FORM 4

obligations may continue. See Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL             |           |  |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |  |
| Estimated average burden |           |  |  |  |  |  |  |  |  |

0.5

hours per response:

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person*     Dimitrov Ivelin M.   |   |                                      |  |             |   | 2. Issuer Name <b>and</b> Ticker or Trading Symbol Fifth Street Finance Corp [ FSC ] |     |   |   |               |                    |   |  |                                  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director 10% Owner |   |   |   |                       |  |
|--|---|--------------------------------------|--|-------------|---|--|-----|---|---|---------------|--------------------|---|--|----------------------------------|---|---|---|---|-----------------------|--|
|  |   |                                      |  |             |   |  |     |   |   |               | X                  |   |  |                                  |   |   |   |   |                       |  |
| Last) (First) (Middle)   |   |                                      |  |             |   | Date of Earliest Transaction (Month/Day/Year)  |     |   |   |               |                    |   |  |                                  | X   | Officer (give title below)  |   |   | Other (specify below) |  |
| 10 BANK STREET, 12TH FLOOR   |   |                                      |  |             | 05/                                     | 05/16/2013   |     |   |   |               |                    |   |  |                                  | Chief Investment Officer  |   |   |   |                       |  |
| ,  |   |                                      |  |             |   |  |     |   |   |               |                    |   |  |                                  |   |   |   |   |                       |  |
| (Street) 4.  |   |                                      |  |             |   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                             |     |   |   |               |                    |   |  |                                  | 6. Individual or Joint/Group Filing (Check Applicable   |   |   |   |                       |  |
| WHITE  | N   | 7 1                                  | 10606  |             |   |  |     |   |   |               |                    | ine)<br>X   | Form   | rm filed by One Reporting Person |   |   |   |   |                       |  |
| PLAINS   |   |                                      |  |             |   |  |     |   |   |               |                    |   |  |                                  | Λ   | Form filed by More than One Reporting                             |   |   |                       |  |
| (Oit )   |   |                                      | 7:-1   |             |   |  |     |   |   |               |                    |   |  |                                  |   | Person  |   |   |                       |  |
| (City)   | (51   | ate) (2                              | Zip)   |             |   |  |     |   |   |               |                    |   |  |                                  |   |   |   |   |                       |  |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned   |   |                                      |  |             |   |  |     |   |   |               |                    |   |  |                                  |   |   |   |   |                       |  |
| 1. Title of Security (Instr. 3)  2. Transact Date (Month/Day)  |   |                                      |  |             |   | Execution Date,  |     | 3. 4. Securities Acquire Disposed Of (D) (Instance) |   |               |                    |   | nd 5)  | Beneficially<br>Owned Following  |   | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) |   | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership               |                       |  |
|  |   |                                      |  |             |   | Code   | v   | Amount  |   | (A) or<br>(D) | Price              |   | Reported<br>Transaction(s)<br>(Instr. 3 and 4) |                                  |   |   | (Instr. 4)  |   |                       |  |
| Common   | Stock   | /2013                                |  |             |   | P  |     | 1,000   | 1,000 A \$  |               | \$10.              | 709   | 20,794.633                                     |                                  | D   |   |   |   |                       |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |   |                                      |  |             |   |  |     |   |   |               |                    |   |  |                                  |   |   |   |   |                       |  |
|  |   |                                      | `  | <del></del> |   | ans,   | _   | <del>'</del>  | •   |               |                    | _   |  |                                  |   |   |   |   |                       |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction Date (Month/Day/Year) | 3A. Deeme<br>Execution<br>if any<br>(Month/Day | Date,       | 4.<br>Transaction<br>Code (Instr.<br>8) |  |     |   | 6. Date Exercisa<br>Expiration Date<br>(Month/Day/Yea |               | te                 | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Inst<br>and 4) |  | ;                                | Deriv<br>Secu   | rice of<br>ivative<br>curity<br>etr. 5)                           | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | (D)<br>rect           | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|  |   |                                      |  |             | Code                                    | v  | (A) |   | Date<br>Exercisa                                      |               | Expiration<br>Date | Titl  | or<br>Nu<br>of                                 | ımber                            |   |   |   |   |                       |  |

**Explanation of Responses:** 

Remarks:

/s/ David H. Harrison,

attorney-in-fact for Ivelin M.

**Dimitrov** 

\*\* Signature of Reporting Person Date

05/16/2013

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- \* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

(A) (D)