The Endowment: Up, and Upheaval

A STRONG YEAR for investors generally was a very strong year for the University. Harvard Management Company (HMC), concluding its first full year under new leadership, reported on August 21 that the endowment had risen to $34.9 billion during the fiscal year ended June 30 from $29.2 billion 12 months earlier, an increase of $5.7 billion. That 19.5 percent growth is the product of a 23 percent investment return on endowment assets after expenses and fees, *plus* endowment gifts received, *minus* the distribution of funds to support University operations.

Those glad tidings were almost immediately overshadowed, however, by the unexpected announcement on September 11 that Mohamed A. El-Erian, HMC's president and CEO since February 2006, would resign at year-end to assume a top management position at Pacific Investment Management Company (PIMCO), from which he had been recruited to Harvard in 2005 (see below).

An Unexpected Risk Factor

One risk to continued strong endowment performance not addressed in Mohamed A. El-Erian's annual letter was the uncertainty arising from unanticipated change in Harvard Management Company's (HMC) leadership and perhaps in other senior investment personnel—many of them newly hired by him.

On September 11, the day after a Harvard Corporation meeting and two days before an HMC board meeting, the University announced that El-Erian would step down from his Harvard posts at year end to return to Pacific Investment Management Company (PIMCO), based in Newport Beach, California, where he had been managing director and senior portfolio manager. Upon his return to PIMCO, the pre-eminent fixed-income manager (with almost $700 billion in assets, nearly 20 times the size of the endowment, and a nearly 900-person staff in nine financial centers around the world), El-Erian will resume his managing directorship and assume the newly created posts of co-chief executive officer and co-chief investment officer. In these roles, PIMCO's news release said, "he will help drive the firm's future business strategy [and] extend the range of products and services…." He is the likely candidate to run the enterprise in the future.

In the official announcement, El-Erian said, "In returning to southern California to be closer to our family, I will miss my daily interactions with this special Harvard community—particularly my highly skilled and dedicated HMC colleagues, the remarkable leadership of the University and its schools, and the stimulating student body and faculty. I will leave behind close friends in an institution that, I am certain, will maintain and expand its tradition of excellence." He declined to comment further.

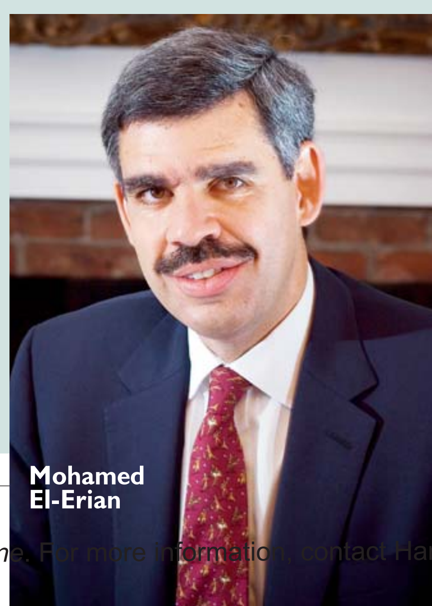
University treasurer James F. Rothenberg, chair of HMC's board of directors, saluted El-Erian for doing "an impressive job guiding and reorganizing Harvard Management Company," and said, "[W]e will miss his leadership. In addition to achieving excellent investment returns, he has led ambitious efforts to rebuild HMC during his time as CEO, and those efforts will leave us with a strong organizational foundation going forward." Rothenberg's statement lauded not only "Mohamed's skill but also…the talent and energy of his colleagues across HMC." He did not respond to a request for further comment.

But Harvard Business School (HBS) dean Jay O. Light, an HMC board member, said he had expected El-Erian to stay in place for a long time.

As a professor, Light has researched and taught on investment management, and knows El-Erian from the 2005 search, as a colleague (El-Erian is a lecturer at HBS), and, he said, as a family friend. Light said that from his perspective—and, he believed, that of fellow board members—El-Erian's decision was entirely a personal matter. Light said there were "no serious disagreements" about investment management, strategy, or tactics, and that the board was "very happy with Mohamed"—as measured by short-term performance and the longer-term strengthening of the HMC organization—and "would have preferred that he stay." Light said family considerations were a "huge" factor in the decision: board members had been aware that El-Erian had had such concerns for an extended period. In that context, Light said, the PIMCO announcement was a surprise—but not that surprising, given that El-Erian had been considering a change apparently at least as long ago as May of this year.

Will HMC's team of investment professionals—many recruited since El-Erian arrived (see "Money-Management Makeover," November-December 2006, page 68)—remain in place? "We really have to make sure those people understand we value them and trust them," Light said. HMC's recent strong performance demonstrated what the staff was capable of—and no doubt increased their value to other institutions seeking talent. Moving expeditiously on the search for "another CEO whom they'll also trust and respect" will obviously be critical. Rothenberg's statement said a search would be "promptly launched." Its duration is impossible to predict, but, Light said, "I'd love to get lucky."

Light said El-Erian "really did do a good job of putting these platforms in place" for solid investment performance. In a perverse way, Light added, the better-than-expected results in the first full year of El-Erian's leadership may have contributed to the timing of his decision to leave, "when he did a great job, and the world sees it, short term and long term."



Mohamed El-Erian

Photograph by Justin Ide/Harvard News Office

The performance of the endowment matters more than ever. During the fiscal year, distributions from the endowment to fund faculty salaries, financial aid, research, library acquisitions, and the like exceeded $1 billion for the first time. (In fiscal year 2006, the sum disbursed was about $930 million.) These funds now represent more than 30 percent of Harvard's operating budget—a substantially larger fraction than tuition and fees, support for sponsored research, or any other source. (An additional $140.5 million was set aside for the "strategic infrastructure fund," a 0.5 percent levy on the endowment for Allston campus development.)

•*Investment returns.* In his annual letter on the endowment, El-Erian noted that during the fiscal year, the Standard & Poor's 500 index returned 20.6 percent, and the Lehman Aggregate—a common bond-market metric—6.1 percent. HMC's 23 percent return was a full 5.8 percentage points above what Harvard would have earned had its diversified portfolio simply matched the market performance of each asset category in which the University invests (domestic and foreign equities, emerging-market stocks, domestic and foreign bonds, real estate, and so on; for the actual composition of the portfolio as of June 30, see the investment section of Harvard's financial report at http://vpf-web.harvard.edu/annualfinancial). The extra returns augmented the endowment by $1.7 billion.

That large margin of added value boosted Harvard's performance well above the median return of 17.7 percent in the Trust Universe Comparison Service, which aggregates data on 151 large institutional investors. (Nonetheless, El-Erian expected some other universities to report higher returns, given their relatively greater proportional investment in private equities and real estate—both exceptionally strong last year. Indeed, Yale reported returns of 28 percent during the period and Amherst only slightly less; the University of Virginia, 25 percent; and Dartmouth 23.7 percent.)

HMC no longer provides yearly returns by asset class. Instead, it offers five- and 10-year annualized performance; El-Erian said other investors could use one-year data to gain insight into certain Harvard

HARVARD PORTRAIT

Janet Browne

When Darwin biographer Janet Browne emigrated from University College London a year ago to become Aramont professor of the history of science, she first lived in Harvard housing built in the former botanical garden of Asa Gray, the first Fisher professor of natural history and an early and forceful proponent of Darwin's theories. "There are still trees there with his identifying tin medallions," she says. "All the streets are named after botanists. Fancy walking to work down Linnaean Street!" She teaches a Core course on the Darwinian revolution and another, on the history of biology, that begins about 1650 with early natural-history collecting. Next semester she'll explore nature on display—in museums, zoos, on TV. She appears here with a gorilla shot in 1926-27 by the Museum of Comparative Zoology's Harold Coolidge and mounted looking ferocious, as was thought appropriate for gorillas. (*Gorilla gorilla* had been named by Harvard's Jeffries Wyman in 1847, based on bones sent from Africa.) She suggested the setting because she is at work on a visual and cultural history of the gorilla. (She will not overlook King Kong.) Browne has spent 17 years with Darwin, winning plaudits, literary and scholarly prizes, and pleasure. She was associate editor of his correspondence and then wrote a magisterial two-volume biography: *Charles Darwin: Voyaging* (1995) and *Charles Darwin: The Power of Place* (2002). "He was great to live with," she says. "I would get up, quite early, get the children off to school, everybody out of the house, turn on my computer, make a cup of coffee, and then I was with Darwin all day. It was lovely."

Photograph by Jim Harrison

strategies. He did disclose that among all asset categories, emerging-market equities produced the highest return for the year (44 percent), followed by private equities and real estate (both of which returned more than 30 percent). As for the dollar contribution to the growth of the endowment—reflecting the size of the portfolios as well as the rate of return—the most significant assets were emerging-market equities, domestic and international equities, and absolute-return funds (hedge funds managed to have a neutral posture toward the market overall).

Asset Reallocation

Harvard Management Company Policy Portfolio

	2002-2006	2007	2008
Foreign equities	10%	11%	12%
Emerging-market equities	5%	8%	10%
Fixed income	21%	13%	9%
Absolute return and special situations	12%	17%	18%

•*The new order.* The fiscal year 2007 results constitute an initial performance report on the investment disciplines El-Erian and new HMC personnel have put in place since his arrival. Reviewing historical data on Harvard's general investment account (which includes the endowment), El-Erian said the 23 percent rate of return had been exceeded only seven times since fiscal year 1971. The 5.8 percentage point margin over market returns had been exceeded only three times: in 1988 and 2001, when market returns generally were negative, and in 2000, when Harvard harvested billions from venture-capital investments during the dot-com bull market.

He attributed HMC's outperformance to several factors. First, the allocation of endowment assets has changed, placing more emphasis on international equities and alternative categories of investments, and much less on fixed-income holdings (see chart above). Those shifts, driven by HMC's long-term investment perspective, were augmented by daily portfolio-management decisions that buffered the effects of several sharp market downdrafts during the year.

With HMC's in-house organization restaffed during the year, El-Erian said, the internal investment team had very strong results. He also augmented the process for evaluating and selecting external managers, resulting in the reallocation of billions of dollars among existing and new firms. This reallocation in part reflects the redeployment of fixed-income funds that had been passively invested during the prior year, after the departure of HMC's senior management and fixed-income team in late 2005 to set up their own firm, Convexity Capital Management. That shift boosted returns, El-Erian said, and other external managers performed well, too.

•*A changed environment.* All the assumptions that boosted the markets during the past year have since been rudely undercut. China and other developing nations, which have led economic growth and accumulated large cash reserves, may be less willing to buy U.S. Treasury bonds (a practice that has helped keep domestic credit available and inexpensive). Problems with subprime mortgages broadly disrupted the credit markets in mid summer, sparking fears of recession, choking off acquisitions, and spurring sharp swings on world stock exchanges. In turn, confidence in the ability of central bankers and policymakers to sustain stable growth was shaken.

The consequences were especially harsh in certain investment sectors. As previously reported (see "Hedge-fund Hemorrhage," Brevia, September-October, page 69), Sowood Capital Management, founded by a former HMC fund manager in 2004, collapsed over the last weekend in July; Harvard's loss from the firm's forced liquidation totaled about $350 million.

In HMC's August 21 release, El-Erian took the unusual step of disclosing endowment performance during July 2007, when the Standard & Poor's index declined 3.1 percent, while the Lehman aggregate rose 0.8 percent. Despite those factors and the Sowood loss, the value of the endowment actually appreciated 0.4 percent. That positive outcome, he said, indicates the value of HMC asset-allocation and diversification decisions, effective action by portfolio managers, and the utility of portfolio insurance to protect against such sharp breaks in the market. One contributing factor may have been strong performance by Convexity, which continues to manage fixed-income funds for HMC. That firm's volatility-driven strategies yielded a double-digit gain in June and July.

Recent events aside, El-Erian said that HMC has been pursuing five longer-term themes. First, economic growth outside the United States is expected to exceed domestic growth, opening new investment opportunities. Second, the external factors helping to rein in inflation—inexpensive labor in emerging markets, and the sharp rise in global trade—are lessening in effect. Third, emerging economies are beginning to use their financial reserves to seek higher returns. Fourth, alternatives such as hedge funds and private-equity firms are maturing, putting pressure on their returns (a challenge for large, diversified endowments like Harvard's). Finally, financial risks are changing as traditional intermediaries, such as banks, assume new roles, and checks on credit quality weaken.

Broadly, these factors drive HMC's asset allocation and strategies: increased investment in foreign equities; greater use of real assets to protect against higher inflation; and—in light of globalization and maturing alternative investment vehicles—greater wariness about the efficacy of traditional diversification to boost returns and protect against risk. For example, if globalization of trade and finance makes economies act more alike, geographic diversification loses its effect in protecting against recession or inflation in any one region.

Hence, El-Erian said, HMC is emphasizing risk management (witness Sowood's demise), and its ability to move first into novel investment areas such as infrastructure and foreign-currency portfolios. Neither of those are consequential today, but they are promising parts of a growing commitment to "special situation" investments.

•*Shedding light.* Given the eventful year for the endowment, El-Erian wrote an unusually long, detailed annual letter. In it, he promised further changes in HMC's public communications, including a website (www.hmc.harvard.edu) intended to

Informational graphic (opposite) by Stephen Anderson demystify some of its operations (for another example, see the University of Virginia's site, http://uvm-web.eservices.virginia. edu/public/). Beginning next fall, he wrote, HMC will issue its own annual report, as Yale University Investments Office has done since 2000 (see www.yale.edu/investments), complementing a leaned-down University *Financial Report*, which now covers endowment management and performance.

In conclusion, El-Erian observed—given continuing large imbalances in global payments, insufficient tests of the "robustness" of new financial derivatives, and "a certain amount of hubris" among other investors—"[W]e are resisting the temptation to extrapolate the recent strong investment performance. Instead, it is more prudent to view it as involving a 'windfall gain' component."

HARVARD BY THE NUMBERS

Green Gauge

The ever-useful *Harvard University Fact Book* (published annually by the Office of Budgets, Financial Planning, and Institutional Research, and now available on line at http://vpf-web.harvard.edu/budget/factbook/index.html) contains, for the first time, indicators of environmental performance. The newest edition, reporting on 2006-2007, provides measures of trash generation, growth in volume, and percentage recycled, by faculty; water usage; commuting; financing for "green" capital projects; and certification of buildings under the Leadership in Energy and Environmental Design (LEED) program.

Perhaps of greatest interest are the data, displayed here, on greenhouse-gas emissions from buildings' energy use. The data, from the Green Campus Initiative (www.greencampus.harvard.edu/ggi, where the methodology is explained), measure metric tons of carbon dioxide equivalent (MTCDE). The information is imperfect: there is a gap in fiscal years 1990 and 1991 for the Longwood Medical Area, and estimates are required for that campus's chief energy plant. But as a snapshot, the data do suggest the total greenhouse-gas generation from powering Harvard's buildings, the growth in such emissions as the University's physical plant continues to expand at a fast pace (about 7 million gross square feet since 1990), and the varying energy intensity of the activities of different faculties, such as those operating scientific laboratories.

In the future, perhaps it will be possible to report improvements in energy efficiency, and reductions in greenhouse-gas emissions, per square foot, by function, and by faculty—metrics that may come into common use not only institutionally, but for individual members of the University community.

FACULTY	TOTAL EMISSIONS (MTCDE*)	MTCDE/ 1,000 sq ft	% CHANGE FY 1990-2006
Arts and Sciences	148,962	16.8	24%
Business	34,949	23.8	72%
Design	3,185	17.8	4%
Divinity	2,224	12.4	-9%
Education	3,689	17.2	13%
Government	4,693	17.8	48%
Law	14,277	15.5	30%
Other	87,141	10.6	N/A

LONGWOOD	TOTAL EMISSIONS (MTCDE*)	MTCDE/ 1,000 sq ft	% CHANGE FY1992-2006
Medical	71,672	24.1	256%
Dental	2,840	28.6	229%
Public Health	12,036	21.0	74%

TOTAL	**385,668**	**15.9**	**64%**

* MTCDE: Metric Tons of Carbon Dioxide Equivalent