UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of April 2024

Commission File Number 001-33159

AERCAP HOLDINGS N.V.

(Translation of Registrant's Name into English)

AerCap House, 65 St. Stephen's Green, Dublin D02 YX20, Ireland, +353 1 819 2010 (Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F \boxtimes

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \square

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): □

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Other Events

On April 16, 2024, AerCap Holdings N.V. ("AerCap") issued a press release announcing the expiration of the offer by AerCap Ireland Capital Designated Activity Company and AerCap Global Aviation Trust (together, the "Issuers"), each a wholly owned subsidiary of AerCap, to exchange (the "Exchange Offer") up to \$1,500,000,000 aggregate principal amount of their unregistered outstanding 6.450% Senior Notes due 2027 that were issued in November 2023 (the "Unregistered Notes") for a like principal amount of new 6.450% Senior Notes due 2027 (the "Exchange Notes"), which are registered under the Securities Act of 1933, as amended (the "Securities Act").

A copy of the press release announcing the expiration of the Exchange Offer is attached hereto as Exhibit 99.1 to this Report on Form 6-K and is incorporated herein by reference.

The information contained in this Form 6-K is incorporated by reference into AerCap's Form F-4 Registration Statement, File No. 333-277595, Form F-3 Registration Statement, File No. 333-260359, and Form S-8 Registration Statements, File Nos. 333-194637, 333-180323, 333-165839 and 333-154416, and related Prospectuses, as such Registration Statements and Prospectuses may be amended from time to time.

Exhibits

99.1 AerCap Holdings N.V. Press Release.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AERCAP HOLDINGS N.V.

By: /s/ Aengus Kelly

Name: Aengus Kelly Title: Authorized Signatory

Date: April 16, 2024

4

PRESS RELEASE



For Investors: Joseph McGinley Head of Investor Relations jmcginley@aercap.com; +353 1 418 0428 For Media: Gillian Culhane Head of Corporate Communications and Marketing gculhane@aercap.com; +353 1 636 0945

AerCap Holdings N.V. Announces Expiration of Registered Exchange Offer for 6.450% Senior Notes due 2027

DUBLIN – April 16, 2024 – AerCap Ireland Capital Designated Activity Company and AerCap Global Aviation Trust (together, the "Issuers"), each a wholly owned subsidiary of AerCap Holdings N.V. ("AerCap" or the "Company"), announced the expiration of an offer to exchange (the "Exchange Offer") up to \$1,500,000,000 aggregate principal amount of their unregistered outstanding 6.450% Senior Notes due 2027 that were issued in November 2023 (the "Unregistered Notes") for a like principal amount of new 6.450% Senior Notes due 2027 (the "Exchange Notes"), which are registered under the Securities Act of 1933, as amended (the "Securities Act").

The Exchange Offer expired at 5:00 p.m., New York City time, on April 15, 2024. AerCap has been advised that \$1,499,156,000 in aggregate principal amount of the Unregistered Notes were validly tendered and not validly withdrawn prior to the expiration of the Exchange Offer, and AerCap has accepted for exchange all such Unregistered Notes pursuant to the Exchange Offer. AerCap expects that settlement of the Exchange Offer will occur on or about April 17, 2024.

About AerCap

AerCap is the global leader in aviation leasing with one of the most attractive order books in the industry. AerCap serves approximately 300 customers around the world with comprehensive fleet solutions. AerCap is listed on the New York Stock Exchange (AER) and is based in Dublin with offices in Shannon, Miami, Singapore, Amsterdam, Shanghai, Dubai, Seattle, Toulouse and other locations around the world.

Forward-Looking Statements

This press release contains certain statements, estimates and forecasts with respect to future performance and events. These statements, estimates and forecasts are "forward-looking statements". In some cases, forward-looking statements can be identified by the use of forward-looking terminology such as "may," "might," "should," "expect," "plan," "intend," "will," "aim," "estimate," "anticipate," "believe," "predict," "potential" or "continue" or the negatives thereof or variations thereon or similar terminology. All statements other than statements of historical fact included in this press release are forward-looking statements and are based on various underlying assumptions and expectations and are subject to known and unknown risks, uncertainties and assumptions, and may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied in the forwardlooking statements, including but not limited to the availability of capital to us and to our customers and changes in interest rates; the ability of our lessees and potential lessees to make lease payments to us; our ability to successfully negotiate flight equipment (which includes aircraft, engines and helicopters) purchases, sales and leases, to collect outstanding amounts due and to repossess flight equipment under defaulted leases, and to control costs and expenses; changes in the overall demand for commercial aviation leasing and aviation asset management services; the continued impacts of the Ukraine Conflict, including the resulting sanctions by the United States, the European Union, the United Kingdom and other countries, on our business and results of operations, financial condition and cash flows; the effects of terrorist attacks on the aviation industry and on our operations; the economic condition of the global airline and cargo industry and economic and political conditions; the impact of current hostilities in the Middle East, or any escalation thereof, on the aviation industry or our business; development of increased government regulation, including travel restrictions, sanctions, regulation of trade and the imposition of import and export controls, tariffs and other trade barriers; a downgrade in any of our credit ratings; competitive pressures within the industry; regulatory changes affecting commercial flight equipment operators, flight equipment maintenance, engine standards, accounting standards and taxes; and disruptions and security breaches affecting our information systems or the information systems of our third-party providers.

As a result, we cannot assure you that the forward-looking statements included in this press release will prove to be accurate or correct. These and other important factors and risks are discussed in AerCap's annual report on Form 20-F and other filings with the United States Securities and Exchange Commission. In light of these risks, uncertainties and assumptions, the future performance or events described in the forward-looking statements in this press release might not occur. Accordingly, you should not rely upon forward-looking statements as a prediction of actual results and we do not assume any responsibility for the accuracy or completeness of any of these forward-looking statements. Except as required by applicable law, we do not undertake any obligation to, and will not, update any forward-looking statements, whether as a result of new information, future events or otherwise.