



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

DIVISION OF
CORPORATION FINANCE

January 23, 2007

Mail Stop 7010

By U.S. Mail and facsimile to (312) 407-8522

Kathleen M. Cronin
Managing Director, General Counsel and Corporate Secretary
Chicago Mercantile Exchange Holdings Inc.
20 South Wacker Drive
Chicago, Illinois 60606

**Re: Chicago Mercantile Exchange Holdings Inc.
Registration Statement on Form S-4
Filed December 21, 2006
File No. 333-139538**

Dear Ms. Cronin:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please provide for staff review all materials prepared by the parties' financial advisors and provided to their respective boards, or their representatives. Provide the board books and all transcripts, summaries, and video presentation materials. We may have further comment based on our review of these materials.

2. We note that each solicitation will seek discretion to vote on other business that may come before the meeting or any adjournment, including an adjournment for the purpose of soliciting additional proxies. If you contemplate adjourning the meeting to solicit additional proxies, this action must appear as a separate item for shareholder approval, as it is not an incidental matter as contemplated by Exchange Act Rule 14a-4(c)(7). Refer also to Rule 14a-4(a)(3).
3. In addition, please revise your discussion of each matter to be voted upon in the respective special meetings to number each proposal for which proxies will be solicited.
4. We note disclosure on page 28 regarding indebtedness that CME may incur to finance the cash portion of the merger consideration. Please revise the registration statement to disclose whether you have obtained commitments for the cash portion of the merger consideration. If you have obtained commitments, please describe terms of such agreement(s).

Summary, page 1

Questions and Answers About the Merger, page 1

What will CBOT Holdings Class A stockholders receive in the merger?, page 1

5. Please disclose the aggregate market value of the consideration to be received in the merger on the last trading day prior to the public announcement.
6. Please clarify in the last full sentence on page 1 that the value of the cash merger consideration will fluctuate

What vote is required to approve the merger?, page 5

7. Please disclose what percentage of unaffiliated stockholders of each company needs to vote for the merger in order to approve the transaction. Where appropriate, please provide this information elsewhere in the filing.

Other Information Regarding the Merger, page 9

CME Holdings Financial Advisors . . . , page 9

8. Please revise your disclosure in this section to specify the fee paid to each financial advisor, as well as the financial advisor to the CBOT Special Transaction Committee. Include disclosure regarding the fee that is contingent upon completion of the merger.

Role and Recommendations of the CBT Holdings' Special Transaction Committee and Non-ER Members Committee, page 11

9. Briefly describe the exercise right.

The Merger Generally Will Be Tax-Free..., page 17

10. Please revise to state counsel's opinion here and on page 125 and to identify counsel here.

Summary Unaudited Pro Forma Condensed Consolidated Financial Data, page 21

11. Please tell us what consideration you gave to disclosing total assets and cash dividends per share. Refer to Item 3(e) of Form S-4 and Item 301 of Regulation S-K.

Comparative Per Share Data, page 21

12. Please tell us what consideration you gave to disclosing basic earnings per share.
13. Please tell us what consideration you gave to disclosing cash dividends per share for the interim period. Refer to Item 3(f)(2) of Form S-4 and the related instructions.

Risk Factors, page 23

14. Please revise to discuss the dilution to CME shareholders.

The Special Meeting of CME Holdings Stockholders, page 34
Vote Required, page 34

15. Please revise your discussion of any proposal to adjourn or postpone the meeting to clarify whether the vote required to approve such action is a majority of the shares outstanding, present, or voting on the matter.

The Merger, page 46
Background of the Merger, page 46

16. We note your statement appearing on page 47 that the parties' March 7, 2006, confidentiality agreement addressed disclosure of "confidential information relating to the clearing link, as well as other potential business arrangements between the parties." Please revise the disclosure to specify the "other potential business arrangements" that were included in the agreement.

Certain Projections, page 66

17. Please confirm that the financial projections appearing in this section include all material financial projections that were exchanged by the parties or, alternatively, provide us supplementally with complete copies of these projections. In addition, please provide us supplementally with the financial information that the parties prepared for their respective financial advisors. We may have further comment upon review of your response.

Opinion of Lehman Brothers Financial Advisor to CME Holdings, page 68

18. For each analysis performed that includes information about other companies or transactions, please disclose if companies or transactions meeting the criteria established by Lehman Brothers were excluded from the analysis and, if so, the reason(s) for exclusion. Please similarly revise the discussions of similar analyses performed by William Blair, JPMorgan, and Lazard.

Comparable Company Analysis, page 70

19. We note your statement regarding the “inherent differences” between CBOT Holdings and the companies used in this analysis. To provide your shareholders with a better understanding of these inherent differences, as well as the extent to which Lehman Brothers made qualitative adjustments to provide context to the quantitative adjustments, please revise the discussion of this analysis to quantify the size of the qualitative adjustment or indicate the modified ratios used in calculating the implied share price of CBOT Holdings.

CBOT Discounted Cash Flow Analysis, page 72

20. Please revise your disclosure to discuss the basis for the perpetual growth rate used in this analysis, as well as the method by which Lehman Brothers selected public companies to calculate the applicable discount rate. Please also discuss the extent to which Lehman utilized CBOT Holdings’ weighted average cost of capital and comparable company information in calculating the range of discount rates used in this analysis, as well as the advantages and disadvantages of each method.

Opinion of William Blair, Financial Advisor to CME Holdings, page 75

21. In the last bullet of items that William Blair examined on page 76, please either describe the other publicly available information or delete the reference. Also, in the next paragraph, please describe the other matters that William Blair considered. Please also comply in the last bullet on pages 83 with respect to the JPMorgan opinion and 89 with respect to the Lazard opinion.

Discounted Cash Flow Analysis, page 78

22. Please revise to briefly discuss the basis for the perpetual growth rate used beyond 2016.

Opinion of JPMorgan, Financial Advisor to CBOT Holdings, page 82

23. Please disclose the basis for JPMorgan's assumption that the financial projections provided by the parties were reasonably prepared. Also, in an appropriate place in this disclosure, please indicate whether the respective boards reviewed, for accuracy and completeness, this financial information and whether the boards found JPMorgan's reliance upon those materials to be reasonable. Make similar revisions to the discussion of the opinion rendered by Lazard, financial advisor to the CBOT Holdings Special Transaction Committee on page 89.

Discounted Cash Flow Analysis, page 86

24. Please revise to briefly discuss the basis for the perpetual growth rate used beyond 2015, as well as the basis utilized in determining the discount rate.

Representations and Warranties, page 114

25. Please revise the disclosure under this heading to summarize the material representations and warranties of the parties, rather than addressing the general subject matter of such representations and warranties.
26. We note your disclosure that the representations and warranties were made only as of the date of the merger agreement. Please be advised that, notwithstanding the inclusion of this disclaimer, you are responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in the proxy statement not misleading. Please confirm your understanding. In addition, please revise to include disclosure acknowledging that if specific material facts exist that contradict the representations or warranties in the merger agreement, you have provided corrective disclosure.
27. We note the statement that the representations and warranties in the merger agreement are made solely for the benefit of the parties and should not be relied upon by any other person. Please revise to more clearly state that the representations and warranties should be read with consideration given to the entirety of public disclosure regarding the parties as set forth in their respective reports with the SEC. As currently drafted, the disclosure may still imply that the representations and warranties do not constitute public disclosure for purposes of the federal securities laws.

28. Please provide us with a list that briefly identifies the contents of all omitted schedules or any supplements to the merger agreement.

Conditions to Complete Merger, page 119

29. Briefly describe the facts under which you may waive the conditions to the merger, and any circumstances under which you would re-solicit shareholders' votes.

Regulatory Approvals, page 123

30. Please update information relating to regulatory approvals as applicable.

Unaudited Pro Forma Condensed Combined Financial Information, page 133

31. Your pro forma footnotes refer to various nonrecurring charges that are related to the merger. Please tell us what consideration you gave to revising the line item labeled "net income" on your pro forma income statements to read "net income before nonrecurring charges directly attributable to the transaction." Refer to Article 11-02(b)(5) of Regulation S-X. Also confirm to us that all nonrecurring charges that are directly related to the merger have been accrued for in the pro forma balance sheet. Refer to Article 11-02(b)(6) of Regulation S-X.
32. We note your discussion of merger-related transaction costs in footnote 2(iii). Please tell us whether these costs include the fees that CME Holdings and CBOT Holdings will pay for fairness opinions. If not, please tell us what consideration you gave to quantifying these fees in your pro forma footnotes and accruing for these fees in your pro forma balance sheet.
33. We note your purchase price allocation in footnote 2(iii). We also note from the merger agreement that you are assuming the pension and other employee benefit plans of CBOT Holdings. Please tell us what consideration you gave to recording a purchase accounting adjustment to record these assumed liabilities at fair value.
34. We note on page 100 the discussion of Bernard Dan's severance payment, retention bonus, and fee to be a special advisor to CME Holdings, all of which are directly related to the merger. There appear to be retention bonuses payable to other executives of CBOT Holdings as well. Please tell us what consideration you gave to quantifying these payments in your pro forma footnotes and accruing for these payments in your pro forma balance sheet.
35. It appears from footnote 3(D) that you have assigned \$1 billion to the identifiable intangible asset "Clearing firm relationships." Please help us to understand if or

how this differs from the clearing services that CME Holdings currently provides to CBOT Holdings, as discussed on page 107.

Comparative Rights of Stockholders . . . , page 145

36. Please delete the statement that the disclosure appearing under this heading is “qualified in its entirety by reference to the Delaware General Corporation Law” Information contained in the prospectus may not be qualified to information not included in the registration statement.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

Kathleen M. Cronin
Chicago Mercantile Exchange Holdings Inc.
January 23, 2007
Page 8

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Bret Johnson, Staff Accountant, at (202) 551-3753 or Jennifer Thompson, Senior Staff Accountant, at (202) 551-3737 if you have questions regarding comments on the financial statements and related matters. Please contact Matt Frankner, Staff Attorney, at (202) 551-3749 or me, at (202) 551-3767 with any other questions.

Sincerely,

Jennifer R. Hardy
Branch Chief

cc: Rodd M. Schreiber
Susan S. Hassan
Skadden, Arps, Slate, Meagher & Flom LLP
333 West Wacker Drive
Chicago, Illinois 60606