Board of Directors of the Company relating to the approval of the Plan and the issuance of the Shares, certified as of the date hereof by an officer of the Company;
 - 7. A certificate executed by an officer of the Company, dated as of the date hereof; and

8. Such other documents and matters as we have deemed necessary or appropriate to express the opinion set forth below, subject to the assumptions, limitations and qualifications stated herein.

In expressing the opinion set forth below, we have assumed the following:

- 1. Each individual executing any of the Documents, whether on behalf of such individual or any other person, is legally competent to do so.
 - 2. Each individual executing any of the Documents on behalf of a party (other than the Company) is duly authorized to do so.
- 3. Each of the parties (other than the Company) executing any of the Documents has duly and validly executed and delivered each of the Documents to which such party is a signatory, and such party's obligations set forth therein are legal, valid and binding and are enforceable in accordance with all stated terms.
- 4. All Documents submitted to us as originals are authentic. The form and content of all Documents submitted to us as unexecuted drafts do not differ in any respect relevant to this opinion from the form and content of such Documents as executed and delivered. All Documents submitted to us as certified or photostatic copies conform to the original documents. All signatures on all such Documents are genuine. All public records reviewed or relied upon by us or on our behalf are true and complete. All representations, warranties, statements and information contained in the Documents are true and complete. There has been no oral or written modification of or amendment to any of the Documents, and there has been no waiver of any provision of any of the Documents, by action or omission of the parties or otherwise.
- 5. None of the Shares will be issued or transferred in violation of any restriction or limitation contained in the Charter or the Plan. Upon any issuance of Shares, the total number of Common Stock issued and outstanding will not exceed the total number of Common Stock that the Company is then authorized to issue under the Charter or the Plan.

Based upon the foregoing, and subject to the assumptions, limitations and qualifications stated herein, it is our opinion that:

- 1. The Company is a corporation duly incorporated and existing under and by virtue of the laws of the State of Maryland and is in good standing with the SDAT.
- 2. The issuance of the Shares has been duly authorized and, when issued and delivered by the Company pursuant to the Resolutions and the Plan and otherwise in accordance with the Registration Statement, the Shares will be validly issued, fully paid and nonassessable.

AG Mortgage Investment Trust, Inc. May 7, 2021 Page 3

The foregoing opinion is limited to the laws of the State of Maryland and we do not express any opinion herein concerning United States federal law or the laws of any other jurisdiction. We express no opinion as to the applicability or effect of federal or state securities laws, including the securities laws of the State of Maryland, or as to federal or state laws regarding fraudulent transfers. To the extent that any matter as to which our opinion is expressed herein would be governed by the laws of any jurisdiction other than the State of Maryland, we do not express any opinion on such matter. The opinion expressed herein is subject to the effect of any judicial decision which may permit the introduction of parol evidence to modify the terms or the interpretation of agreements.

The opinion expressed herein is limited to the matters specifically set forth herein and no other opinion shall be inferred beyond the matters expressly stated. We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof.

This opinion is being furnished to you for submission to the Commission as an exhibit to the Registration Statement. We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of the name of our firm therein. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the 1933 Act.

Very truly yours,

/s/ Venable LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of AG Mortgage Investment Trust, Inc. of our report dated February 22, 2021 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in AG Mortgage Investment Trust, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ PricewaterhouseCoopers LLP New York, NY May 7, 2021