Cboe Global Markets, Inc. Form SC 13G/A February 14, 2018

(a) [_]

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 2)*

•	,	
	Cboe Global Market	cs, Inc.
(Na	ame of Issuer)	
Comr	mon Stock, par value \$(0.01
(Title of (Class of Securities)	
	12503M108	
(CUS	SIP Number) December 29, 2017	
(Date of Event Which	h Requires Filing of th	nis Statement)
Check the appropriate box to designate Schedule is filed:	ate the rule pursuant t	to which this
[X] Rule 13d-1(b)		
[_] Rule 13d-1(c)		
[_] Rule 13d-1(d)		
*The remainder of this cover page she initial filing on this form with reand for any subsequent amendment of the disclosures provided in a prior	espect to the subject $lpha$ ontaining information \imath	class of securities,
The information required in the remadeemed to be "filed" for the purpose Act of 1934 ("Act") or otherwise subset to a see the Notes).	e of Section 18 of the bject to the liabilitie	Securities Exchange es of that section
CUSIP NO. 12503M108	13G 	Page 2 of 8 Pages
(1) NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF	F ABOVE PERSONS (entiti	ies only).
Renaissance Technologies LLC	26-0385758	
(2) CHECK THE APPROPRIATE BOX IF A	MEMBER OF A GROUP (SEE	T INSTRUCTIONS) ·

	(b) [_]			
(3)	SEC USE ONLY			
(4)	CITIZENSHIP OR PLACE OF C	 RGANIZATION		
	Delaware			
			(5)	SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:			4,520,000	
		(6)	SHARED VOTING POWER	
			0	
		(7)	SOLE DISPOSITIVE POWER	
			4,520,000	
		(8)	SHARED DISPOSITIVE POWER	
			0	
(9)	AGGREGATE AMOUNT BENEFIC	TALLY OWNED BY EAC	H REI	PORTING PERSON
(3)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,520,000			TONTING TENDON
 (10)	CHECK BOX IF THE AGGREGA			YCLIDES CERTAIN SHARES
(10)	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [_]			
(11)	PERCENT OF CLASS REPRES	ENTED BY AMOUNT IN	ROW	(9)
		3.98 %		
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA			
		Page 2 of 8 pag	es	
		Page 3 of 8 pag		
	IP NO. 12503M108	13G		 Page 3 of 8 Page
	NAMES OF REPORTING PERSO	NS.		
	RENAISSANCE TECHNOLOGIES	HOLDINGS CORPORAT	ION	13-3127734
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [_] (b) [_]			
	SEC USE ONLY			

(4) CITIZENSHIP OR PLACE OF ORGAN	NIZATION
Delaware	
	(5) SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED	4,520,000
BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER
	0
	(7) SOLE DISPOSITIVE POWER
	4,520,000
	(8) SHARED DISPOSITIVE POWER
	0
	LY OWNED BY EACH REPORTING PERSON 520,000
(10) CHECK BOX IF THE AGGREGATE A (SEE INSTRUCTIONS)	AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
(11) PERCENT OF CLASS REPRESENT	ED BY AMOUNT IN ROW (9)
3.9	98 %
(12) TYPE OF REPORTING PERSON (SI	E INSTRUCTIONS)
	Page 3 of 8 pages
CUSIP NO. 12503M108	13G Page 4 of 8 Page:
Item 1.	
(a) Name of Issuer	
Cboe Global Markets, Inc	
(b) Address of Issuer's Princ	cipal Executive Offices.
400 South LaSalle Street	t Chicago, Illinois 60605
Item 2.	
(a) Name of Person Filing:	
	ing filed by Renaissance Technologies LLC Technologies Holdings Corporation ("RTHC").

(b) Address of Principal Business Office or, if none, Residence.

The principal business address of the reporting persons is:

800 Third Avenue New York, New York 10022

(c) Citizenship.

RTC is a Delaware limited liability company, and RTHC is a Delaware corporation.

(d) Title of Class of Securities.

Common Stock, par value \$0.01

(e) CUSIP Number.

12503M108

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- Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 13-d-2(b) or (c), check whether the person filing is a:
- (a) [_] Broker or dealer registered under section 15 of the Act.
- (b) [_] Bank as defined in section 3(a)(6) of the Act.
- (c) [_] Insurance Company as defined in section 3(a)(19) of the Act.
- (d) [_] Investment Company registered under section 8 of the Investment Company Act.
- (e) [x] Investment Adviser in accordance with Sec.240.13d-1(b) (1) (ii) (E).
- (f) [_] Employee Benefit Plan or Endowment Fund in accordance with Sec. 240.13d-1 (b) (1) (ii) (F).
- (g) [_] Parent holding company, in accordance with Sec.240.13d-1(b)(1)(ii)(G).
- (h) $[_]$ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (i) [_] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940.
- (j) $[_]$ Group, in accordance with Sec.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

(a) Amount beneficially owned.

RTC: 4,520,000 shares

RTHC: 4,520,000 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 3.98 % RTHC: 3.98 %

- (c) Number of shares as to which the person has:
 - (i) sole power to vote or to direct the vote:

RTC: 4,520,000 RTHC: 4,520,000

(ii) Shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of:

RTC: 4,520,000 RTHC: 4,520,000

(iv) Shared power to dispose or to direct the disposition of:

RTC: 0 RTHC: 0

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Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Certain funds and accounts managed by RTC have the right to receive dividends and proceeds from the sale of the securities which are the subject of this report.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of a Group.

Not applicable

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Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 13, 2018

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See $18\ U.S.C.\ 1001$).

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EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING

UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of Common Stock, par value \$0.01 of Cboe Global Markets, Inc.

Date: February 13, 2018

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

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