Further Financial **Fallout**

UNDERSTANDABLY, the Harvard University Financial Report for fiscal year 2009, published in mid October, is dominated by the plunge in value of the endowment (see "\$11 Billion Less," November-December 2009, page 50). But it also documents previously undisclosed blows to the University's fisc, notably including:

- \$1.8 billion of losses incurred in the "general operating account"—the principal cash funding mechanism for University operations-where assets, invested like the endowment's, absorbed proportional declines in value; and
- additional losses, which may ultimately exceed \$1 billion, on Harvard's interestrate swaps associated with its borrowings.

The deflation in Harvard's investments extended beyond the endowment (valued at \$26 billion this past June, down from \$36.9 billion at the end of fiscal 2008). The report draws attention to losses in the "University's portfolio of pooled cash balances" or General Operating Account (GOA)—the funds used to pay the bills. This asset pool receives, manages, and disburses cash balances held by Harvard's schools, academic centers, and the administration, but many of its assets have been invested alongside the endowment in what is called the General Investment Account—a step meant to generate returns far exceeding those of money-market instruments. In recent years of strong investment returns, that strategy benefited contributors and users of the funds. But during the past fiscal year, falling and illiquid markets produced losses of \$1.8 billion.

Changes in accounting and financial reporting make it difficult to ascertain the disposition of GOA funds over time and more detailed explanations have not been forthcoming. But it appears that GOA net assets doubled during the decade, to about \$6.6 billion in fiscal 2008. During that time, the University sums reported as cash and short-term equivalents held roughly constant at between \$1 billion and \$2 billion in most years, while "funds functioning as endowment," from all sources, more than doubled—peaking at about s9 billion in fiscal 2008; GOA assets accounted for within "pooled general investment net assets" (as first reported for fiscal 2005) rose from \$3.4 billion then

to peak at about \$5.5 billion in fiscal 2008.

Although a decision was made during fiscal 2008 to "reduce the risk profile of the University's pooled cash investments," and implementation had begun, according to the financial report, the chaos that erupted in the fall of 2008 disrupted that transition and made it impossible to shield the GOA.

The decline in the value of investments, payments on swap losses and the infusion of the remaining proceeds from new debt offerings (see below), and other fund flows combined to reduce the GOA's net asset balance to \$3.7 billion at the end of fiscal 2009 from the \$6.6 billion of a year earlier. The \$11-billion decline in the value of the endowment is thus only part of the story: the value of Harvard's net assets overall declined from \$44.2 billion to \$30.1 billion. And the decline in the GOA, like the loss of endowment value, represents a further reduction in wealth and future income.

In an October 17 Boston Globe story headlined "Harvard admits to \$1.8b gaffe in cash holdings," reporter Beth Healy quoted a statement from University treasurer James F. Rothenberg to the effect that responsibility for the investment decisions and resulting losses in the GOA did not "sit with a single individual: the Corporation plays a role, the University's financial team, including the CFO, play a role, and I play a role as treasurer." (Neither her article nor Steven Sayre's October 20 Globe column, "More red than crimson," on sound cash management, appeared in the daily electronic news links circulated within the University.)

In an interview with the Harvard news office posted October 16, Rothenberg said all the endowment, GOA, and swap losses "were a function of last year's extraordinary market conditions." Asked if "the University's investment strategies square with its responsibility to steward endowment funds," Daniel S. Shore, vice president for finance and chief financial officer. told the news office, "There does need to be a balance between investing for longterm returns and managing for near-term needs, and we are now more conscious than ever of that balance...."

Responding to a query about "the Corporation's responsibility for those investment decisions," Rothenberg said, "The President and Fellows have ultimate fiduciary responsibility for the University, including its finances. We take that responsibility very seriously, and we devote quite a lot of our time, especially these days, to matters of financial strategy and planning, thinking about how to balance present and future needs." Direct investment management, he noted, is conducted by Harvard Management Company (HMC), whose board he chairs. "There weren't any reliable predictors of precisely when and how a global economic crisis would unfold," he said, "and there were valid arguments for why the strategies in place made sense both when they were made and right up until last fall." In the future, he said, "I think the likelihood is that the University will continue to invest portions of pooled cash alongside the endowment, but likely not to the same degree."

Beyond the GOA losses, the report also refers delicately to "realized and unrealized losses on interest rate exchange agreements held by the University as part of the financing strategy for its capital program." As previously reported (Breaking News, harvardmagazine.com, December 19, 2008), the "notional" value of such swap agreements soared from \$1.4 billion to \$3.7 billion during fiscal 2005, when Harvard put in place forward interest-rate agreements to finance then-anticipated rapid campus development in Allston. The fair value the University would have paid to terminate those agreements, a volatile sum related to market interest rates, ballooned to \$330 million at the end of fiscal 2008.

During the chaotic financial conditions of late 2008, problems arose in refunding very short-term debt instruments, and central banks pushed interest rates to record lows. That put Harvard in a double bind of refinancing its borrowings and covering its rising obligations under the swap agreements. As the annual report notes, the "unprecedented" fall in interest rates caused the University's swap agreements "to incur sudden and precipitous declines in value, which in turn led to significant increases in associated collateral pledged to counterparties, creating liquidity pressures on the University."

In response, Harvard terminated such agreements with a notional value of \$1.138 billion during the year, buying its way out with cash payments of approximately \$500 million. But it also entered into new swap agreements with a notional value of \$764 million—structured to offset other, existing swap agreements—yielding unrealized losses of a further \$425 million. This is, in effect, a financing transaction, locking in losses which will have to be realized in the future, but immunizing Harvard today from still steeper losses should interest rates remain adverse relative to the assumptions underlying the original swaps. Finally, the University remains exposed to risks amounting to an additional \$250 million of swap-related losses, not hedged by offsetting transactions, as of last June 30.

Thus, during the year, Harvard realized and paid for a half-billion-dollars' worth of swap-related losses, and ended the year with about \$675 million of unrealized losses remaining (the fair value of the swap portfolio, with a notional value of \$3.14 billion): about \$425 million locked in by offsetting swaps, and \$250 million of remaining exposure subject to the market.

In the news office interview, Rothenberg said of Harvard's strategy, "Compared to most universities, our use of interest-rate swaps was certainly larger because the projected capital program that we were looking at was larger": the planned construction in Allston was "a major focus, and we were planning that expansion aggressively." He

did not respond to requests for further comment on the assumptions made earlier in the decade. At the time the financings were arranged, in December 2004, Allston plans had been outlined broadly, but there were no public, detailed programs even for the first science building (the architect was announced in February 2006) or the relocated education and public-health campuses proposed for resiting there. Design work and Boston's regulatory review and permitting would have followed. Even now, the Charlesview housing project in the center of the area seems unlikely to be relocated (to a Harvard-owned site farther west) for at least a few years. And the first, fast-tracked science complex—on which below-ground work has proceeded, but whose status and schedule are now under review (see "A New Economic Reality," May-June 2009, page 48)—would not have been occupied before 2011.

Turning from these financial losses to the University's continuing operations, Shore and Rothenberg write in their annual letter, "Notwithstanding the challenges we have faced during fiscal 2009, Harvard's fi-

nancial foundation is strong and will continue to enable the University to deliver on its guiding purposes: to achieve excellence in research and education; to prepare students for leadership and for lives of meaning and value; to advance the course of knowledge and ideas; and to serve society" (see the full text at http://vpf-web.harvard.edu/annualfinancial). In a conversation, Shore said that once the challenges became clear, the University set about adapting to what the report calls "a new economic footing" after an adverse period in which, he said, Harvard "certainly lost significant wealth."

As evidence of that adaptation, in the fiscal year ended last June 30, the University achieved an operating surplus of \$71 million, up from a \$17-million surplus a year before. That result reflects both revenue growth budgeted before the financial crisis and ensuing recession and efforts to cut spending progressively as the extent of the problem became clearer.

Revenues grew a vigorous \$3,45 million, or nearly 10 percent, to \$3.83 billion—actually accelerating from the prior year. In both years, distributions from the endowment were the driving factor: in 2009,

"Two Radically Different Worlds"

In his annual dean's report, released for the year's second Faculty of Arts and Sciences (FAS) meeting on October 27, Michael D. Smith necessarily found himself covering "a time that straddles two radically different worlds"—before and after the global financial crisis. The period under review, from early 2008 through the fiscal year ending on June 30, 2009, brought a "seismic change" in FAS's finances, Smith wrote, but not its goals: renewing the undergraduate experience; supporting "existing and emerging intellectual communities"; and strengthening teaching and learning. Aspirations to "reshape our physical environment" to support academic aims, he acknowledged, will perforce be slowed given the financial reality of Harvard's shrunken endowment. (He spelled out the financial prospects in a briefing on September 15; see "FAS's Progress—and Prognosis," November-December 2009, page 58.)

Smith used the report (available at www.fas.harvard.edu) to initiate much more detailed, and revealing, disclosure of FAS finances, discussed below; as is customary, he first reviewed accomplishments and goals—beginning with thorough changes in management meant to enhance information and better tie academic plans to budgets. Those changes, he emphasized, helped

FAS respond to the endowment losses and resulting drop in its own operating funds by \$50 million this year and still more next year.

On matters academic, Smith pointed to the launch of the undergraduate General Education curriculum. He also highlighted efforts to make pedagogy more active in both the arts and humanities and the social sciences, with art-making present in 25 courses, and "activity-based learning" tying classwork to extracurricular work in anthropology, government, history of science, and sociology.

In the Graduate School of Arts and Sciences, he noted, new enrollments declined, as planned: 665 master's and doctoral candidates entered this fall, 15 percent fewer than in the prior year. Stipends were increased modestly, maintaining prior years' gains in support for graduate students. Meanwhile, the School of Engineering and Applied Sciences (SEAS), which has expanded its faculty rapidly, is now constrained by limited physical facilities—a problem worsened by slowed plans for Allston development and the resulting need to locate stem-cell researchers and part of a new bioengineering program in Cambridge. (For more on SEAS, see "Critical Mass, and World-Class," November-December 2009, page 62.)

Smith described the Harvard College Library (HCL) starkly, as suffering from the "increase in publishing output" and the pressures on purchasing given the "diminished strength of the dollar"—even before recent belt-tightening (see page 41). The major goal, he said "will be to rebuild HCL with a dramatically smaller base of resources," which will require "bold, innovative,

funds from the endowment distributed to support University operations increased \$241 million, or a robust 20 percent, to \$1.44 billion, thus accounting for nearly 38 percent of University operating revenue. That was four percentage points more than in the prior year. Every unit but the Graduate School of Education and the School of Engineering and Applied Sciences depended more heavily on endowment income in 2000 than in 2008.

Those trends will now reverse. In the current fiscal year, the operating distribution is forecast to decrease by 8 percent, or more than \$100 million; and in fiscal 2011, the distribution is likely to decrease a further 12 percent from the now-reduced level—an additional \$150 million or so.

Other sources of revenue were mixed. Support for sponsored research rose about 7 percent, to \$714 million. But revenue from students declined 1 percent, to \$678 million, as higher tuition and fees were more than offset by a 20 percent increase in scholarships applied against such income. Currentuse giving rose 23 percent, to \$291 million (a huge bequest and another large gift to the Faculty of Arts and Sciences accounted for Unfortunately, the stand-out expense item is rising sharply: the University incurred about \$58 million in increased interest costs. It appears that the interest expense will rise another \$50 million to \$60 million this year.

60 percent of the gain); but giving overall declined by \$93 million, to \$597 million, as gifts for endowment funds plunged \$142 million (42 percent).

Expenses grew \$201 million, or 8.4 percent, to \$3.76 billion. Salaries, wages, and benefits—49 percent of total expenses increased 11 percent, to \$1.84 billion. But included in that total is \$59 million in onetime severance and benefit costs associated with the staff early-retirement-incentive program and layoffs, which together resulted in the departures of more than 800 employees last spring (see "Finding a New Footing," September-October 2009, page 44). Adjusting for those costs, compensation expenses were still up more than 7 percent—perhaps in part for hiring associated with sponsored research. That growth underscores the pressure to maintain controls on filling open positions, to restrain faculty appointments, and to consider whether to extend the salary freeze for faculty and non-union staff beyond the current year. (It also helps explain the early-retirement incentive offered to 180 tenured professors see Breaking News, harvardmagazine.com, December 2, 2009.) Meanwhile, Shore said, "We got a good, honest start" on reining in discretionary "other expenses" (purchased services—from consultants to janitorsas well as travel, publishing, postage, telephone, and so on).

Unfortunately, the stand-out expense item is rising sharply. According to the report, the University incurred about \$58 million in increased interest costs. That reflects the issuance of nearly \$1 billion of

and creative initiatives, rather than modest, incremental changes" and likely produce "a vastly different organization."

One visible fruit of Smith's efforts to improve management is an expanded discussion of FAS's income and expenses. The published details usefully complement the broad financial trends sketched during his September 15 briefing.

Cost reductions and two nonrecurring items boosted the faculty's flexible, unrestricted reserves by \$58.6 million during the past fiscal year, a valuable cushion for the future. First, FAS received two unrestricted gifts totaling \$32 million. Second, Smith disclosed that as part of a fiscal year 2008 "strategic" payout of endowment capital, FAS was able to spend \$20 million in fiscal 2009 to defray the increased costs of the financial-aid initiative for middle-income undergraduates unveiled in December 2007 (see "Boosting College Financial Aid," March-April 2008, page 54). This year and in the future, those extra costs must be covered by FAS's regular, unrestricted operating budget. (Undergraduate financial aid increased from \$106.8 million in fiscal 2008 to \$137.2 million last year; the cost is expected to rise some \$10 million more this year.)

A footnote partially discloses other uses of that special, \$95.3-million "decapitalization" from fiscal 2008—most of which was applied to the 2008 and 2009 budgets: part funded capital projects (the principal use of a similar, \$100-million decapitalization in fiscal year 2007, according to Smith's May 2008 annual report) and one-time expenses. But part was applied "to fund the FAS core unrestricted deficit" (neither amounts nor affected fiscal years are specified).

FAS's construction-related debt rose to \$994.5 million at the end of fiscal 2009, from \$938 million a year earlier. Debt service totaled \$86.4 million, up 28 percent from the prior year. In the future, given constraints on University debt issuance and on FAS's ability to service its existing construction-related debt (in light of other expenses and constrained revenues), it is difficult to imagine sustaining comparable levels of capital investment.

Two final items illuminate the relationship between FAS—and by proxy, other Harvard schools and academic units-and the central administration. In fiscal 2009, FAS reported an endowment decapitalization of \$81.8 million for "central administrative overhead"—its share of the half-percent assessment for the "strategic infrastructure fund" (SIF) used to defray Allston-related development expenses (a total of \$176 million Universitywide for the fiscal year). A separate footnote spells out FAS's "University Assessment," a levy of 2.6 percent on the faculty's total operating expenses to pay for legal, accounting, information-technology, and other services provided by the central administration. That assessment, at the same rate for all schools. is based on their expenses of two years earlier; for fiscal 2009, FAS paid \$28.9 million.

From the central administration's perspective, these formulas signal leaner years to come. The SIF distribution will fall sharply, reflecting the much-reduced value of the endowment; and the University Assessment may come under pressure to the extent that schools' expenses flatten or decline in the future as their operating distributions from the endowment are reduced.

Capital spending and property acquisitions totaled \$644 million, up about \$50 million from fiscal 2008. Major projects included the Law School's Northwest Corner

complex; the prospective renovation and expansion of the Fogg Art Museum; and the Allston science complex. Shore said Harvard was "still in the process of planning and thinking about the options for all" major construction projects: design details, construction costs, and financing are still being reevaluated.

Unanticipated but significant projects are the renovation and relocation of Cambridge laboratories to accommodate stemcell scientists, and similar work in the Longwood Medical Area for bioengineering researchers; both groups had been assigned to the Allston complex. These extra

costs will be covered by the Allston-related infrastructure fund (the half-percent annual administrative levy on endowment accounts yielded \$176 million in fiscal 2009).

No other significant work is in the pipeline. Instead, Shore noted, Harvard must identify appropriate interim uses for the Allston properties it has acquired but now will not occupy or redevelop soon. He said institutional uses, codevelopment options, and private use by other investors might be considered.

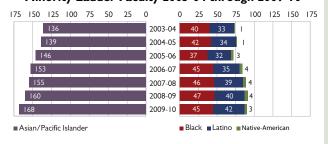
SHORE DID NOT FORECAST University expenses for the current fiscal year, nor

Faculty Diversity Developments

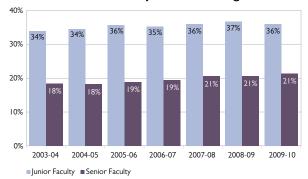
The number of ladder faculty members at Harvard (professor, associate professor, assistant professor) rose by 96 (7 percent) from 2003-2004 to the current academic year: a period during which women made gains, but—among underrepresented minorities—black and Latino professors showed only slow progress. The data were published in November in the annual report of the Office of Faculty Development and Diversity (FD&D—www. faculty.harvard.edu). Ironically, in the current economic climate, further progress may come principally from retirements by full professors, who constitute two-thirds of the faculty.

Women now hold 26 percent of Harvard's ladder-faculty po-

Minority Ladder Faculty 2003-04 through 2009-10



Women Ladder Faculty 2003-04 through 2009-10



sitions (395 out of 1,507) and minorities 17 percent (258 positions) according to the report. Both groups are much more heavily represented in the junior ranks.

The data, published under the auspices of senior vice provost and FD&D director Judith D. Singer, show that within the Faculty of Arts and Sciences (FAS), women hold 22 percent of the senior professorships, but 37 percent of the junior appointments. Women hold 23 percent of the full professorships in social sciences, 32 percent in humanities, 12 percent in natural sciences, and 9 percent in engineering. It's a different story lower down the ladder: 46 percent of junior-faculty members in social sciences are women, 40 percent in humanities, 28 percent in natural sciences, and 22 percent in engineering. In the professional schools, the proportion of women in the full-professor ranks ranges from a low of 14 percent in the dental school and 16 percent in the medical school (excluding the faculty in the affiliated hospitals) to highs of 36 percent in divinity and 37 percent in education (where Singer herself is Conant professor of education).

The population of minority faculty members remains small, with Asian/Pacific Islanders accounting for 168 ladder positions (and for two-thirds of the growth in the past six years), and black, Latino, and Native American professors as a whole holding just 90 positions—respectively, 3 percent, 3 percent, and 0.2 percent of the faculty overall.

The number of women faculty members has risen by 55 (or 16 percent) during the past six years. The number of black faculty members has risen by just five since 2003-2004, to 45. From 2003-2004 to the current year, the share of junior-faculty appointments held by women has risen from 34 percent to 36 percent, while the proportion of senior-faculty appointments has risen by 3 points, to 21 percent.

Today—with new hiring slowed significantly in FAS, the largest faculty (about half the University total), and retirement incentives offered to 180 tenured professors (see harvardmagazine.com, Breaking News, December 2, 2009)—the proportionally higher representation of women among junior professors would tend to increase diversity in the wake of senior-faculty retirements, all other factors held equal. Given the very small number of black, Latino, and Native American junior professors, the effect of retirements on further diversifying the faculty from among these underrepresented groups would be negligible.

the likely change from 2009. Harvard has set its endowment distribution to the various schools at a lower level, but other factors—sponsored-research support, the volume of giving—will still affect revenues and expenses. Most schools have some reserves (for instance, see "FAS's Progress and Prognosis," November-December 2009, page 58) to help buffer the budget cuts they would face otherwise.

Shore also pointed to longer-term opportunities for administrative savings, in functions ranging from procurement to the provision of human-resources expertise to information systems and technology. The goal, he said, is not simply to centralize, but to find the best performers and practices, adopt "different aggregations of activities," and realize economies across the institution. Such savings, he said, are meant to support academic aims—preserving junior-faculty slots, for example: just one item among those at the core of Harvard's mission.

From a financial manager's perspective, Shore said, the new reality means maintaining a much more flexible posture toward plans and budgets, testing diverse scenarios at different revenue levels, and helping the whole community cope with heightened uncertainty by assuring that Harvard can be kept appropriately nimble. A Financial Management Committee (expanded to tap alumni and faculty expertise, and including both Rothenberg and HMC president and CEO Jane Mendillo) is better integrating University and endowment perspectives on risk, risk management, liquidity, and investment opportunities. It advises Shore himself, Katie Lapp (the new executive vice president), and through them, President Drew Faust and the Corporation, where financial policies and endowment distributions are finally vetted and approved.

In any event, Shore said, the critical balance remained the same: not cutting budgets so deeply now that essential activities were irreparably harmed, but not treading so lightly that cutting would have to extend many years into the future to restore distributions from the now-reduced endowment to a sustainable level. If the balance can be set properly, he said, once investment returns strengthen, Harvard will find itself sooner able to increase those distributions once again, to support essential academic work and innovations.



Radcliffe's New Life

TEN YEARS AGO, Radcliffe ceased to exist as a college. But reincarnated as the Radcliffe Institute for Advanced Study (RIAS), it has done anything but fade quietly into history. Where some saw the end of an era, those guiding Radcliffe forward saw the potential for a new kind of greatness. Both the trustees of Radcliffe College and those acting on Harvard's behalf "really did want to create something not just constructive, but imaginative and powerful," Neil L. Rudenstine, the University's president at the time of the institute's creation, recalled at a symposium held October 8 and 9 to mark its tenth birthday.

Those founders wanted "a refuge for scholars" that would also be "an active participant in advancing the University's intellectual agenda," the institute's current dean, Barbara J. Grosz, said at the symposium. Grosz, who is also Higgins professor of natural sciences, joined the institute in 2001 as its first dean of science. (She became dean in 2008, after inaugural dean Drew Faust left for higher office.) In a November interview, Grosz said RIAS had met its major goals for its first decade: establishing an excellent fellowship program that draws scholars from a wide range of fields and advances thinking in culturally current areas such as stem-cell science and new media. The task for the next 10 years, she said, is rounding out the balance of RIAS's offerings and integrating them more fully within Harvard.

That the fellowship program has blossomed is clear from the list of honors won by past fellows, including at least five Pulitzers, 14 Guggenheims, and one MacPanelists at the tenth-anniversary symposium discuss how their time as Radcliffe Fellows helped them bridge boundaries between genres. From left to right: English professor Leah Price, painter Beverly McIver, filmmaker Jeanne Jordan, composer Tarik O'Regan, filmmaker Anne Makepeace, and lawyer Hauwa Ibrahim.

Arthur. In fact, Harvard Overseer Susan Wallach '68, J.D. '71, who was a member of the Radcliffe College Board of Trustees at the time of the merger, noted at the symposium, "It is harder to get a Radcliffe Fellowship than it is to get into Harvard College." The program—which accepts 6 percent of applicants, compared to the College's 7 percent—holds such strong appeal, Grosz said, because Radcliffe Fellows "don't do their work isolated, on their own. They do it as part of a community of scholars, scientists, and artists."

The program also enriches Harvard's academic life through fellows' talks and their participation in academic conferences, among other things. Radcliffe professorships also help the University recruit sought-after scholars with the prospect of spending two years (of their first five as Harvard faculty members) as Radcliffe

The institute "plays an especially important role for undergraduates interested in pursuing academic careers" by enabling interaction with scholars from around the world, says Scott Duke Kominers '09, who regularly attended fellows' presentations, lectures, and teas at RIAS as an undergraduate—and continues to do so as a first-year student in the business-economics Ph.D. program offered through the Business School and the Graduate School of Arts and Sciences.

The fellows are, thus, not "individu-