

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

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

36-4459170
(I.R.S. Employer
Identification No.)

**20 South Wacker Drive
Chicago, Illinois 60606
(312) 930-1000**

(Address of Principal Executive Offices, Zip Code)

**Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan
Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan**
(Full Title of Plan)

Kathleen M. Cronin, Esq.
Managing Director, General Counsel and Corporate Secretary
Chicago Mercantile Exchange Holdings Inc.
20 South Wacker Drive
Chicago, Illinois 60606
(312) 930-1000

(Name, Address and Telephone Number, including Area Code, of Agent for Service)

CALCULATION OF REGISTRATION FEE

Title of Shares To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Class A Common Stock, par value \$.01 per share (including rights to acquire Series A Junior Participating Preferred Stock pursuant to our rights plan)	65,000	\$ 188.85	\$ 12,275,250	\$ 1,445

- (1) Represents 25,000 shares issuable under the Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan and 40,000 shares issuable under the Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan, together with an indeterminate number of shares of the Registrant's Class A common stock that may be necessary to adjust the number of shares reserved for issuance pursuant to the foregoing plans as a result of a stock split, stock dividend or similar adjustment of the outstanding shares of the Registrant's Class A common stock. In accordance with Rule 416 under the Securities Act of 1933, as amended, such indeterminate number of additional shares as may be issuable as a result of such adjustments are also registered hereby.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee, pursuant to Rule 457(h) of the Securities Act of 1933, as amended, based upon the average of the high and low prices of our Class A common stock on April 26, 2005, as reported on the New York Stock Exchange.

EXPLANATORY NOTE

This Registration Statement on Form S-8 (the "Registration Statement") of Chicago Mercantile Exchange Holdings Inc., a Delaware corporation (the "Company"), is being filed by the Company to register 25,000 shares of the Company's Class A common stock, par value \$0.01 per share (the "Class A common stock"), issuable under the Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan and 40,000 shares of Class A common stock issuable under the Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The information called for in Part I of Form S-8 is currently included in documents that will be sent or given to participants as specified by Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act"). These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents heretofore filed with the Securities and Exchange Commission (the "Commission") by the Company pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") are incorporated herein by reference:

(a) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, including portions of the Company's 2004 Annual Report to Shareholders and definitive Proxy Statement for the 2005 Annual Meeting of Shareholders incorporated therein by reference.

(b) The Company's Current Reports on Form 8-K filed with the Commission on February 3, 2005, March 4, 2005, April 18, 2005 and April 28, 2005.

(c) The description of the Company's Class A common stock contained in the prospectus included in the Company's Registration Statement on Form S-1 (File No. 333-90106), as amended, which description is incorporated by reference in the Company's Registration Statement on Form 8-A filed with the Commission on November 29, 2002 (File No. 001-31553), including any amendments or reports filed for purposes of updating such description.

(d) The description of the Company's Rights Agreement and Series A Junior Participating Preferred Stock contained in the Company's Registration Statement on Form 8-A filed on December 4, 2001 (File No. 000-33379), including any amendments or reports filed for purposes of updating such description.

In addition, all documents filed by the Company subsequent to the date hereof pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents or reports with the Commission. Any statement contained 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 other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement contained in this Registration Statement shall be deemed to be modified or superseded to the extent that a statement in a subsequently filed document that is incorporated or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of Delaware General Corporation Law authorizes a court to award or a corporation's board of directors to grant indemnity to directors and officers in terms sufficiently broad to permit such indemnification under some circumstances for liabilities arising under the Securities Act and to provide for the reimbursement of expenses incurred.

As permitted by the Delaware law, Article XI of the Company's certificate of incorporation and Article VIII of its bylaws provide that (1) the Company is permitted to indemnify its directors, officers and other employees to the fullest extent permitted by Delaware law; (2) the Company is permitted to advance expenses, as incurred, to its directors, officers and other employees in connection with defending a legal proceeding if the Company has received in advance an undertaking by the person receiving such advance to repay all amounts advanced if it should be ultimately determined that he or she is not entitled to be indemnified by the Company; and (3) the rights conferred in the bylaws are not exclusive. As permitted by the Delaware General Corporation Law, the Company's certificate of incorporation includes a provision that eliminates the personal liability of its directors for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the Company or its shareholders; (2) for acts of omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (3) under Section 174 of the Delaware General Corporation Law (regarding payments of dividends, stock purchases or redemptions which are unlawful); or (4) for any transaction from which the director derived an improper personal benefit. This provision in the certificate of incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Company for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

The following exhibits are filed as part of this Registration Statement:

<u>Exhibit Number</u>	<u>Description</u>
4.1	Amended and Restated Certificate of Incorporation of Chicago Mercantile Exchange Holdings Inc. (incorporated by reference to Exhibit 3.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on December 4, 2001).
4.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Chicago Mercantile Exchange Holdings Inc. (incorporated by reference to Exhibit 3.2 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on May 16, 2002).
4.3	Third Amended and Restated Bylaws of Chicago Mercantile Exchange Holdings Inc., as amended March 2, 2005 (incorporated by reference to Exhibit 99.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on March 4, 2005).
4.4	Rights Agreement, dated as of November 30, 2001, between Chicago Mercantile Exchange Holdings Inc. and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.1 to Chicago Mercantile Exchange Holding's Inc.'s Form 8-A, filed with the SEC on December 4, 2001).
4.5	First Amendment to Rights Agreement, dated as of November 13, 2002, between Chicago Mercantile Exchange Holdings Inc., Mellon Investor Services, LLC and Computershare Investor Services, LLC (incorporated by reference to Exhibit 5 to Chicago Mercantile Exchange Holdings Inc.'s Form 8-A, filed with the SEC on November 29, 2002).
5.1	Opinion of Kathleen M. Cronin, Managing Director, General Counsel and Corporate Secretary.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Kathleen M. Cronin (included in Exhibit 5.1).
24.1	Power of Attorney (included on signature page).
99.1	Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan (incorporated by reference to Exhibit 99.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on April 28, 2005).
99.2	Form of Equity Grant Letter for Non-Executive Directors (incorporated by reference to Exhibit 99.2 to Chicago Mercantile Exchange Holdings Inc.'s Form 8-K filed with the SEC on April 28, 2005).
99.3	Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.3 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on April 28, 2005).

ITEM 9. UNDERTAKINGS.

1. The undersigned registrant hereby undertakes:

A. 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;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the 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 the registration statement. Notwithstanding the foregoing, any increase or decrease in 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 end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 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;

provided, however, that paragraphs (1)(A)(i) and (1)(A)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

B. 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.

C. 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.

2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act, (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the 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.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant 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 registrant of expenses incurred or paid by a director, officer or controlling person of the

registrant 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 registrant 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.

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 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 Chicago, State of Illinois, on April 28, 2005.

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

By /s/ Kathleen M. Cronin

Kathleen M. Cronin
*Managing Director, General Counsel and
Corporate Secretary*

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Craig S. Donohue, James E. Parisi and Kathleen M. Cronin, and each of them, his or her true and lawful attorney-in-fact and agents with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney may be executed in counterparts.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated below on April 28, 2005.

<u>Signature</u>	<u>Title</u>
<u>/s/ Craig S. Donohue</u> Craig S. Donohue	Chief Executive Officer and Director
<u>/s/ Terrence A. Duffy</u> Terrence A. Duffy	Chairman of the Board and Director
<u>/s/ James E. Parisi</u> James E. Parisi	Managing Director and Chief Financial Officer
<u>/s/ Nancy W. Goble</u> Nancy W. Goble	Managing Director and Chief Accounting Officer
<u>/s/ Dennis H. Chookaszian</u> Dennis H. Chookaszian	Director
<u>/s/ Martin J. Gepsman</u> Martin J. Gepsman	Director
<u>/s/ Daniel R. Glickman</u> Daniel R. Glickman	Director

Signature
/s/ Elizabeth Harrington

Elizabeth Harrington
/s/ Bruce F. Johnson

Bruce F. Johnson
/s/ Gary M. Katler

Gary M. Katler
/s/ Patrick B. Lynch

Patrick B. Lynch
/s/ Leo Melamed

Leo Melamed
/s/ William P. Miller II

William P. Miller II
/s/ James E. Oliff

James E. Oliff
/s/ Alex J. Pollock

Alex J. Pollock
/s/ William G. Salatich, Jr.

William G. Salatich, Jr.
/s/ John F. Sandner

John F. Sandner
/s/ Terry L. Savage

Terry L. Savage
/s/ Myron S. Scholes

Myron S. Scholes

Title
Director

Director

Director

Director

Director

Director

Director

Director

Director

Director

Director

Signature

Title

/s/ William R. Shepard

Director

William R. Shepard

/s/ Howard J. Siegel

Director

Howard J. Siegel

/s/ David J. Wescott

Director

David J. Wescott

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
4.1	Amended and Restated Certificate of Incorporation of Chicago Mercantile Exchange Holdings Inc. (incorporated by reference to Exhibit 3.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on December 4, 2001).
4.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Chicago Mercantile Exchange Holdings Inc. (incorporated by reference to Exhibit 3.2 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on May 16, 2002).
4.3	Third Amended and Restated Bylaws of Chicago Mercantile Exchange Holdings Inc., as amended March 2, 2005 (incorporated by reference to Exhibit 99.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on March 4, 2005).
4.4	Rights Agreement, dated as of November 30, 2001, between Chicago Mercantile Exchange Holdings Inc. and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.1 to Chicago Mercantile Exchange Holding's Inc.'s Form 8-A, filed with the SEC on December 4, 2001).
4.5	First Amendment to Rights Agreement, dated as of November 13, 2002, between Chicago Mercantile Exchange Holdings Inc., Mellon Investor Services, LLC and Computershare Investor Services, LLC (incorporated by reference to Exhibit 5 to Chicago Mercantile Exchange Holdings Inc.'s Form 8-A, filed with the SEC on November 29, 2002).
5.1	Opinion of Kathleen M. Cronin, Managing Director, General Counsel and Corporate Secretary.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Kathleen M. Cronin (included in Exhibit 5.1).
24.2	Power of Attorney (included on signature page).
99.1	Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan (incorporated by reference to Exhibit 99.1 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on April 28, 2005).
99.2	Form of Equity Grant Letter for Non-Executive Directors (incorporated by reference to Exhibit 99.2 to Chicago Mercantile Exchange Holdings Inc.'s Form 8-K filed with the SEC on April 28, 2005).
99.3	Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.3 to Chicago Mercantile Exchange Holdings Inc.'s Current Report on Form 8-K, filed with the SEC on April 28, 2005).



20 South Wacker Drive
Chicago, IL 60606-7499
www.cme.com

312/930.1000 tel
312/446.4410 fax

April 29, 2005

Chicago Mercantile Exchange Holdings Inc.
20 South Wacker Drive
Chicago, Illinois 60606

Re: Chicago Mercantile Exchange Holdings Inc.
Registration Statement on Form S-8

Ladies and Gentlemen:

I am the Managing Director, General Counsel and Corporate Secretary of Chicago Mercantile Exchange Holdings Inc., a Delaware corporation (the "Company"). This opinion is delivered in connection with the registration of 65,000 shares (the "Shares") of the Company's Class A common stock, par value \$.01 per share (the "Common Stock"), and the associated rights to purchase Series A Junior Participating Preferred Stock, par value \$.01 per share, of which 25,000 shares are issuable under the Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan (the "Director Stock Plan") and 40,000 shares are issuable under the Chicago Mercantile Exchange Holdings Inc. Employee Stock Purchase Plan (the "ESPP").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act of 1933, as amended (the "Act").

In rendering the opinions set forth herein, I have examined originals or copies, certified or otherwise identified to my satisfaction, of (i) a draft of the Company's Registration Statement on Form S-8, to be filed with the Commission on the date hereof (the "Registration Statement"); (ii) a specimen certificate representing the Common Stock; (iii) the Amended and Restated Certificate of Incorporation of the Company, as amended to date and currently in effect; (iv) the Amended and Restated By-Laws of the Company, as amended to date and currently in effect; (v) the Director Stock Plan, (vi) the ESPP and (vii) certain resolutions of the Board of Directors dated January 31, 2005 approving the Director Stock Plan and the ESPP. I also have examined originals or copies, certified or otherwise identified to my satisfaction, of such records of the Company and such agreements, certificates of public officials, certificates of officers or other representatives of the Company and others, and such other documents, certificates and records as I have deemed necessary or appropriate as a basis for the opinions set forth herein.

In my examination, I have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to me as originals, the conformity to original documents of all documents submitted to me as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. In making my examination of executed documents, I have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts material to the opinions expressed herein that I did not independently establish or verify, I have relied upon statements and representations of officers and other representatives of the Company and others and of public officials.

I am admitted to the bar in the State of Illinois, and I do not express any opinion as to the laws of any jurisdiction other than the General Corporation Law of the State of Delaware, and I do not express any opinion as to the effect of any other laws on the opinions stated herein.

Based upon and subject to the foregoing, I am of the opinion that the Shares have been duly authorized and, when issued in accordance with the terms and conditions of the Director Stock Plan and the ESPP, as applicable, will be validly issued and fully paid and non-assessable.

I hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, I do not thereby admit that I am included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Kathleen M. Cronin

Kathleen M. Cronin
Managing Director, General Counsel and Corporate Secretary

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the 2005 Director Stock Plan and the Employee Stock Purchase Plan of Chicago Mercantile Exchange Holdings Inc. of our reports dated February 11, 2005, with respect to the consolidated financial statements of Chicago Mercantile Exchange Holdings Inc. incorporated by reference in its Annual Report (Form 10-K) for the year ended December 31, 2004, and Chicago Mercantile Exchange Holdings Inc. management's assessment of the effectiveness of internal control over financial reporting, the effectiveness of internal control over financial reporting of Chicago Mercantile Exchange Holdings Inc., and the related financial statement schedules of Chicago Mercantile Exchange Holdings Inc. included therein, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Chicago, Illinois
April 29, 2005