

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

FORM S-8

**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

AERCAP HOLDINGS N.V.

(Exact name of Registrant as specified in its charter)

<p>Netherlands (State or other jurisdiction of incorporation or organization)</p>	<p>7359 (Primary Standard Industrial Classification Code Number)</p>	<p>Not Applicable (I.R.S. Employer Identification No.)</p>
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**Stationsplein 965
1117 CE Schiphol Airport
The Netherlands
+31 20 655 9655**

(Address, including zip code, and telephone number, including area code, of the Registrant's principal executive offices)

**2006 EQUITY SHARE INCENTIVE PLAN
(Full Title of Plan)**

**Puglisi & Associates
850 Library Avenue, Suite 204
Newark, Delaware 19711
Tel. (302) 738-6680**

(Name and address, including zip code, and telephone number, including area code, of agent for service of process)

With a copy to:

Douglas A. Tanner, Esq.
Milbank, Tweed, Hadley & McCloy LLP
One Chase Manhattan Plaza
New York, NY 10005
(212) 530-5000

Erwin den Dikken
Chief Legal Officer
Evert van de Beekstraat
1118 CX Schiphol Airport
The Netherlands
+31 20 655 9655

Indicate by check mark whether the registrant is a large accelerated filer, on accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(do not check if a smaller reporting company)

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	Amount of Registration Fee
Ordinary Shares par value €0.01	1,751,848 shares	\$ 6.35(2)	\$ 11,124,234.80(2)	\$ 437.19
Ordinary Shares par value €0.01	2,500,000 shares	\$ 24.25(3)	\$ 60,625,000.00(3)	\$ 2382.57

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, there shall also be deemed registered hereby such additional number of ordinary shares of the Registrant as may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

- (2) Calculated solely for the purpose of determining the registration fee pursuant to Rule 457(h) and Rule 457(c) under the Securities Act of 1933, based upon the average of the high and low sales prices for the ordinary shares as quoted on the New York Stock Exchange on October 10, 2008, of \$6.35 per share.
- (3) The Proposed Maximum Offering Price Per Share and Proposed Maximum Aggregate Offering Price are estimated in accordance with Rule 457(h) promulgated under the Securities Act solely for the purpose of calculating the amount of the registration fee, based on the weighted average exercise price of the stock options that have already been issued which are being registered pursuant to this Registration Statement.
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PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the U.S. Securities and Exchange Commission (the "Commission") by AerCap Holdings N.V. (the "Company"), are incorporated herein by reference:

- the Company's annual report on Form 20-F for the fiscal year ended December 31, 2007 filed with the Commission on March 21, 2007;
- the Company's current reports on Form 6-K, filed with the SEC on July 14, 2008, July 22, 2008 (relating to AerCap's freighter conversion program and management transition), September 11, 2008 and October 15, 2008; and
- the description of the Company's ordinary shares, par value €0.01 per share contained in its Registration Statement on Form 8-A filed with the Commission on November 16, 2006 pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which incorporates by reference the description of the Company's ordinary shares set forth under "Description of Ordinary Shares" in the Company's Registration Statement on Form F-1 (File No. 333-138381), as amended, which was originally filed with the Commission on November 16, 2006.

All documents subsequently filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered 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. Unless expressly incorporated into this Registration Statement, a report (or portion thereof) furnished on Form 6-K shall not be incorporated by reference into this Registration Statement. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement. Copies of these documents are not required to be filed with this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

None.

Item 6. Indemnification of Directors and Officers.

The Company has a directors and officers liability insurance policy which insures directors and officers against the cost of defense, settlement or payment of claims and judgments under some circumstances. The Company has also entered into indemnity agreements with each of its board members in which the Company agrees to hold each of them harmless, to the extent permitted by law, from damage resulting from a failure to perform or a breach of duties by the Company's board members, and to indemnify each of them for serving in any capacity for the benefit of the Company, except in the case of willful misconduct or gross negligence in certain circumstances.

Although Netherlands law does not contain any provisions with respect to the indemnification of officers and directors, the concept of indemnification of directors of a company for liabilities arising from

their actions as members of the executive or supervisory boards is, in principle, accepted in The Netherlands. The Company's Articles of Association provide for indemnification of directors and officers by the Company to the fullest extent permitted by Netherlands law against liabilities, expenses and amounts paid in settlement relating to claims, actions, suits or proceedings to which a director becomes a party as a result of his or her position.

The indemnification provided above is not exclusive of any rights to which any of the Company's directors or officers may be entitled. The general effect of the forgoing provisions may be to reduce the circumstances in which a director or officer may be required to bear the economic burdens of the forgoing liabilities and expenses.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description
4.1	Form of Share Certificate (incorporated herein by reference to Exhibit 4.1 of the Company's Registration Statement on Form F-1 (No. 333-138381), as amended, originally filed with the Commission on November 16, 2006) (the "F-1 Registration Statement").
5.1	Opinion of NautaDutilh NV
10.13	AerCap Holdings N.V. 2006 Equity Incentive Plan (including form of Stock Option Agreement) (incorporated herein by reference to Exhibit 10.13 of the F-1 Registration Statement).
23.1	Consent of PricewaterhouseCoopers Accountants NV
23.2	Consent of PricewaterhouseCoopers Accountants NV
23.3	Consent of NautaDutilh NV (included in Exhibit 5.1).
24.1	Power of Attorney (included in signature page to this Registration Statement).

Item 9. Undertakings.

(a) The Company 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 of 1933, as amended (the "Securities Act");
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this 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 this Registration Statement. Notwithstanding the foregoing, any increase or decrease in the 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 and the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent 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;

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provided, however, that the undertakings set forth in 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 Securities and Exchange Commission by the Company pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, that are incorporated by reference in this Registration Statement; and

- (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.
 - (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) The Company hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this 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.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange 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 Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company 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 Amsterdam, the Netherlands, on October 17, 2008.

AERCAP HOLDINGS N.V.

By: /s/ Klaus Heinemann
 Name: Klaus Heinemann
 Title: Chief Executive Officer
 (Principal Executive Officer)

POWER OF ATTORNEY

We, the undersigned officers and directors of AerCap Holdings N.V., hereby severally constitute and appoint James N. Chapman, Klaus W. Heinemann and Robert G. Warden and each of them, our true and lawful attorneys-in-fact, with full power of substitution, for them, together or individually, in any and all capacities, to sign for us and in our names, the Registration Statement on Form S-8 filed with the Securities and Exchange Commission, and any and all amendments to said Registration Statement (including post-effective amendments), and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, and each of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of them might or could do in person, and hereby ratifying and confirming all that said attorneys, or their substitute, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933 this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Pieter Korteweg</u> Pieter Korteweg	Chairman of the Board of Directors	October 17, 2008
<u>/s/ Klaus Heinemann</u> Klaus Heinemann	Chief Executive Officer	October 17, 2008
<u>/s/ Ronald J. Bolger</u> Ronald J. Bolger	Non-Executive Director	October 17, 2008
<u>/s/ James N. Chapman</u> James N. Chapman	Non-Executive Director	October 17, 2008
<u>/s/ W. Brett Ingersoll</u> W. Brett Ingersoll	Non-Executive Director	October 17, 2008
<u>/s/ Marius J.L. Jonkhart</u> Marius J.L. Jonkhart	Non-Executive Director	October 17, 2008
<u>/s/ Keith A. Helming</u> Keith A. Helming	Chief Financial Officer	October 17, 2008
<u>/s/ Cole T. Reese</u> Cole T. Reese	Chief Accounting Officer	October 17, 2008
<u>/s/ Gerald P. Strong</u>	Non-Executive Director	October 17, 2008

Gerald P. Strong

/s/ David J. Teitelbaum

David J. Teitelbaum

Non-Executive Director

October 17, 2008

/s/ Robert G. Warden

Robert G. Warden

Non-Executive Director

October 17, 2008

/s/ Donald Puglisi

Donald Puglisi

Authorized Representative in the United
States

October 17, 2008

Amsterdam, 17 October 2008

AerCap Holdings N.V.
Stationsplein 965
AerCap House
1117 CE Schiphol
The Netherlands

Ladies and Gentlemen,

SEC Exhibit 5 opinion letter re Form S-8 Registration Statement

This opinion letter is rendered to you in order to be filed as an exhibit to the registration statement on Form S-8 to be filed by you with the U.S. Securities and Exchange Commission (as amended, the “**Registration Statement**”).

We have acted as your legal counsel as to Dutch law in connection with the Registration Statement to be filed by AerCap Holdings N.V., a public company with limited liability (*naamloze vennootschap*), organized under the laws of the Netherlands (“**AerCap**”) on or about 17 October 2008 relating to the registration under the U.S. Securities Act of 1933, as amended, by AerCap of an additional 4,251,848 of its ordinary shares with a nominal value of EUR 0.01 per share (the “**Ordinary Shares**”), to be issued pursuant to the terms of the AerCap Equity Share Incentive Plan as approved by the Company’s shareholders on October 31, 2006 and acknowledged by the Company’s Board on December 7, 2006 and as amended and restated from time to time.

This opinion letter is addressed to you. It may be relied upon only in connection with the Registration Statement. This opinion letter is strictly limited to the matters stated in it and may not be read as extending by implication to any matters not specifically referred to in it. Nothing in this opinion letter should be taken as

expressing an opinion in respect of any representation or warranty or other information contained in any document.

In rendering the opinions expressed in this opinion letter, we have exclusively reviewed and we have relied upon the following documents: (i) a photocopy of the deed of incorporation of AerCap, dated 10 July 2006, (ii) photocopies of the deeds of amendment of the articles of association of AerCap dated 10 November 2006 and 4 July 2008 respectively, (iii) an electronic copy of the Plan, (iv) a draft private deed of issue (document reference number 50066363 AMS C 803079 / 2, the “**Deed of Issue**”) relating to the issuance of Ordinary Shares by AerCap pursuant to a valid exercise of one or more options under the Plan, (v) an online extract dated the date hereof from the Commercial Register relating to AerCap and (vi) a certificate (the “**Certificate**”) dated 17 October 2008 signed by the Chief Executive Officer and the Chief Tax and Accounting Officer of AerCap that AerCap has not (i) been dissolved (*ontbonden*), (ii) ceased to exist pursuant to a merger (*fusie*) or a division (*splitsing*), (iii) had its assets placed under administration (*onder bewind gesteld*), (iv) been declared bankrupt (*failliet verklaard*) or granted a suspension of payments (*surseance van betaling verleend*), or (v) been made subject to any other insolvency proceedings under any applicable law or otherwise be limited in its rights to dispose of its assets.

This opinion letter sets out our opinion on certain matters of the laws with general applicability of the Netherlands as they stand at today’s date and as they are presently interpreted under published authoritative case law of the Dutch courts and the opinions expressed in this opinion letter are limited in all respects to and are to be construed and interpreted in accordance with, Dutch law. We do not express any opinion on public international law or on the rules promulgated under or by any treaty or treaty organisation, except insofar as these rules are directly applicable in the Netherlands, nor do we express any opinion on Dutch or European competition law or tax laws. No undertaking is assumed on our part to revise, update or amend this opinion letter in connection with or to notify or inform you of, any developments and/or changes of Dutch law subsequent to today’s date.

This opinion letter may only be relied upon on the condition that you accept that the legal relationship between yourselves and NautaDutilh N.V. is governed by Dutch law and our general conditions and that any issues of interpretation or liability arising out of or in connection with this opinion letter are submitted to the exclusive jurisdiction of the competent courts at Amsterdam, the Netherlands.

In this opinion letter, legal concepts are expressed in English terms. The Dutch legal concepts concerned may not be identical in meaning to the concepts described

by the English terms as they exist under the law of other jurisdictions. In the event of a conflict or inconsistency, the relevant expression shall be deemed to refer only to the Netherlands legal concepts described by the English terms.

For the purposes of this opinion letter, we have assumed that:

- a. all documents reviewed by us as originals are complete and authentic and the signatures on these documents are the genuine signatures of the persons purporting to have signed the same, all documents reviewed by us as drafts of documents or as fax, photo or electronic copies of originals are in conformity with the executed originals and these originals are complete and authentic and the signatures on them are the genuine signatures of the persons purporting to have signed the same and the statements contained

in the Certificate are true and correct on the date of this opinion letter;

- b. the Plan is in full force and effect; and
- c. the Ordinary Shares will be issued (i) upon a valid exercise of options under the Plan and (ii) pursuant to the Deed of Issue and all parties to this Deed of Issue, including AerCap, will have the power of disposition (*beschikkingsbevoegd*) to execute such Deed and will take or will have taken all corporate action required to execute such deed and to issue the Ordinary Shares.

Based upon and subject to the foregoing and subject to the qualifications set forth in this opinion letter, we are of the opinion that:

- 1. AerCap has been duly incorporated and is validly existing as a public company with limited liability (*naamloze vennootschap*) under Dutch law.
- 2. The Ordinary Shares, when issued pursuant to the Deed of Issue, validly signed by and on behalf of all parties thereto and paid for in accordance with the Plan, will be validly issued, fully paid (provided that the Fair Market Value as defined in the Plan will be at least equal to the nominal value of the Ordinary Shares at the time of issue of the Ordinary Shares) and non- assessable.

The opinions expressed above are subject to the following qualifications:

- A. The term “non-assessable” as used herein means that a holder of a share will not by reason of being merely such a holder, be subject to assessment or calls by AerCap or its creditors for further payment on such share.

We consent to the filing of this opinion as Exhibit to the Registration Statement hereby and further consent to the reference to our firm in the Registration Statement.

Yours faithfully,

/s/ NautaDutilh N.V.

NautaDutilh N.V.



**PricewaterhouseCoopers
Accountants N.V.**
Fascinatio Boulevard 350
3065 WB Rotterdam
P.O. Box 8800
3009 AV Rotterdam
The Netherlands
Telephone +31 (10) 407 55 00
Facsimile +31 (10) 456 43 33
www.pwc.com/nl

Consent of independent registered public accounting firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 18, 2008 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in AerCap Holdings N.V.'s Annual Report on Form 20-F for the year ended December 31, 2007.

Rotterdam, October 15, 2008

PricewaterhouseCoopers Accountants N.V.

/s/ H.F.M. Gertsen RA

H.F.M. Gertsen RA

PricewaterhouseCoopers is the trade name of among others the following companies: PricewaterhouseCoopers Accountants N.V. (Chamber of Commerce 34180285), PricewaterhouseCoopers Belastingadviseurs N.V. (Chamber of Commerce 34180284), PricewaterhouseCoopers Advisory N.V. (Chamber of Commerce 34180287) and PricewaterhouseCoopers B.V. (Chamber of Commerce 34180289). The services rendered by these companies are governed by General Terms & Conditions, which include provisions regarding our liability. These General Terms & Conditions are filed with the Amsterdam Chamber of Commerce and can also be viewed at www.pwc.com/nl.



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Consent of independent registered public accounting firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 18, 2008 relating to the financial statements and financial statement schedule of debis AerFinance B.V. and its subsidiaries for the period from January 1, 2005 to June 30, 2005, which appears in AerCap Holdings N.V.'s Annual Report on Form 20-F for the year ended December 31, 2007.

Rotterdam, October 15, 2008

PricewaterhouseCoopers Accountants N.V.

/s/ H.F.M. Gertsen RA

H.F.M. Gertsen RA

PricewaterhouseCoopers is the trade name of among others the following companies: PricewaterhouseCoopers Accountants N.V. (Chamber of Commerce 34180285), PricewaterhouseCoopers Belastingadviseurs N.V. (Chamber of Commerce 34180284), PricewaterhouseCoopers Advisory N.V. (Chamber of Commerce 34180287) and PricewaterhouseCoopers B.V. (Chamber of Commerce 34180289). The services rendered by these companies are governed by General Terms & Conditions, which include provisions regarding our liability. These General Terms & Conditions are filed with the Amsterdam Chamber of Commerce and can also be viewed at www.pwc.com/nl.
