3M CO Form SC 13G February 11, 2011

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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

ANNUAL FILING

3M CO.
(NAME OF ISSUER)
COMMON STOCK
(TITLE CLASS OF SECURITIES)
88579Y101
(CUSIP NUMBER)
12/31/2010
(DATE OF EVENT WHICH REQUIRES FILING OF THIS STATEMENT)

CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE IS FILED:

- (X) RULE 13D-1(B) () RULE 13D-1(C) () RULE 13D-1(D)
- *THE REMAINDER OF THIS COVER PAGE SHALL BE FILLED OUT FOR A REPORTING PERSON'S INITIAL FILING ON THIS FORM WITH RESPECT TO THE SUBJECT CLASS OF SECURITIES, AND FOR ANY SUBSEQUENT AMENDMENT CONTAINING INFORMATION WHICH WOULD ALTER THE DISCLOSURES PROVIDED IN A PRIOR COVER PAGE.

THE INFORMATION REQUIRED IN THE REMAINDER OF THIS COVER PAGE SHALL NOT BE DEEMED TO BE "FILED" FOR THE PURPOSE OF SECTION 18 OF THE SECURITIES EXCHANGE ACT OF 1934 ("ACT") OR OTHERWISE SUBJECT TO THE LIABILITIES OF THAT SECTION OF THE ACT BUT SHALL BE SUBJECT TO ALL OTHER PROVISIONS OF THE ACT (HOWEVER, SEE THE NOTES).

CUSIP NO. 88579Y101 13G PAGE 2 OF 6 PAGES

- 1. NAME OF REPORTING PERSON: STATE STREET CORPORATION I.R.S. IDENTIFICATION NO. OF ABOVE PERSON: 04-2456637
- 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

NOT APPLICABLE A ___

В ___

- 3. SEC USE ONLY
- 4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

5. SOLE VOTING POWER 0 SHARES

- 6. SHARED VOTING POWER 52,898,941 SHARES
- 7. SOLE DISPOSITIVE POWER 0 SHARES
- 8. SHARED DISPOSITIVE POWER 52,898,941 SHARES
- 9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 52,898,941 SHARES
- 10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

7.4%

12. TYPE OF REPORTING PERSON

HС

CUSIP NO. 88579Y101 13G PAGE 3 OF 6 PAGES

ITEM 1.

(A) NAME OF ISSUER

ЗМ СО.

(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

3M CENTER

BLDG 220-11W-02 ST. PAUL MN 55144-1000

ITEM 2.

(A) NAME OF PERSON FILING

STATE STREET CORPORATION AND ANY OTHER REPORTING PERSON IDENTIFIED ON THE SECOND PART OF THE COVER PAGES HERETO

(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

STATE STREET FINANCIAL CENTER ONE LINCOLN STREET BOSTON, MA 02111

(FOR ALL REPORTING PERSONS)

- (C) CITIZENSHIP: SEE ITEM 4 (CITIZENSSHIP OR PLACE OF ORGANIZATION) OF COVER PAGES
 - (D) TITLE OF CLASS OF SECURITIES

COMMON STOCK, \$0.01 PAR VALUE PER SHARE

(E) CUSIP NUMBER:

88579Y101

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B), OR (C), CHECK WHETHER THE PERSON FILING IS A:

SEE ITEM 12(TYPE OF REPORTING PERSON) OF THE COVER PAGE FOR EACH REPORTING PERSON AND THE TABLE BELOW, WHICH EXPLAINS THE MEANING OF THE TWO LETTER SYMBOLS APPEARING IN ITEM 12 OF THE COVER PAGES.

SYMBOL CATEGORY

BK IC	BANK AS DEFINED IN SECTION INSURANCE COMPANY AS DEFINOF THE ACT.	` , ` ,	
CUSIP NO. 88579Y101	13G	PAGE 4 OF 6 PAGES	
IC	INVESTMENT COMPANY REGISTE THE INVESTMENT COMPANY ACT		
IA	AN INVESTMENT ADVISER IN ACCORDANCE WITH RULE 13D-1(B)(1)(II)(E).		
EP	AN EMPLOYEE BENEFIT PLAN C ACCORDANCE WITH RULE 13D-1		
HC	A PARENT HOLDING COMPANY OR CONTROL PERSON IN ACCORDANCE WITH RULE 13D-1(B)(1)(II)(G).		
SA	A SAVINGS ASSOCIATIONS AS OF THE FEDERAL DEPOSIT INS 1813).	, ,	
СР	A CHURCH PLAN THAT IS EXCI	JNDER SECTION 3(C)(14)OF	

ITEM 4. OWNERSHIP

THE INFORMATION SET FORTH IN ROWS 5 THROUGH 11 OF THE COVER PAGE HERETO FOR EACH OF THE REPORTING PERSONS IS INCORPORATED HEREIN BY REFERENCE. THE PERCENTAGE AMOUNT SET FORTH IN ROW 11 FOR ALL COVER PAGES FILED HEREWITH IS CALCULATED BASED UPON THE 714,859,083 SHARES OF COMMON STOCK ISSUED AND OUTSTANDING AS REPORTED BY 3M COMPANY IN ITS FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2010.

THIS REPORT IS NOT AN ADMISSION THAT ANY OF THE REPORTING PERSONS IS THE BENEFICIAL OWNER OF ANY SECURITIES COVERED BY THIS REPORT, AND THE REPORTING PERSONS EXPRESSLY DISCLAIM BENEFICIAL OWNERSHIP OF ALL SHARES PURSUANT TO RULE 13D-4, EXCEPT IN THEIR FIDUCIARY CAPACITY UNDER ERISA.

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

NOT APPLICABLE

OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER ITEM 6. PERSON.

NOT APPLICABLE

CUSIP NO. 88579Y101 13G

PAGE 5 OF 6 PAGES

IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ITEM 7. ACOUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON

SEE EXHIBIT 1 ATTACHED HERETO

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

NOT APPLICABLE

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

NOT APPLICABLE

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 WERE NOT ACQUIRED AND ARE NOT HELD FOR THE PURPOSE 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.

SIGNATURES

AFTER REASONABLE INQUIRY AND TO THE BEST OF HIS KNOWLEDGE AND BELIEF, EACH OF THE UNDERSIGNED CERTIFIES THAT THE INFORMATION SET FORTH IN THIS STATEMENT IS TRUE, COMPLETE AND CORRECT.

> 10 FEBRUARY 2011 STATE STREET CORPORATION

> > /s/ JAMES J. MALERBA EXECUTIVE VICE PRESIDENT, CORPORATE CONTROLLER

CUSIP NO. 88579Y101 13G

PAGE 6 OF 6 PAGES

EXHIBIT 1

THE FOLLOWING TABLE LISTS THE IDENTITY AND ITEM 3 CLASSIFICATION OF EACH SUBSIDIARY OF STATE STREET CORPORATION, THE PARENT HOLDING COMPANY, THAT BENEFICIALLY OWNS THE ISSUER'S COMMON STOCK. PLEASE REFER TO ITEM 3 OF THE ATTACHED SCHEDULE 13G FOR A DESCRIPTION OF EACH OF THE TWO-LETTER SYMBOLS REPRESENTING THE ITEM 3 CLASSIFICATION BELOW.

SUBSIDIARY		ITEM 3	CLASSIFICATION
STATE STREET BANK AND TRUST COMPANY		BK	
SSGA FUNDS MANAGEMENT, INC		IA	
STATE STREET GLOBAL ADVISORS LIMITED	IA		
STATE STREET GLOBAL ADVISORS LTD.		IA	
STATE STREET GLOBAL ADVISORS FRANCE S.A.		IA	
STATE STREET GLOBAL ADVISORS AUSTRALIA LIMITED IA			
STATE STREET GLOBAL ADVISORS JAPAN CO., LTD.	IA		
STATE STREET GLOBAL ADVISORS ASIA LIMITED	IA		

NOTE: ALL OF THE LEGAL ENTITIES ABOVE ARE DIRECT OR INDIRECT SUBSIDIARIES OF STATE STREET CORPORATION.