

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

Annual Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2007

or

Transition Report Pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____.

Commission file number (of issuer): 1-5667

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Cabot Retirement Savings Plan

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Cabot Corporation
Two Seaport Lane, Suite 1300
Boston, Massachusetts 02210-2019

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* All other supplemental schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Trustees and Participants of the Cabot Corporation Retirement Savings Plan:

We have audited the accompanying statements of net assets available for benefits of the Cabot Corporation Retirement Savings Plan (the "Plan") as of December 31, 2007 and 2006, and the related statement of changes in net assets available for benefits for the year ended December 31, 2007. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2007 and 2006, and the changes in net assets available for benefits for the year ended December 31, 2007 in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the financial statements, the financial statements include an investment valued at \$222,501,907 as of December 31, 2006 whose fair value has been estimated by management in the absence of a readily determinable fair value. Management's estimate is based on a valuation provided by an independent appraiser.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2007 is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This schedule is the responsibility of the Plan's management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2007 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

June 27, 2008

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Statement of Net Assets Available for Benefits
As of December 31, 2007**

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Assets			
Investments	\$ 384,586,317	\$ 86,976,646	\$ 471,562,963
Employer contribution receivable	858,171	—	858,171
Total assets	<u>385,444,488</u>	<u>86,976,646</u>	<u>472,421,134</u>
Liabilities			
Current portion of notes payable	—	4,437,311	4,437,311
Long-term portion of notes payable	—	28,570,284	28,570,284
Total liabilities	—	33,007,595	33,007,595
Net assets available for benefits	<u>\$ 385,444,488</u>	<u>\$ 53,969,051</u>	<u>\$ 439,413,539</u>

See notes to financial statements.

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Statement of Net Assets Available for Benefits
As of December 31, 2006**

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Assets			
Investments	\$ 392,884,539	\$ 132,607,044	\$ 525,491,583
Employer contribution receivable	—	—	—
Total assets	<u>392,884,539</u>	<u>132,607,044</u>	<u>525,491,583</u>
Liabilities			
Current portion of notes payable	—	4,087,755	4,087,755
Long-term portion of notes payable	—	33,007,595	33,007,595
Total liabilities	—	<u>37,095,350</u>	<u>37,095,350</u>
Net assets available for benefits	<u>\$ 392,884,539</u>	<u>\$ 95,511,694</u>	<u>\$ 488,396,233</u>

See notes to financial statements.

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Statement of Changes in Net Assets Available for Benefits
For the Year Ended December 31, 2007**

	<u>Allocated</u>	<u>Unallocated</u>	<u>Total</u>
Additions			
Interest and dividend income	\$ 21,211,773	\$ 2,934,626	\$ 24,146,399
Share allocation of Cabot Corporation common and preferred stock, at fair value	16,711,201	—	16,711,201
Transfer of forfeitures from allocated	—	865,000	865,000
Employer contributions	1,347,281	3,235,986	4,583,267
Employee contributions	11,968,233	—	11,968,233
Total additions	<u>51,238,488</u>	<u>7,035,612</u>	<u>58,274,100</u>
Deductions			
Benefits paid to participants	33,817,528	—	33,817,528
Interest expense	—	2,950,298	2,950,298
Redemption fees	2,261	—	2,261
Net depreciation in fair value of investments	23,993,750	27,771,271	51,765,021
Transfer of forfeitures to unallocated	865,000	—	865,000
Share allocation of Cabot Corporation common and preferred stock, at fair value	—	16,711,201	16,711,201
Share allocation of Cabot Corporation common and preferred stock at fair value for dividend payment	—	1,145,485	1,145,485
Total deductions	<u>58,678,539</u>	<u>48,578,255</u>	<u>107,256,794</u>
Net decrease	(7,440,051)	(41,542,643)	(48,982,694)
Net assets available for benefits			
Beginning of year	392,884,539	95,511,694	488,396,233
End of year	<u>\$385,444,488</u>	<u>\$ 53,969,051</u>	<u>\$439,413,539</u>

See notes to financial statements.

**Cabot Retirement Savings Plan
Notes to Financial Statements**

1. Description of the Plan

General

Cabot Corporation (“Cabot” or the “Company”) initially adopted the Cabot Corporation Employee Stock Ownership Plan (the “ESOP”) in 1988, the Cabot Retirement Incentive Savings Plan in 1994 (previously the Cabot Profit-Sharing and Savings Plan, adopted in 1952) (the “CRISP”), and the Cabot Employee Savings Plan in 1987 (the “CESP”). As of December 31, 2000, the CRISP and the CESP were merged with and into the ESOP. The combined amended and restated plan, overall considered to be a defined contribution plan, was renamed the Cabot Retirement Savings Plan (the “Plan”). The Plan has two components, a 401(k) plan and an Employee Stock Ownership Plan (“ESOP”). The Plan is subject to provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

The following brief description of the Plan is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

Eligibility

All U.S. employees of the Company and its participating subsidiaries (except certain temporary and leased employees) are eligible to participate in the Plan beginning on the later of the first day of employment or the date the employee is included in an employee group which participates.

Employee Contributions

By means of a salary reduction arrangement, a participant may make contributions to his or her account. Participants may elect to contribute up to 50% of their U.S. eligible compensation on a before-tax basis, an after-tax basis, or a combination thereof, subject to certain limitations under the Internal Revenue Code (the “Code”). Participants may also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans.

Company Contributions

The Company’s contributions are primarily in the form of (i) a matching contribution in shares of Cabot common stock and (ii) a Cabot common stock allocation (the “ESOP allocation”). Prior to July 20, 2007 matching contributions were made with either shares of the Company’s Series B ESOP Convertible Preferred Stock (the “preferred stock”) or the Company’s common stock, and ESOP allocations were made with shares of preferred stock. Subsequent to July 20, 2007, both matching contributions and ESOP allocations have been made only in the Company’s common stock. These contributions are calculated and recorded on the last business day of a calendar quarter. In addition, the Company may make discretionary contributions to participants under the terms of the Plan.

For employees not subject to a collective bargaining agreement, Cabot makes a matching contribution of 75% of a participant’s before-tax or after-tax contribution on up to 7.5% of the participant’s eligible compensation, making the maximum matching contribution an amount equal to 5.625% of a participant’s eligible compensation.

For the ESOP allocation, for 2006 and for both the first and second quarter of 2007, a total of 742,574 shares of preferred stock were allocated each quarter among eligible participants. As further described in Note 3, on July 20, 2007, all of the Company’s outstanding shares of preferred stock were converted into shares of the Company’s common stock. Accordingly, for both the third and fourth quarter of 2007, a total of 108,696,645 shares of common stock were allocated each quarter among eligible participants. The number of shares allocated to each participant each quarter depends in part on the fair market value of Cabot common stock at the time of the allocation, the number of shares allocated to the payment of dividends and total eligible

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compensation. The ESOP allocation each quarter is generally between 4% and 8% of a participant's eligible compensation. In instances where a participant's allocation is less than 4% of eligible compensation, the Company is required to make a contribution to provide a minimum allocation of 4% of eligible compensation. If there are unallocated shares after participants receive an ESOP allocation equal to 8% of eligible compensation, the additional shares are used to fund the Company matching contribution. In the event not all shares have been allocated to participants after the ESOP allocation and Company matching contributions have been made, the remaining shares are contributed to participants based on total eligible compensation. An allocation is made to the accounts of participants who are employed on the last business day of the calendar quarter or who have retired, died, or become totally and permanently disabled during the quarter.

Common stock held by the plan to be allocated in future periods is reflected as unallocated assets in the statement of net assets available for benefits.

As discussed in Note 5, the Company also remits debt service contributions to the Plan.

Participant Accounts

Individual accounts are maintained for each Plan participant. Each participant account is credited with the participant's contribution, the Company's matching contribution, and allocations of the Company common stock and Plan earnings, and charged with withdrawals and an allocation of Plan losses. Allocations are based on participant earnings or account balances, as defined, with the exception of the ESOP allocation, which is based on a participant's eligible earnings. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Funding Policy

In calendar year 2007, the total addition to each participant's account did not exceed the lesser of either 100% of the participant's U.S. compensation (as defined by the Code) or \$45,000.

Investments

Participants direct the investment of their contributions into various investment options offered by the Plan. The Plan offers several mutual funds and the Cabot Common Stock Fund as investment options for participants.

The quarterly ESOP allocations are recorded in the Cabot Common ESOP Stock Fund, which invests primarily in Cabot common stock. The quarterly Company matching contribution is recorded in the Cabot Common ESOP Stock Fund, the Cabot common stock fund or a combination of both.

Vesting

Each participant is at all times 100% vested in his or her contributions. Effective January 1, 2002, all salaried participants are vested in all Company contributions and earnings thereon according to the following five-year vesting schedule: 20% upon completion of two years of service, 40% upon completion of three years of service, 60% upon completion of four years of service, and 100% upon completion of five years of service. In addition, a participant's entire account balance becomes 100% vested and payable upon the participant's attainment of age 65, or upon the participant's early retirement (defined as age 55 with 10 years of service to the Company), disability or death.

Benefits

For employees not subject to certain collective bargaining agreements, effective April 30, 2001 the Plan requires all new benefits to be paid in the form of a lump sum distribution.

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A participant may withdraw up to 100% of his or her before-tax contributions upon showing a financial hardship exists, but only after the participant has withdrawn all other vested benefits from the Plan and the maximum loan has been made from the participant's account. Participants may withdraw at any time any after-tax contributions made.

A participant may make withdrawals from his or her entire vested account balance once the participant reaches age 59 ¹/₂.

If a participant leaves the Company before retirement for any reason other than death or total and permanent disability, and his or her account balance is \$5,000 or less, upon such termination he or she will receive the vested portion of his or her account balance in a lump sum distribution.

A participant may elect to defer payment of a benefit until April 1 following the year that the participant reaches age 70 ¹/₂.

Participant Loans

Participants may obtain loans from the Plan in an amount not to exceed, in the aggregate, the lesser of \$50,000 or 50% of the total vested amount in the participant's account. Each loan must be paid in full within five years through payroll deductions and is secured by the participant's remaining account balance. The Plan provides that loans may bear interest at reasonable rates as determined by the Benefits Committee of the Company. The interest rate is currently the prime rate plus 2%, and is adjusted quarterly to reflect changes in the prime rate. Interest rates on outstanding loans as of December 31, 2007 ranged from 6.00% to 10.25% per annum.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual amounts could differ from those estimates.

Risk and Uncertainties

The Plan allows for various investment options (as selected by the Plan administrator) in any combination of stocks, bonds, fixed income securities, mutual funds and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the financial statements.

Investment Valuation

The Plan's investments are stated at fair value.

Investments in common stock traded on a national securities exchange are valued at the last reported sale price on the last business day of the year. Investments in mutual funds are valued at quoted market prices, which represent the net asset value of shares held by the Plan at year-end.

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The preferred stock, whose fair value at December 31, 2006 was \$222,501,907, represented approximately 42% of the Plan's investments, is considered to be an alternative investment and was valued by an independent appraiser. The value of the preferred stock depended primarily on the Company's common stock value.

The short-term investment funds are carried at cost which approximates market value. Participant loans are valued at the outstanding loan balance which also approximates market value.

Income Recognition

Purchases and sales of securities are reflected on a trade date basis. Gains or losses on sales of securities are based on average cost.

Dividend income is reported on the ex-dividend date. Interest income is recorded as earned on the accrual basis.

The Plan presents in the statement of changes in net assets the net realized and unrealized appreciation (depreciation) in the fair value of its investments which consists of (i) realized gains or losses, and (ii) unrealized appreciation (depreciation) on those investments.

Benefit Payments

Benefit payments to participants are recorded upon distribution.

New Accounting Pronouncements to be Adopted

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statement on Financial Accounting Standards No. 157, Fair Value Measurements ("FAS 157"). FAS 157 provides guidance for using fair value to measure assets and liabilities and requires additional disclosure about the use of fair value measures, the information used to measure fair value, and the effect fair-value measurements have on earnings. One of the primary areas in which the Company utilizes fair value measures are valuing pension plan assets and liabilities. FAS 157 is effective for fiscal years beginning after November 15, 2007, which will be January 1, 2008 for the Plan. The Company is evaluating the impact of FAS 157 on the Plan's financial statements.

On February 15, 2007 the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115 ("SFAS No. 159"). This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. The unrealized gains and losses on items for which the fair value option has been elected will be reported in earnings at each subsequent reporting date. The fair value option: (a) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (b) is irrevocable (unless a new election date occurs); and (c) is applied only to entire instruments and not to portions of instruments. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007 and for interim periods within those fiscal years. The Company did not elect the fair value option for eligible items that had not previously been required to be measured at fair value as of January 1, 2008.

3. Investments

On July 20, 2007, all of the Company's outstanding shares of preferred stock were converted into shares of the Company's common stock. As a result, approximately 32,095 of the Plan's shares of preferred stock were converted into 4,698,065 shares of Cabot common stock.

The fair value of investments held by the Plan by general type are as follows:

	December 31,			
	2007		2006	
	Allocated	Unallocated	Allocated	Unallocated
Cabot common stock	\$ 84,759,259	\$ 86,976,646	\$ 29,533,953	\$ —
Cabot preferred stock	—	—	89,894,863	132,607,044
Mutual funds	297,376,038	—	271,017,103	—
Participant loans	2,451,020	—	2,438,620	—
	<u>\$ 384,586,317</u>	<u>\$ 86,976,646</u>	<u>\$ 392,884,539</u>	<u>\$ 132,607,044</u>

The fair value of investments held by the Plan that exceed 5% or more of the Plan's net assets available for benefits as of December 31, 2007 and 2006 are as follows:

	December 31,			
	2007		2006	
	Allocated	Unallocated	Allocated	Unallocated
Vanguard Windsor II Fund	\$41,070,552	\$ —	\$41,410,091	\$ —
Vanguard Wellington Fund	44,517,754	—	42,625,744	—
Cabot Common Stock Fund	84,759,259	86,976,646	29,533,953	—
Cabot Preferred Stock Fund	—	—	89,894,863	132,607,044
Vanguard Federal Money Market Fund	25,582,916	—	—	—
Vanguard 500 Index Fund	49,129,893	—	50,045,791	—
Vanguard International Growth Fund	31,330,274	—	24,471,356	—
Vanguard PRIMECAP Fund	38,619,713	—	36,481,081	—

During the year ended December 31, 2007, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value as follows:

Cabot preferred stock	\$ 4,631,838
Cabot common stock	(56,934,307)
Mutual funds	537,448
Total	<u>\$(51,765,021)</u>

4. Notes Payable

Notes payable consisted of the following:

	December 31,	
	2007	2006
Note due 2013, 8.29%	<u>\$33,007,595</u>	<u>\$37,095,350</u>

In November 1988, the Plan borrowed \$75,000,000 from an institutional lender in order to finance its purchase of 75,000 shares of the preferred stock ("ESOP note"). This debt accrues interest at a rate of 8.29% per annum, and is being repaid in equal quarterly installments, with the final payment due on December 31, 2013. This debt is collateralized by the assets in the unallocated fund and is guaranteed by the Company. On July 20, 2007, all of the Company's outstanding shares of preferred stock were converted into shares of the Company's common stock.

The aggregate principal amounts of notes due and payable in each of the next five fiscal years and the balance thereafter are as follows:

Year ended December 31,	
2008	\$4,437,311
2009	4,816,758
2010	5,228,654
2011	5,675,771
2012	6,161,123
Thereafter	6,687,978

5. Debt Service Contributions

The Company contributes to the Plan on a quarterly basis the deficiency between dividends earned on the leveraged common stock and the payment due by the Plan to the lender described in Note 4. These debt service contributions are recorded as unallocated employer contributions.

6. Forfeitures

Upon termination of a participant from the Plan before being fully vested, the nonvested portion of the Company contributions is forfeited. The Plan allows the Company to apply participant forfeitures toward the payment of the ESOP debt obligation. During 2007, the Company used \$865,000 of participant forfeitures toward the payment of the ESOP note. As of December 31, 2007, available participant forfeitures totaled \$12,265.

7. Administrative Expenses

Other than certain redemption fees, all administrative expenses associated with the operation of the Plan were paid by the Company during the year ended December 31, 2007. These costs totaled approximately \$174,544. Under the terms of the Plan, such costs may be charged to the Plan.

8. Federal Income Tax Status

The Internal Revenue Service has determined and informed the Company by a letter dated September 2, 2003, that the Plan and related trust were designed in accordance with applicable Code regulations. The Plan has been amended since receiving the determination letter. However, the Company and Plan management believe that the Plan is currently designed and operated in compliance with applicable Code regulations and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

9. Plan Termination

The Plan was established with the intention that it will continue indefinitely. However, the Company reserves the right to suspend its contributions or to terminate the Plan at any time. In the event the Plan is terminated, all participants become 100% vested and the assets of the Plan, after payment of any expenses, taxes or proper charges of the trustee, will be allocated in accordance with the provisions of ERISA.

10. Party-In-Interest

The Plan's investment options include certain mutual funds of The Vanguard Group. Vanguard Fiduciary Trust Company is the recordkeeper and trustee of certain of the Plan's assets and, therefore, participant investments in mutual funds within The Vanguard Group qualify as party-in-interest transactions.

In addition, the Plan is either currently or has been previously invested in common and preferred stock of the Company and these transactions qualify as party-in-interest transactions.

At December 31, 2007 and 2006, the Plan held common stock of the Company, the sponsoring employer. During the year ended December 31, 2007, the Plan earned dividend income of \$2,090,755 related to the common stock. As noted above, on July 20, 2007 all of the Company's outstanding shares of preferred stock were converted into shares of the Company's common stock. During the first and second quarter of 2007, the Plan earned dividend income of \$1,271,407 related to the preferred stock.

11. Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500 as of December 31, 2007 and 2006:

	<u>2007</u>	<u>2006</u>
Net assets available for benefits per the financial statements	\$439,413,539	\$488,396,233
Deemed distributed - reduction of loans	(5,979)	(32,885)
	<u>\$439,407,560</u>	<u>\$488,363,348</u>

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The following is a reconciliation of the net decrease in net assets available for benefits per the financial statements to net loss per the Form 5500:

Net decrease in net assets available for benefits per the financial statements	\$(48,982,694)
Add deemed distributions	<u>26,906</u>
	<u><u>\$(48,955,788)</u></u>

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Cabot Retirement Savings Plan
Schedule H, Line 4i - Schedule of Assets (Held At End of Year)
As of December 31, 2007

Identity of Issuer	Description of Investment	Cost	Current Value
* Cabot Corporation	Common stock of Cabot Corporation	\$ 79,106,421	\$ 171,735,905
* The Vanguard Group	Vanguard 500 Signal Portfolio Fund	51,049,559	49,129,893
* The Vanguard Group	Vanguard Explorer Fund	20,562,815	21,165,500
* The Vanguard Group	Vanguard Extended Market Index Fund	7,488,575	8,102,926
* The Vanguard Group	Vanguard Federal Portfolio Fund	25,582,916	25,582,916
* The Vanguard Group	Vanguard International Growth Portfolio Fund	28,002,780	31,330,274
* The Vanguard Group	Vanguard International Value Fund	4,035,857	3,830,299
* The Vanguard Group	Vanguard PRIMECAP Fund	32,751,870	38,619,713
* The Vanguard Group	Vanguard Short-term Federal Portfolio	8,929,522	9,081,162
* The Vanguard Group	Vanguard Target Retirement Portfolio 2005	338,530	338,629
* The Vanguard Group	Vanguard Target Retirement Portfolio 2010	1,325,187	1,322,950
* The Vanguard Group	Vanguard Target Retirement Portfolio 2015	871,989	865,927
* The Vanguard Group	Vanguard Target Retirement Portfolio 2020	2,200,489	2,187,826
* The Vanguard Group	Vanguard Target Retirement Portfolio 2025	479,885	473,287
* The Vanguard Group	Vanguard Target Retirement Portfolio 2030	534,421	529,375
* The Vanguard Group	Vanguard Target Retirement Portfolio 2035	251,108	245,188
* The Vanguard Group	Vanguard Target Retirement Portfolio 2040	75,646	74,083
* The Vanguard Group	Vanguard Target Retirement Portfolio 2045	68,903	68,778
* The Vanguard Group	Vanguard Target Retirement Portfolio 2050	110,471	109,170
* The Vanguard Group	Vanguard Target Retirement Income Portfolio	511,187	516,528
* The Vanguard Group	Vanguard Total Bond Market Index Signal Fund	17,876,033	18,213,308
* The Vanguard Group	Vanguard Wellington Fund	41,489,296	44,517,754
* The Vanguard Group	Vanguard Windsor II Fund	39,917,554	41,070,552
* Participants	Participant Loans - stated interest rates ranging from 6.00% - 10.25%* maturing at various dates through 2012.	2,451,020	2,451,020
Total investments		\$ 366,012,034	\$ 471,562,963

*Party-in-interest

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Cabot Retirement Savings Plan
(Name of Plan)

Date: June 27, 2008

/s/ Robby D. Sisco

Robby D. Sisco

Vice President

Exhibit Index

Exhibit Number

Exhibit 23.1 -- Consent of Independent Registered Public Accounting Firm

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Forms S-8 (Nos. 333-19103 and 333-19099) of Cabot Corporation of our report dated June 27, 2008 relating to the financial statements of the Cabot Retirement Savings Plan (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the valuation of an investment) appearing in this Annual Report on Form 11-K for the year ended December 31, 2007.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

June 27, 2008