

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G  
Under the Securities Exchange Act of 1934

(Amendment No. 7)\*

CEMEX, S.A.B. de C.V.

---

(Name of Issuer)

Ordinary Participation Certificates

---

(Title of Class and Securities)

2406457

---

(CUSIP Number of Class of Securities)

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 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).

(Continued on following page(s))

CUSIP No. 2406457

13G

---

(1) NAMES OF REPORTING PERSONS  
Southeastern Asset Management, Inc. I.D. No. 62-0951781

---

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:  
(a)  
(b) X

---

(3) SEC USE ONLY

---

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Tennessee

---

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

: (5) SOLE VOTING POWER  
: (Discretionary Accounts)  
: 576,762,594 shares

---

: (6) SHARED OR NO VOTING POWER

381,860,400 shares (Shared)  
120,539,706 shares (No Vote)

---

: (7) SOLE DISPOSITIVE POWER  
(Discretionary Accounts)  
: 697,302,300 shares

---

: (8) SHARED DISPOSITIVE POWER

: 381,860,400 shares (Shared)  
0 shares (None)

---

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
(Discretionary & Non-discretionary Accounts)  
1,079,162,700 shares

---

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES  
CERTAIN SHARES

---

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
11.2 %

---

(12) TYPE OF REPORTING PERSON  
IA

---

CUSIP No. 2406457

13G

---

(1) NAMES OF REPORTING PERSONS  
O. Mason Hawkins I.D. No. XXX-XX-XXXX

---

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:  
(a)  
(b) X

---

(3) SEC USE ONLY

---

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Citizen of United States

---

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

: (5) SOLE VOTING POWER  
: (Discretionary Accounts)  
: None

---

: (6) SHARED VOTING POWER

: None

---

: (7) SOLE DISPOSITIVE POWER

: None

---

: (8) SHARED DISPOSITIVE POWER

: None

---

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
None (See Item 3)

---

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES  
CERTAIN SHARES

---

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
0.0%

---

(12) TYPE OF REPORTING PERSON  
IN

---

Item 1.

(a). Name of Issuer: CEMEX, S.A.B. de C.V. ("Issuer")

(b). Address of Issuer's Principal Executive Offices:

Av. Ricardo Margain Zozaya #325  
Colonia Valle del Campestre  
Garza Garcia, Nuevo Leon  
Mexico 66265

Item 2.

(a). and (b). Names and Principal Business Addresses of Persons Filing

(1) Southeastern Asset Management, Inc.  
6410 Poplar Ave., Suite 900  
Memphis, TN 38119

(2) Mr. O. Mason Hawkins  
Chairman of the Board and C.E.O.  
Southeastern Asset Management, Inc.  
6410 Poplar Ave., Suite 900  
Memphis, TN 38119

(c). Citizenship:

Southeastern Asset Management, Inc. - A Tennessee corporation

Mr. O. Mason Hawkins - U.S. Citizen

(d). Title of Class of Securities: Ordinary Participation  
Certificates (the "Securities").

(e). Cusip Number: 2406457

Item 3. If this statement is filed pursuant to Rules 13d-1 (b) or  
13d-2 (b), check whether the person filing is a:

(e.) Investment Adviser registered under Section 203 of the  
Investment Advisers Act of 1940. This statement is being filed  
by Southeastern Asset Management, Inc. as a registered investment  
adviser. All of the securities covered by this report are owned  
legally by Southeastern's investment advisory clients and none  
are owned directly or indirectly by Southeastern. As permitted  
by Rule 13d-4, the filing of this statement shall not be construed  
as an admission that Southeastern Asset Management, Inc. is the  
beneficial owner of any of the securities covered by this statement.

(g.) Parent Holding Company. This statement is also being filed by  
Mr. O. Mason Hawkins, Chairman of the Board and C.E.O. of  
Southeastern Asset Management, Inc. in the event he could be  
deemed to be a controlling person of that firm as the result of  
his official positions with or ownership of its voting securities.  
The existence of such control is expressly disclaimed. Mr. Hawkins  
does not own directly or indirectly any securities covered by  
this statement for his own account. As permitted by Rule 13d-4,  
the filing of this statement shall not be construed as an admission  
that Mr. Hawkins is the beneficial owner of any of the securities  
covered by this statement.

Item 4. Ownership:

(a). Amount Beneficially Owned: (At 12/31/09)

1,079,162,700 shares

(b). Percent of Class:

11.2 %

Above percentage is based on 9,611,304,614 shares of Ordinary Participation Certificates outstanding. The filers' holdings consist of 103,939,301 American Depositary shares (each representing 10 Ordinary Participation Certificates) and 39,769,690 Ordinary Participation Certificates.

(c). Number of shares as to which such person has:

(i). sole power to vote or to direct the vote:

576,762,594 shares

(ii). shared or no power to vote or to direct the vote:

Shared - 381,860,400 shares.  
Securities owned by the following series of Longleaf Partners Funds Trust, an open-end management investment company registered under the Investment Company Act of 1940, as follows:

Longleaf Partners Fund - 294,590,400 shares  
Longleaf International Fund - 87,270,000 shares

No Power to Vote - 120,539,706 shares.

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

697,302,300 shares

(iv). shared or no power to dispose or to direct the disposition of:

Shared - 381,860,400 shares  
Securities owned by the following series of Longleaf Partners Funds Trust, an open-end management investment company registered under the Investment Company Act of 1940, as follows:

Longleaf Partners Fund - 294,590,400 shares  
Longleaf Partners International Fund - 87,270,000

No Power - 0 shares

Item 5. Ownership of Five Percent or Less of a Class: N/A

Item 6. Ownership of More Than Five Percent on Behalf of Another Person:  
N/A

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company: N/A

Item 8. Identification and Classification of Members of the Group:  
N/A

Item 9. Notice of Dissolution of Group: N/A

Item 10. Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose

and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

Signatures

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

Dated: February 12, 2010

Southeastern Asset Management, Inc.

By /s/ Andrew R. McCarroll

\_\_\_\_\_  
Andrew R. McCarroll  
Vice President and General Counsel

O. Mason Hawkins, Individually

/s/ O. Mason Hawkins  
\_\_\_\_\_

Joint Filing Agreement

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, the persons or entities named below agree to the joint filing on behalf of each of them of this Schedule 13G with respect to the Securities of the Issuer and further agree that this joint filing agreement be included as an exhibit to this Schedule 13G. In evidence thereof, the undersigned hereby execute this Agreement as of February 12, 2010.

Southeastern Asset Management, Inc.

By /s/ Andrew R. McCarroll

\_\_\_\_\_  
Andrew R. McCarroll  
Vice President and General Counsel

O. Mason Hawkins, Individually

/s/ O. Mason Hawkins  
\_\_\_\_\_

SCHEDULE 13G - CEMEX, S.A. de C.V. ("Issuer")

Amendment #7

2

CMX13G7.doc