
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. ___)*

GSC Investment Corp.

(Name of Issuer)

Common Stock, \$0.0001 par value

(Title of Class of Securities)

362493 10 8

(CUSIP Number)

December 31, 2007

(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- 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.

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).

1	NAME OF REPORTING PERSONS GSC CDO III, L.L.C.	
	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	
	(a)	0
	(b)	0
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 904,980
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 904,980
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*	
		0
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%	
12	TYPE OF REPORTING PERSON CO	

1	NAME OF REPORTING PERSONS GSCP (NJ) Holdings, L.P.		
	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		(a) 0 (b) 0
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER	0
	6	SHARED VOTING POWER	904,980
	7	SOLE DISPOSITIVE POWER	0
	8	SHARED DISPOSITIVE POWER	904,980
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980		
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*		0
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%		
12	TYPE OF REPORTING PERSON CO		

1	NAME OF REPORTING PERSONS GSCP (NJ), Inc.	
	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	
	(a)	0
	(b)	0
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 904,980
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 904,980
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*	
		0
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%	
12	TYPE OF REPORTING PERSON CO	

1	NAME OF REPORTING PERSONS GSC Group, Inc. I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		
		(a)	0
		(b)	0
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0	
	6	SHARED VOTING POWER 904,980	
	7	SOLE DISPOSITIVE POWER 0	
	8	SHARED DISPOSITIVE POWER 904,980	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980		
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*		
			0
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%		
12	TYPE OF REPORTING PERSON CO		

1	NAME OF REPORTING PERSONS GSC Active Partners Holdings, L.P.		
	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		
		(a)	0
		(b)	0
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0	
	6	SHARED VOTING POWER 904,980	
	7	SOLE DISPOSITIVE POWER 0	
	8	SHARED DISPOSITIVE POWER 904,980	
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980		
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%		
12	TYPE OF REPORTING PERSON CO		

1	NAME OF REPORTING PERSONS GSC Active Partners, Inc. I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 904,980
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 904,980
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 904,980	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* 0	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.91%	
12	TYPE OF REPORTING PERSON CO	

Item 1(a). Name of Issuer:

GSC Investment Corp., a Maryland corporation the (“Issuer”).

Item 1(b). Address of Issuer’s Principal Executive Offices:

888 Seventh Ave., New York, New York, 10019

Item 2(a). Name of Person Filing:

This statement is filed jointly on behalf of the persons identified below. In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), each person filing this statement acknowledges that it is responsible for the completeness and accuracy of the information concerning that person but is not responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

GSC CDO III, L.L.C

GSCP (NJ) Holdings, L.P.

GSCP (NJ), Inc.

GSC Group, Inc.

GSC Active Partners Holdings, L.P.

GSC Active Partners, Inc.

Each of the above persons is referred to herein as a “Reporting Person” and collectively as the “Reporting Persons”. The Reporting Persons are filing this Schedule 13G jointly pursuant to a Joint Filing Agreement attached hereto as Exhibit A.

Item 2(b). Address of Principal Business Office or, if None, Residence:

The principal business office address for each Reporting Person is:

888 Seventh Ave.
New York, New York, 10019

Item 2(c). Citizenship:

Incorporated by reference to Item 4 of each Reporting Person’s respective cover page.

Item 2(d). Title of Class of Securities:

Common Stock, \$0.0001 par value.

Item 2(e). CUSIP Number:

362493 10 8

Item 3. If this Statement is Filed Pursuant to Rule 13d-1(b), or 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) Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c);
-

- (d) o Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) o An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) o An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) o A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) o A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) o 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) o Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

The filing of this statement should not be construed as an admission by any person that such person is, for purposes of Section 13(d) or 13(g) of the Exchange Act, the beneficial owner of any securities covered by this statement, other than the securities set forth opposite such person's name in the table in Item 4(c) below.

(a) Amount beneficially owned:

GSC CDO III, L.L.C., is a single member Delaware limited liability company ("GSC CDO III"). The single member of GSC CDO III is GSCP (NJ) Holdings, L.P., a Delaware limited partnership ("GSCP Holdings"). GSCP (NJ), Inc. a Delaware corporation ("GSCP Inc") is the general partner of GSCP Holdings. GSC Group, Inc. a Delaware corporation ("GSC Group") owns all of the limited partnership interests of GSCP Holdings and all of the issued and outstanding shares of GSCP Inc. Through the ownership of 100% of the Class A Common Stock of GSC Group, GSC Active Partners Holdings, L.P., a Delaware limited partnership ("GSC Active Holdings") holds a majority of the dividend interest and the voting interest in GSC Group. GSC Active Partners, Inc., a Delaware corporation ("GSC Active") is the general partner of GSC Active Holdings. Each of the Reporting Persons may be deemed to be the beneficial owner of 904,980 shares of common stock of the Issuer by virtue of its relationship with the record owner of said shares of common stock as described herein.

Each Reporting Person disclaims beneficial ownership of the reported securities except and to the extent of its or his pecuniary interest therein.

(b) Percent of class:

See item 11 to Cover Pages on this Schedule 13G. All percentages are based on 8,291,384 shares of common stock issued and outstanding reported as of October 11, 2007, as reported on Form 10-Q filed with the SEC by the Issuer for the quarter ended August 31, 2007.

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

(i) Sole power to vote or to direct the vote:

See item 5 to Cover Pages on this Schedule 13G.

(ii) Shared power to vote or to direct the vote:

See item 6 to Cover Pages on this Schedule 13G.

(iii) Sole power to dispose or to direct the disposition of:

See item 7 to Cover Pages on this Schedule 13G.

(iv) Shared power to dispose or to direct the disposition of:

See item 8 to Cover Pages on this Schedule 13G.

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. o

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 or Control Person.

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.

Not applicable.

Exhibits and Schedules.

Exhibit A Joint Filing Agreement, dated February 13, 2008, by and among the Reporting Persons.

Exhibit B Power of attorney

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.

Dated: February 13, 2008

GSC CDO III, L.L.C.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSCP (NJ) Holdings, L.P.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSCP (NJ), Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Group, Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Active Partners Holdings, L.P.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Active Partners, Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

SCHEDULE 13G JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the persons named below agrees to the joint filing of a Statement on Schedule 13G (including amendments thereto) with respect to the common stock, \$0.0001 par value, of GSC Investment Corp., a Maryland corporation, and further agrees that this Joint Filing Agreement be included as an exhibit to such filings provided that, as contemplated by Section 13d-1(k)(1)(ii), no person shall be responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

This Agreement may be executed in two or more counterparts, any one of which need not contain the signature of more than one party, but all such parties taken together will constitute part of this Agreement.

In evidence thereof, the undersigned, being duly authorized, hereby execute this Agreement this February 13, 2008.

GSC CDO Fund III, L.L.C.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSCP (NJ) Holdings, L.P.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSCP (NJ), Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Group, Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Active Partners Holdings, L.P.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

GSC Active Partners, Inc.

By: /s/ David L. Goret
Name: David L. Goret
Title: Attorney-in-fact

Power of Attorney

Know all men by these presents, that the undersigned hereby constitutes and appoints each of Thomas V. Inglesby, David L. Goret and Richard T. Allorto, Jr., signing singly, the undersigned's true and lawful attorneys-in-fact to:

1. execute for and on behalf of the undersigned, in such undersigned's capacity as a beneficial owner of stock of GSC Investment Corp. (the "Company"), any Schedule 13G or Schedule 13D, or any amendment thereto (collectively, the "Schedules") in accordance with the Securities Exchange Act of 1934 and the rules thereunder;
2. do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Schedules and timely file such Schedules with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
3. take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or proper to be done in the exercise of any rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Schedules with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

By execution of this Power of Attorney, the undersigned hereby revokes any previous Power of Attorney executed in favor of any other entity or entities, person or persons for the purposes described herein.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of the 13th day of February, 2008.

GSC CDO Fund III, L.L.C.

By: GSCP(NJ) Holdings, L.P., its sole member

By: GSCP(NJ), Inc., its General Partner

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary

GSCP (NJ) Holdings, L.P.

By: GSCP(NJ), Inc., its General Partner

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary

GSCP (NJ), Inc.

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary

GSC Group, Inc.

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary

GSC Active Partners Holdings, L.P.

By: GSC Active Partners, Inc., its General Partner

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary

GSC Active Partners, Inc.

By: /s/ David L. Goret

Name: David L. Goret

Title: Senior Managing Director and Secretary
