worsens the fiscal problem by more than $13 million. Faust and Forst are "taking a hard look at hiring, staffing levels, and compensation"—and "reconsidering the scale and pace of planned capital projects," including Allston.

To maximize financial flexibility during a period of disrupted markets and a recession of uncertain depth and duration, the December 2 memorandum outlines an additional financial strategy.

First, taking advantage of the University's top-tier (Aaa/AAA) credit rating and the historically low interest rates, Harvard will issue "a substantial amount of new taxable fixed-rate debt." Forst said borrowings will depend on the terms and structure of debt that can be sold in the market over time. (According to the 2008 University financial report, taxable bonds and notes outstanding as of last June 30 were $1.3 billion; tax-exempt debt issued at fixed rates totaled $1.1 billion.) The aim is to accumulate cash "to fund ongoing operations and critical academic and research priorities."

Second, to reduce risk in the cost of renewing its short-term debt in volatile markets, the University intends now to replace such borrowings with longer-term tax-exempt debt instruments. Variable-rate notes and commercial paper outstanding totaled about $1.6 billion as of last June 30; the exact amount now is presumably somewhat greater.

These steps, if effected, may help alleviate other challenges, including those facing the endowment managers. Although HMC declined to comment, it—like other long-term investors with similar strategies— likely has substantial contractual commitments to deliver funds in the future to investment-management firms (which in turn make distributions of funds from successful investments to their limited-partner clients, such as HMC). That is the norm for private-equity, venture-capital, and hedge funds, and for various kinds of real-estate and commodities assets; such assets collectively make up perhaps half or even more of Harvard's endowment holdings.

(One institution that discloses such issues, the University of Virginia Investment Management Company—UVIMC—revealed that as of September 20, it has "un-

HARVARD PORTRAIT

Chiara String Quartet

When Julie Yoon joined the Chiara String Quartet in 2000, she not only gave up a spot in a master's program at Juilliard, but also agreed to pull up stakes in New York City and put them down in Grand Forks, North Dakota. The Manhattan-based quartet had won a rural residency grant, but had lost its second violinist to an arm injury. Those left (Rebecca Fischer on violin, Jonah Sirota on viola, and Gregory Beaver on cello) needed a replacement. "The fact that they were going to North Dakota to do this residency," Yoon says, "was a strong indication of what kind of people they were and what kind of group they wanted to be." The players aim to be musical pioneers in both what and where they perform: Haydn to Schoenberg, in concert halls, company cafeterias, schools, and even nightclubs. Now, as the Blodgett Artists-in-Residence, they will spend 12 weeks (spread across three academic years) teaching and performing at Harvard. Group members say they went out West because that afforded so many opportunities to play (albeit sometimes at schools at 7 A.M., with half-frozen fingers). They also had time to settle on ways to resolve disputes. In an orchestra, notes Beaver, "You can play with people you have active lawsuits against. Not so much in a quartet." ("At least [the quartet] won't last," adds Fischer.) They have since spent two years in New York in a residency with the Juilliard String Quartet, and now hold a long-term position at the University of Nebraska that enables them to spend 60 percent of their time traveling and performing. "That's really why we do this," explains Sirota. "We also love to teach, but performance comes first."

Courtesy of the Chiara String Quartet