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

SCHEDULE 13G

| Under the Securities Exchange Act of 1934 | | |
|--|--|--|
| (Amendment No.)* | | |
| AerCap Holdings N.V. | | |
| (Name of Issuer) | | |
| Ordinary Shares, par value €0.01 per share | | |
| (Title of Class of Securities) | | |
| N00985106 | | |
| (CUSIP Number) | | |
| December 31, 2016 | | |
| (Date of Event which Requires Filing of this Statement) | | |
| Check the appropriate box to designate the rule pursuant to which this Schedule is filed: | | |
| [x] Rule 13d-1(b) | | |
| [] Rule 13d-1(c) | | |
| [] Rule 13d-1(d) | | |
| * The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject | | |
| class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page. Beneficial ownership information contained herein is given as of the date listed above. | | |

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

| | Greenlight Capital, Inc. | |
|----|------------------------------|---|
| | | |
| 2 | Check the Appropriate Box | if a Member of a Group (See Instructions) |
| | (a) [] | |
| | (b) [] | |
| | | |
| 3 | SEC Use Only | |
| 4 | Citizenship or Place of Orga | anization. |
| | | |
| | Delaware | |
| | Number | |
| | of Shares | Sole Voting Power |
| | Beneficially | |
| | Owned by Each | 0 shares |
| | Reporting | |
| | Person With | |
| | 6 | Shared Voting Power |
| | | |
| | | 7,157,352 shares |
| | 7 | Sole Dispositive Power |
| | | |
| | | 0 shares |
| | 8 | Shared Dispositive Power |
| | | |
| | | 7,157,352 shares |
| 9 | Aggregate Amount Benefic | ially Owned by Each Reporting Person |
| | 7 157 252 aboves | |
| | 7,157,352 shares | |
| 10 | Check if the Aggregate Ame | ount in Row (9) Excludes Certain Shares (See Instructions) [] |
| | | |
| 11 | Percent of Class Represente | d by Amount in Row (9) |
| | 3.9% | |
| 12 | Type of Reporting Person (S | See Instructions) |
| | IA | |
| | | |
| | | |

| | mz |
|----|--|
| 12 | IA |
| 12 | 0.9% Type of Reporting Person (See Instructions) |
| 11 | Percent of Class Represented by Amount in Row (9) |
| 10 | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) [] |
| | 1,673,700 shares |
| 9 | Aggregate Amount Beneficially Owned by Each Reporting Person |
| | 1,673,700 shares |
| | 8 Shared Dispositive Power |
| | 0 shares |
| | 7 Sole Dispositive Power |
| | 1,673,700 shares |
| | 6 Shared Voting Power |
| | Reporting Person With |
| | Owned by Each 0 shares |
| | of Shares 5 Sole Voting Power Beneficially |
| | Number |
| | Delaware |
| 4 | Citizenship or Place of Organization. |
| 3 | SEC Use Only |
| | (b) [] |
| 2 | Check the Appropriate Box if a Member of a Group (See Instructions) (a) [] |
| | |
| | DME Advisors, LP |
| 1 | Names of Reporting Persons. |

| 1 | Names of Reporting Persons | |
|----|------------------------------|---|
| | DME Capital Management, | LP |
| 2 | Check the Appropriate Box | if a Member of a Group (See Instructions) |
| | (a) [] | |
| | (b) [] | |
| 3 | SEC Use Only | |
| 4 | Citizenship or Place of Orga | nization. |
| | Delaware | |
| | Number | |
| | of Shares 5 | Sole Voting Power |
| | Beneficially Owned by | |
| | Each | 0 shares |
| | Reporting | |
| | Person With | |
| | 6 | Shared Voting Power |
| | | 2.502.242.1 |
| | | 3,583,243 shares |
| | 7 | Sole Dispositive Power |
| | | 0 shares |
| | 8 | Shared Dispositive Power |
| | | 3,583,243 shares |
| 9 | Aggregate Amount Benefici | ally Owned by Each Reporting Person |
| | 3,583,243 shares | |
| 10 | Check if the Aggregate Amo | ount in Row (9) Excludes Certain Shares (See Instructions) [] |
| 11 | Percent of Class Represented | d by Amount in Row (9) |
| | 2.0% | |
| 12 | Type of Reporting Person (S | ee Instructions) |
| | IA | |
| | | |

| 1 | Names of Reporting Persons | 3. |
|----|------------------------------|---|
| | DME Advisors GP, LLC | |
| 2 | Check the Appropriate Box | if a Member of a Group (See Instructions) |
| | (a) [] | |
| | (b) [] | |
| | | |
| 3 | SEC Use Only | |
| 4 | Citizenship or Place of Orga | inization. |
| | Delaware | |
| | Number | |
| | of Shares | Sole Voting Power |
| | Beneficially Owned by | |
| | Each | 0 shares |
| | Reporting | |
| | Person With | |
| | 6 | Shared Voting Power |
| | | 5,256,943 shares |
| | 7 | Sole Dispositive Power |
| | | 0 shares |
| | 8 | Shared Dispositive Power |
| | | 5,256,943 shares |
| 9 | Aggregate Amount Benefici | ally Owned by Each Reporting Person |
| | 5,256,943 shares | |
| 10 | Check if the Aggregate Amo | ount in Row (9) Excludes Certain Shares (See Instructions) [] |
| | | |
| 11 | Percent of Class Represente | d by Amount in Row (9) |
| | 2.9% | |
| 12 | Type of Reporting Person (S | See Instructions) |
| | НС | |
| | | |
| | | |

| 1 | Names of Reporting Persons. |
|----|--|
| | David Einhorn |
| 2 | Check the Appropriate Box if a Member of a Group (See Instructions) |
| | (a) [] |
| | (b) [] |
| | |
| 3 | SEC Use Only |
| 4 | Citizenship or Place of Organization. |
| | U.S. Citizen |
| | Number |
| | of Shares 5 Sole Voting Power |
| | Beneficially |
| | Owned by Each 0 shares |
| | Reporting |
| | Person With |
| | 6 Shared Voting Power |
| | 12,621,325 shares |
| | 7 Sole Dispositive Power |
| | 0 shares |
| | 8 Shared Dispositive Power |
| | 12,621,325 shares |
| 9 | Aggregate Amount Beneficially Owned by Each Reporting Person |
| | 12,621,325 shares |
| | |
| 10 | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) [] |
| 11 | Percent of Class Represented by Amount in Row (9) |
| | 6.9% |
| 12 | Type of Reporting Person (See Instructions) |
| | НС |
| | |

SCHEDULE 13G

This Schedule 13G relating to ordinary shares, par value €0.01 per share ("Ordinary Shares") of AerCap Holdings N.V., a Netherlands corporation (the "Company" or the "Issuer"), is being filed on behalf of Greenlight Capital, Inc., a Delaware corporation ("Greenlight Inc."), DME Advisors, LP, a Delaware limited partnership ("DME Advisors"), DME Capital Management, LP, a Delaware limited partnership ("DME CM"), DME Advisors GP, LLC, a Delaware limited liability company ("DME GP" and together with Greenlight Inc., DME Advisors and DME CM, "Greenlight"), and Mr. David Einhorn, the principal of Greenlight (collectively with Greenlight, the "Reporting Persons").

This Schedule 13G relates to Ordinary Shares of the Issuer held by Greenlight for the account of private investment funds and other accounts for which Greenlight acts as investment manager (or general partner of the investment manager) and with respect to which Mr. Einhorn may be deemed to have indirect investment and/or voting power as the principal of Greenlight and other affiliated entities. DME GP is the general partner of DME Advisors and of DME CM.

The filing of this Schedule 13G shall not be construed as an admission that any of the Reporting Persons is for the purposes of Section 13(d) or 13(g) of the Securities Exchange Act of 1934, the beneficial owner of any of the Common Shares reported herein. Pursuant to Rule 13d-4, each of the Reporting Persons disclaims all such beneficial ownership except to the extent of its pecuniary interest in any Ordinary Shares, if applicable.

Item 1.

(a) Name of Issuer

AerCap Holdings N.V.

(b) Address of Issuer's Principal Executive Offices

AerCap House, 65 St. Stephen's Green, Dublin 2, Ireland

Item 2.

(a) Name of Person Filing

Greenlight Inc.

DME Advisors

DME CM

DME GP

David Einhorn

(b) Address of Principal Business Office or, if none, Residence

The principal business office of each the Reporting Persons is 140 East 45th Street, 24th Floor, New York, New York 10017.

(c) Citizenship

Greenlight Inc. is a corporation organized under the laws of the State of Delaware.

DME Advisors is a limited partnership organized under the laws of the State of Delaware.

DME CM is a limited partnership organized under the laws of the State of Delaware.

DME GP is a limited liability company organized under the laws of the State of Delaware.

David Einhorn is a United States citizen

(d) Title of Class of Securities

Ordinary Shares, par value €0.01 per share

(e) CUSIP Number

N00985106

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) [] Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) [] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

| (c) (d) | [] | Insurance Company as defined in Section 3(a)(19) of the Act |
|------------|-----|--|
| (d) | [] | Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). |
| (e) | [X] | An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); |
| (f) | [] | An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); |
| (g) | [X] | A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G); |
| (h) | [] | A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); |
| (i) | [] | A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment |
| | | Company Act of 1940 (15 U.S.C. 80a-3); |
| (j) | [] | A non-U.S. institution in accordance with §240.13d–1(b)(1)(ii)(J); |
| (k) | [] | Group, in accordance with §240.13d-1(b)(1)(ii)(K). |
| | | |

If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned

Greenlight Inc. may be deemed the beneficial owner of 7,157,352 shares

DME Advisors may be deemed the beneficial owner of 1,673,700 shares

DME CM may be deemed the beneficial owner of 3,583,243 shares

DME GP may be deemed the beneficial owner of 5,256,943 shares

David Einhorn may be deemed the beneficial owner of 12,621,325 shares

(b) Percent of Class

The information set forth in Rows 5 through 11 on the cover page for each Reporting Person is hereby incorporated by reference into this Item 4(b) for each such Reporting Person. The percentages reported herein are calculated on the basis of there being 181,743,634 Ordinary Shares outstanding as of September 30, 2016, as reported in the Issuer's report on Form 6-K filed by the Issuer with the SEC on November 8, 2016.

(c) Number of shares as to which such person has:

The information set forth in Rows 5 through 11 on the cover page for each Reporting Person is hereby incorporated by reference into this Item 4(b) for each such Reporting Person.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [].

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

Not applicable.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certifications

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under §240.14a-11.

Exhibits Exhibit

99.1 Joint Filing Agreement by and among the Reporting Persons.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2017

GREENLIGHT CAPITAL, INC.

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

DME ADVISORS, LP

By: DME Advisors GP, LLC, its General Partner

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

DME CAPITAL MANAGEMENT, LP

By: DME Advisors GP, LLC, its General Partner

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

DME ADVISORS GP, LLC

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

/s/ DANIEL ROITMAN*

Daniel Roitman, on behalf of David Einhorn

^{*} The Power of Attorney executed by David Einhorn, authorizing the signatory to sign and file this Schedule 13G on David Einhorn's behalf, filed as Exhibit 99.2 to the Schedule 13G filed with the Securities and Exchange Commission on May 24, 2010 by the Reporting Persons with respect to the common stock of NCR Corporation, is hereby incorporated by reference.

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a statement on Schedule 13G and/or 13D (including any and all amendments thereto) with respect to Ordinary Shares, par value ϵ 0.01 per share, of AerCap Holdings N.V., and further agree that this Joint Filing Agreement shall be included as an Exhibit to such joint filings.

The undersigned further agree that each party hereto is responsible for the timely filing of such Statement on Schedule 13G and/or 13D and any amendments thereto, and for the accuracy and completeness of the information concerning such party contained therein; provided, however, that no party is responsible for the accuracy or completeness of the information concerning any other party, unless such party knows or has reason to believe that such information is inaccurate.

This Joint Filing Agreement may be signed in counterparts with the same effect as if the signature on each counterpart were upon the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date written below.

Date: February 14, 2017

GREENLIGHT CAPITAL, INC.

By: /s/ DANIEL ROITMAN

Daniel Roitman
Chief Operating Officer

DME ADVISORS, LP

By: DME Advisors GP, LLC,

its General Partner

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

DME CAPITAL MANAGEMENT, LP

By: DME Advisors GP, LLC,

its General Partner

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

DME ADVISORS GP, LLC

By: /s/ DANIEL ROITMAN

Daniel Roitman Chief Operating Officer

/s/ DANIEL ROITMAN*

Daniel Roitman, on behalf of David Einhorn