
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 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 May 2012

Commission File Number 001-33159

AERCAP HOLDINGS N.V.

(Translation of Registrant's Name into English)

Stationsplein 965, 1117 CE Schiphol Airport, The Netherlands, +31-20-655-9655

(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

Form 40-F

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):

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 May 8, 2012, AerCap Holdings N.V. announced the results of its operations for the quarter ended March 31, 2012.

Exhibits

99.1 AerCap Holdings N.V. Press Release

2

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: May 8, 2012

3

EXHIBIT INDEX

99.1 AerCap Holdings N.V. Press Release.

4

**For Investors:**

Keith Helming
 Chief Financial Officer
 +31 20 655 9670
 khelming@aercap.com

Peter Wortel
 Investor Relations
 +31 20 655 9658
 pwortel@aercap.com

For Media:

Frauke Oberdieck
 Corporate Communications
 +31 20 655 9616
 foberdieck@aercap.com

PRESS RELEASE**AerCap Holdings N.V. Reports First Quarter 2012 Financial Results**

Adjusted net income for the first quarter of 2012 was \$69.1 million.

Amsterdam, Netherlands; May 8, 2012 - AerCap Holdings N.V. (the "Company" or "AerCap") (NYSE: AER) today announced the results of its operations for the first quarter ended March 31, 2012.

First Quarter 2012 Net Income and Earnings Per Share

- First quarter 2012 *reported* net income was \$65.0 million, compared with \$72.1 million for the same period in 2011. First quarter 2012 *reported* basic and diluted earnings per share was \$0.46, compared with *reported* basic and diluted earnings per share of \$0.48 for the same period in 2011.
- First quarter 2012 *adjusted* net income was \$69.1 million, compared with first quarter 2011 *adjusted* net income of \$75.3 million. *Adjusted* net income excludes non-cash charges relating to the mark-to-market of interest rate caps and share-based compensation. First quarter 2012 *adjusted* earnings per share was \$0.49, compared with \$0.50 for the same period in 2011.

Aengus Kelly, CEO of AerCap, commented: *"The first quarter has seen AerCap deliver another very strong set of results. The combination of our young fuel efficient aircraft portfolio, disciplined growth strategy and robust capital structure continue to deliver industry leading returns. This combination of factors has also resulted in AerCap being rated Investment Grade by both S&P and Fitch, these ratings coupled with our ample liquidity and access to capital ensure that AerCap will be able to rapidly respond to market investment opportunities that may arise in the balance of this year and beyond."*

Additional First Quarter 2012 Financial Highlights

- Net interest margin earned on lease assets, or net spread, was \$174.4 million in the first quarter of 2012 compared with \$180.1 million for the same period in

2011. Net interest margin as a percent to average lease assets was 8.85% for first quarter 2012 as compared to 9.22% for first quarter 2011. The decrease in net interest margin is driven by the impact from the delivery of new aircraft.

- Total assets were \$9.3 billion at March 31, 2012, a decrease of 5% over total assets of \$9.8 billion at March 31, 2011. The net decrease is attributed to the sale of AeroTurbine and the sale of our 50% interest in a joint venture containing three A330 aircraft, totaling \$0.6 billion, offset by new aircraft deliveries.
- Debt to equity ratio was 2.6 to 1 at March 31, 2012, compared to 2.9 to 1 at March 31, 2011.
- Committed purchases of aviation assets delivered or scheduled for delivery in 2012 are \$985 million, of which \$258 million closed in the first three months of 2012.
- We entered into debt facility agreements totaling \$0.3 billion in first quarter 2012.
- AerCap was assigned an investment grade corporate credit rating of BBB- with a stable outlook by both Standard and Poor's Ratings Services and Fitch Ratings.

AerCap's CFO, Keith Helming, added: *"We are very proud of the recent investment grade corporate credit ratings which are representative of management's disciplined approach to capital allocation and liquidity. The total interest costs of the Company's debt obligations remain at the 4% level, inclusive of all up-front fees paid in addition to the hedging costs to fully protect the Company from adverse interest rate risks. Our debt to equity ratio is now 2.6 to 1 with book equity of \$2.35 billion. Coupled with a total cash balance in excess of \$720 million, AerCap is well positioned to carry forward its business strategy in 2012 and beyond to maximize value for its*

shareholders and other Company's stakeholders."

Summary of Financial Results

	Three months ended March 31,		
	2012	2011	% increase/ (decrease)
Net income	\$ 65.0	\$ 72.1	(10)%
Adjusted net income	69.1	75.3	(8)%

Both reported and adjusted net income in the first quarter of 2012 were down slightly from the same period in 2011. This decrease was the result of the timing of revenues and expenses relating to defaults and restructurings in the first quarter of 2011 and 2012.

Revenue breakdown

	Three months ended March 31,		
	2012	2011	% increase/ (decrease)
Lease revenue:			
Basic lease rents	\$ 235.1	\$ 237.1	(1)%
Maintenance rents and other receipts	17.6	20.1	(12)%
Lease revenue	252.7	257.2	(2)%
Net loss on sale of assets	(0.2)	(1.3)	85%
Management fees and interest income	5.2	5.7	(9)%
Other revenue	0.2	2.5	(92)%
Total revenue	\$ 257.9	\$ 264.1	(2)%

2

Basic lease rents were \$235.1 million for the first quarter of 2012, a decrease of 1% compared with the same period in 2011. Our average lease assets increased by 1% to \$7.9 billion compared with the first quarter of 2011.

Basic rents, maintenance rents and other receipts, or total lease revenue, for the first quarter of 2011 was \$252.7 million, compared to \$257.2 million for the same period in 2011, a decrease of 2%.

Net loss on sale of assets for the first quarter of 2012 was a loss of \$0.2 million, compared to a \$1.3 million loss for the same period in 2011. Net loss on sale of assets for the first quarter of 2012 was generated from the sale of an older B757 aircraft partially offset by a gain on a new A330 aircraft.

Total revenue for the first quarter of 2012 was \$257.9 million, compared to \$264.1 million for the same period in 2011.

	Three months ended March 31,		
	2012	2011	% increase/ (decrease)
Basic lease rents	\$ 235.1	\$ 237.1	(1)%
Interest on debt	64.0(a)	58.7	9%
Plus: mark-to-market of interest rate caps	(3.3)	(1.7)	94%
Interest on debt excluding the impact of mark-to-market of interest rate caps	60.7	57.0	6%
Net interest margin, or net spread	\$ 174.4	\$ 180.1	(3)%

(a) Interest on debt for the quarter ended March 31, 2012 includes \$7.1 million of amortization of debt issuance costs.

As shown in the table above, interest expense excluding the impact of the mark-to-market of interest rate caps was \$60.7 million in the first quarter of 2012, a 6% increase compared with the first quarter of 2011. Net spread in the first quarter of 2012 decreased 3% compared with the same period in 2011.

Selling, general and administrative expenses breakdown

	Three months ended March 31,		% increase/ (decrease)
--	---------------------------------	--	---------------------------

	<u>2012</u>	<u>2011</u>	<u>(decrease)</u>
Aircraft management fees	\$ 0.5	\$ 1.6	(69)%
Mark-to-market of foreign currency hedges, foreign currency balances and other derivatives.	(4.9)	(7.2)	(32)%
Share-based compensation expenses	1.5	1.2	25%
Other selling, general and administrative expenses.	19.2	21.2	(9)%
Total selling, general and administrative expenses	\$ 16.3	\$ 16.8	(3)%

Effective tax rate

AerCap's blended effective tax rate during the first three months of 2012 was 8.7%. The blended effective tax rate in 2011 was 6.7%.

3

Financial position

	<u>March 31, 2012</u>	<u>March 31, 2011</u>	<u>% increase/ (decrease) over March 31, 2011</u>
Total cash (incl. restricted)	\$ 728.3	\$ 621.2	17%
Flight equipment held for lease	7,974.7	8,366.6	(5)%
Total assets	9,255.9	9,789.1	(5)%
Debt	6,176.8	6,731.1	(8)%
Total liabilities	6,907.4	7,496.4	(8)%
Total equity	2,348.5	2,292.7	2%
Debt/equity ratio	2.6	2.9	(10)%

As of March 31, 2012, AerCap's portfolio consisted of 350 aircraft that were either owned, on order, under contract or letter of intent, or managed. Total assets were \$9.3 billion at March 31, 2012, a decrease of 5% over total assets of \$9.8 billion at March 31, 2011. The net decrease is attributed to the sale of AeroTurbine and the sale of our 50% interest in a joint venture containing three A330 aircraft, totaling \$0.6 billion, offset by new aircraft deliveries.

Notes Regarding Financial Information Presented In This Press Release

The financial information presented in this press release is not audited.

The following is a definition of non-GAAP measures used in this press release and a reconciliation of such measure to the most closely related GAAP measure:

Adjusted net income and adjusted earnings per share. These measures are determined by adding non-cash charges related to the mark-to-market losses on our interest rate caps and share based compensation during the applicable period, net of related tax benefits, to GAAP net income. Adjusted earnings per share are determined by dividing the amount of adjusted net income by the average number of shares outstanding for that period. The average number of shares is based on a daily average.

In addition to GAAP net income and earnings per share, we believe these measures may provide investors with supplemental information regarding our operational performance and may further assist investors in their understanding of our operational performance in relation to past and future reporting periods. We use interest rate caps to allow us to benefit from decreasing interest rates and protect against the negative impact of rising interest rates on our floating rate debt. Management determines the appropriate level of caps in any period with reference to the mix of floating and fixed cash inflows from our lease and other contracts. We do not apply hedge accounting to our interest rate caps. As a result, we recognize the change in fair value of the interest rate caps in our income statement during each period.

4

Following is a reconciliation of net income excluding the impact of the mark-to-market of interest rate caps and share-based compensation to net income for the three month periods ended March 31, 2012 and 2011:

	<u>Three months ended March 31,</u>		<u>% increase/ (decrease)</u>
	<u>2012</u>	<u>2011</u>	
Net income	\$ 65.0	\$ 72.1	(10)%
Plus: mark-to-market of interest rate caps, net of tax	2.8	1.5	87%
share-based compensation, net of tax	1.3	1.7	(24)%
Adjusted net income)%

Net interest margin, or net spread (refer to second table under Revenue breakdown section of this press release). This measure is the difference between basic lease rents and interest expense excluding the impact from the mark-to-market of interest rate caps. We believe this measure may further assist investors in their understanding of the changes and trends related to the earnings of our leasing activities. This measure reflects the impact from changes in the number of aircraft leased, lease rates, utilization rates, as well as the impact from the use of interest rate caps instead of swaps to hedge our interest rate risk. The reconciliation of net spread to basic rents for the three month periods ended March 31, 2012 and 2011 is included above.

Conference Call

In connection with the earnings release, management will host an earnings conference call today, Tuesday, May 8, 2012 at 9:30 am Eastern Time / 3:30 pm Central European Time. The call can be accessed live by dialing (U.S./Canada) 1-480-629-9692 or (International) +31-20-794-8504 and referencing code 4529515 at least 5 minutes before start time, or by visiting AerCap’s website at <http://www.aercap.com> under “Investor Relations”.

The webcast replay will be archived in the “Investor Relations” section of the company’s website for one year.

In addition, a New York Group Lunch Presentation for investors and analysts will be hosted by AerCap’s management today, Tuesday, May 8, 2012, at 12:30 pm Eastern Time at The New York Palace (the Henry Room), 455 Madison Avenue, New York. Doors will open at 12:00 pm.

To participate in either event, please register at: <http://client.sharedvalue.net/AerCap/Q112>

For further information, contact Peter Wortel: +31 20 655 9658 (pwortel@aercap.com) or Mark Walter (Shared Value): +44 (0)20 7321 5039 (aercap@sharedvalue.net).

About AerCap Holdings N.V.

AerCap is the world’s leading independent aircraft leasing company and has one of the youngest fleets in the industry. AerCap has a portfolio of 350 aircraft with a focus on fuel-efficient narrowbodies and widebodies. AerCap is a New York Stock Exchange-listed company (AER) headquartered in The Netherlands with offices in Ireland, the United States, China, Singapore and the United Arab Emirates.

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,” “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, 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 forward-looking statements. As a result, there can be no assurance that the forward-looking statements included in this press release will prove to be accurate or correct. 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. 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.

For more information regarding AerCap and to be added to our email distribution list, please visit <http://www.aercap.com>.

Financial Statements Follow

AerCap Holdings N.V.
Unaudited Consolidated Balance Sheets
(In thousands of U.S. Dollars)

	<u>March 31, 2012</u>	<u>December 31, 2011</u>	<u>March 31, 2011</u>
Assets			
Cash and cash equivalents	\$ 424,694	\$ 411,081	\$ 322,450

Restricted cash	303,652	237,325	210,134
Trade receivables, net of provisions	10,494	16,063	58,976
Flight equipment held for operating leases, net	7,974,747	7,895,874	8,366,553
Net investment in direct finance leases	24,103	25,094	28,633
Notes receivables, net of provisions	4,282	5,200	18,153
Prepayments on flight equipment	102,741	95,619	130,784
Investments	84,968	84,079	78,138
Goodwill	—	—	6,776
Intangibles	26,700	29,677	53,364
Inventory	8,864	13,953	124,985
Derivative assets	18,629	21,050	85,183
Deferred income taxes	86,771	91,258	89,680
Other assets	185,254	181,359	215,246
Total Assets	\$ 9,255,899	\$ 9,107,632	\$ 9,789,055
Liabilities and Equity			
Accounts payable	\$ 674	\$ 4,142	\$ 18,684
Accrued expenses and other liabilities	82,994	74,458	105,176
Accrued maintenance liability	475,203	452,582	423,562
Lessee deposit liability	104,263	102,844	120,689
Debt	6,176,754*	6,111,165	6,731,055
Accrual for onerous contracts	—	3,971	4,800
Deferred revenue	46,645	47,994	52,265
Derivative liabilities	20,900	27,159	40,143
<i>Total liabilities</i>	<i>6,907,433</i>	<i>6,824,315</i>	<i>7,496,374</i>
Ordinary share capital €0.01 par value (250,000,000 ordinary shares authorized, 149,232,426 ordinary shares issued and outstanding)	1,570	1,570	1,570
Additional paid-in capital	1,341,670	1,340,205	1,334,967
Treasury stock (9,332,982 ordinary shares)	(100,000)	(100,000)	—
Accumulated other comprehensive income (loss)	(9,266)	(8,513)	5,818
Accumulated retained earnings	1,108,984	1,043,974	943,839
<i>Total AerCap Holdings N.V. shareholders' equity</i>	<i>2,342,958</i>	<i>2,277,236</i>	<i>2,286,194</i>
Non-controlling interest	5,508	6,081	6,487
<i>Total Equity</i>	<i>2,348,466</i>	<i>2,283,317</i>	<i>2,292,681</i>
Total Liabilities and Equity	\$ 9,255,899	\$ 9,107,632	\$ 9,789,055

* Includes \$64.3 million of subordinated debt received from our joint venture partners

Supplemental information	March 31, 2012	December 31, 2011	March 31, 2011
Debt/equity ratio	2.6	2.7	2.9
Debt/equity ratio (adjusted for subordinated debt)	2.5	2.6	2.8

7

AerCap Holdings N.V.

Unaudited Consolidated Income Statements

(In thousands of U.S. Dollars, except share and per share data)

	Three months ended	
	March 31,	
	2012	2011
Revenues		
Lease revenue	\$ 252,738	\$ 257,242
Net loss on sale of assets	(219)	(1,315)
Management fee revenue	4,530	5,148
Interest revenue	622	580
Other revenue	229	2,456
Total Revenues	257,900	264,111
Expenses		
Depreciation	89,028	90,425
Asset impairment	—	7,749
Interest on debt	63,967	58,701
Operating lease-in costs	2,522	3,051

Leasing expenses	18,477	11,096
Provision for doubtful accounts	—	(39)
Selling, general and administrative expenses	16,328	16,834
Total Expenses	190,322	187,817
Income from continuing operations before income taxes and income of investments accounted for under the equity method	67,578	76,294
Provision for income taxes	(5,878)	(5,773)
Net income of investments accounted for under the equity method	2,737	2,654
Net Income from continuing operations	64,437	73,175
Loss from discontinued operations, net of tax (AeroTurbine)	—	(646)
Net income	64,437	72,529
Net loss (income) attributable to non-controlling interest	573	(440)
Net Income attributable to AerCap Holdings N.V	\$ 65,010	\$ 72,089
Total earnings per share, basic and diluted	\$ 0.46	\$ 0.48
Weighted average shares outstanding, basic and diluted	139,899,444	149,232,426

Certain reclassifications have been made to prior years Unaudited Consolidated Income Statements to reflect the current year presentation.

AerCap Holdings N.V.
Unaudited Consolidated Statements of Cash Flows
(In thousands of U.S. Dollars)

	Three months ended March 31, 2012	Three months ended March 31, 2011
Net income	\$ 64,437	\$ 72,529
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	89,028	98,322
Asset impairment	—	7,749
Amortization of debt issuance costs	7,115	7,451
Amortization of intangibles	2,977	5,273
Provision for doubtful accounts	—	1,643
Capitalised interest on pre-delivery payments	(336)	(39)
Net loss on sale of assets	219	478
Mark-to-market of non-hedged derivatives	(3,784)	(18,376)
Deferred taxes	4,595	7,859
Share-based compensation	1,465	2,273
Changes in assets and liabilities:		
Trade receivables and notes receivable, net	6,487	(14,365)
Inventories	5,089	(368)
Other assets and derivative assets	(5,714)	(28,944)
Other liabilities	(4,057)	(41,270)
Deferred revenue	(1,349)	(7,797)
Net cash provided by operating activities	166,172	92,418
Purchase of flight equipment	(268,647)	(359,889)
Proceeds from sale/disposal of assets	107,967	25,943
Prepayments on flight equipment	(8,206)	(8,678)
Purchase of investments	—	(2,500)
Movement in restricted cash	(66,327)	12,330
Net cash used in investing activities	(235,213)	(332,794)
Issuance of debt	354,590	405,904
Repayment of debt	(289,106)	(243,809)
Debt issuance costs paid	(5,926)	(14,819)
Maintenance payments received	39,708	33,907

Maintenance payments returned	(18,409)	(20,518)
Security deposits received	(1,925)	(6,717)
Net cash provided by financing activities	83,037	155,838
Net increase (decrease) in cash and cash equivalents	13,996	(84,538)
Effect of exchange rate changes	(383)	2,538
Cash and cash equivalents at beginning of period	411,081	404,450
Cash and cash equivalents at end of period	\$ 424,694	\$ 322,450

Certain reclassifications have been made to prior years Unaudited Consolidated Statements of Cash Flows to reflect the current year presentation.