

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>DONOHUE CRAIG S</u> (Last) (First) (Middle) <u>20 S. WACKER DRIVE</u> (Street) <u>CHICAGO IL 60606</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>CME GROUP INC. [CME]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <p style="text-align: center;">CEO</p>
	3. Date of Earliest Transaction (Month/Day/Year) <u>09/14/2010</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	
		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock Class A	09/14/2010		M		1,500	A	\$22	28,234 ⁽¹⁾	D	
Common Stock Class A	09/14/2010		M		5,000	A	\$63.01	33,234 ⁽¹⁾	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					
Non-Qualified Stock Option (right to buy)	\$22	09/14/2010		M			1,500	05/07/2005 ⁽²⁾	05/07/2011	Common Stock Class A	1,500	\$0	0	D
Non-Qualified Stock Option (right to buy)	\$63.01	09/14/2010		M			5,000	06/06/2008 ⁽³⁾	06/06/2013	Common Stock Class A	5,000	\$0	22,400	D

Explanation of Responses:

- On September 14, 2010, Mr. Donohue increased his beneficial ownership in CME Group Class A shares by 6,500 shares. Mr. Donohue is now the beneficial owner of 33,234 CME Group Class A shares with a market value of approximately \$9 million, based on the closing price of \$269.32 on September 14, 2010. Mr. Donohue paid approximately \$900,000 in cash, to satisfy his tax withholding obligations and the exercise price associated with his exercise of 6,500 options with exercise prices of \$22.00 (1,500 options) and \$63.01 (5,000 options).
- On May 7, 2005, this option vested with respect to 100% of the granted number of shares covered by the option.
- On June 6, 2008, this option vested with respect to 100% of the granted number of shares covered by the option.

By: Margaret C. Austin For: 09/15/2010
Craig S. Donohue

** Signature of Reporting Person Date

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.