As filed with the Securities and Exchange Commission on December 20, 2012

Registration No. 333-100630

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

POST-EFFECTIVE AMENDMENT NO. 2 TO FORM S-8 **REGISTRATION STATEMENT** UNDER **THE SECURITIES ACT OF 1933**

FIRST INDUSTRIAL REALTY TRUST, INC.

(Exact name of registrant as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization)

> 36-3935116 (I.R.S. Employer Identification No.)

> > 311 S. Wacker Drive, Suite 3900 Chicago, Illinois 60606 (Address of principal executive offices) (Zip code)

FIRST INDUSTRIAL, L.P. 401(k) PLAN (Full title of the plan)

Bruce W. Duncan **President and Chief Executive Officer** First Industrial Realty Trust, Inc. 311 S. Wacker Drive, Suite 3900 Chicago, Illinois, 60606 (Name and address of agent for service) (312) 344-4300

(Telephone number, including area code, of agent for service)

With copies to: Howard A. Nagelberg William E. Turner II James R. Whitney Barack Ferrazzano Kirschbaum & Nagelberg LLP 200 W. Madison St., Suite 3900 Chicago, Illinois, 60606 (312) 984-3100

Indicate by check mark whether the registrant is a large accelerated filer, an 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.

Large accelerated filer

Non-accelerated filer □ (Do not check if a smaller reporting company)

X

Accelerated filer Smaller reporting company

(Exact name of registrant as specified in its charter) Delaware

FIRST INDUSTRIAL, L.P.

(State or other jurisdiction of incorporation or organization)

> 36-3924586 (I.R.S. Employer Identification No.)

EXPLANATORY NOTE

This Post-Effective Amendment No. 2 ("Amendment No. 2") relates to the Registration Statement on Form S-8 (Registration No. 333-100630) filed by First Industrial Realty Trust, Inc. (the "Company") and First Industrial, L.P. (the "Operating Partnership") on October 18, 2002, as amended by Post-Effective Amendment No. 1 thereto filed on June 27, 2003 (the "Registration Statement"), to register 2,000,000 shares of the Company's common stock (the "Common Stock") for issuance under the First Industrial, L.P. 401(k) Plan (the "Plan").

The offering of Common Stock contemplated by the Registration Statement has been terminated. Accordingly, pursuant to an undertaking made in the Registration Statement to remove from registration, by means of a post-effective amendment, any shares of Common Stock which remain unsold at the termination of the offering, the registrant hereby removes from registration all shares of Common Stock registered under the Registration Statement which remain unssued as of the filing of this Amendment No. 2.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-8 and has duly caused this Post-Effective Amendment No. 2 to the Registration Statement to be signed on its behalf by the undersigned, thereunder duly authorized, in the City of Chicago, State of Illinois, on December 20, 2012.

FIRST INDUSTRIAL REALTY TRUST, INC.

By: /s/Scott A. Musil

Scott A. Musil Chief Financial Officer

FIRST INDUSTRIAL, L.P.

By: First Industrial Realty Trust, Inc., its sole general partner

By: /s/Scott A. Musil

Scott A. Musil Chief Financial Officer