

Cash Me If You Can

by Daniel Golden [April 2009 Issue](#)

University endowment managers followed Yale investment guru David Swensen into private equity and hedge funds, eager for the same 16 percent annual returns he got. Now with the crash, they're short on cash. Luckily for Yale, Swensen didn't always follow his own advice.

Flapping his arms, David Swensen pulls a pop-eyed, mock-outraged face. He's mimicking his critics—second-guessers, in his view, who praised him before the economy caved but now accuse him of leading the nation's endowments astray. "What a stupid idea that was!" Yale's chief investment officer yells, role-playing.

Swensen's idea, implemented at Yale and copied nationwide, was that universities should shift their endowment money out of traditional investments such as stocks and bonds and into higher-yielding ones like private equity, hedge funds, and real estate. The Yale model, as it came to be known, perennially outperformed stodgier strategies, gaining Swensen gurulike adulation. Since June, though, endowments on average have given up 22.5 percent of their value. Moreover, the economic crisis would seem to have exposed a major flaw in the Yale model: Alternative investments like private equity and real estate are very difficult to convert to cash without significant loss, leaving universities with a dearth of ready money. As a result, many schools have slashed operating budgets and sold off stocks at depressed values. ([View a graphic of how Swensen's protégés are doing at their respective institutions.](#))

Swensen is unrepentant. Walking me through his offices on the fifth floor of a brick building a couple of blocks from campus, he shows me a slip of paper documenting the Yale endowment's performance in the decade ending June 30, 2008: up 16.3 percent annually, compared with 6.5 percent for the average college endowment and 2.9 percent for Standard & Poor's 500-stock index. The value added to Yale's coffers was \$14.9 billion.

Since Swensen took over in 1985, Yale's endowment has led all universities in average returns and leapfrogged Princeton and the University of Texas to become the second largest, behind Harvard. In the spring of 2008, alumni mounted a campaign to name a new residential college after him. His insights into the markets landed him a spot on President Barack Obama's economic-recovery advisory board.

Tributes clutter the walls and shelves of Swensen's office: a 2006 fan letter from Warren Buffett ("Yale and the investment world owe you a great deal"); the Mory's Cup for distinguished service to Yale, an award whose other recipients include former president George H.W. Bush ("Bush one, not Bush two," Swensen notes); and a limerick in his honor by the economist and Nobel laureate James Tobin, celebrating the endowment's reaching \$10 billion in 2000. Called "Son of Sven," it neatly summarizes the biography of Swensen, a Wisconsin native with a doctorate in economics from Yale: "A young Viking, a badger called Dave / Determined poor Eli to save / First he'd be / A PhD / And then make those markets behave." Mugs illustrated by the children's book author Sandra Boynton commemorate several endowment milestones: "I actually drink out of the \$6 billion coffee mug every morning," Swensen says.

He earned these plaudits with a bold strategy that increased Yale's stake in private equity from 3.2 to 20.2 percent; in real assets—timber, real estate, and the like—from 8.5 to 29.3 percent; and in hedge funds, from zero to 25.1 percent. During his tenure, the share of Yale's endowment invested in domestic stocks and bonds

has dropped from 71.9 to 14.1 percent.

In his 2000 book, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*, and in numerous speeches, Swensen championed such alternative investments. He argued that while beating the stock market is almost impossible because so much information is available about public companies and shares are accurately priced, shrewd managers can exploit inefficiencies in the pricing of less familiar private assets. Diversification into alternatives, he added, reduces risk.

He contended that keeping funds in investments that are more liquid—that is, easily converted into cash—is more valuable to short-term players than to endowments, which can afford to wait until private assets are sold or go public. He brushed aside concerns that most alternative investments are tied up for years and therefore illiquid. “Investors should pursue success, not liquidity,” he wrote. “Portfolio managers should fear failure, not illiquidity.” And again: “Accepting illiquidity pays outside dividends to the patient long-term investor.”

For endowment managers, the Yale model appeared to solve a constant dilemma: how to generate returns high enough to support their operating budgets and simultaneously preserve capital for the future by allowing growth to keep up with inflation. Princeton, the Massachusetts Institute of Technology, and Bowdoin College hired Swensen protégés to run their endowments. By the 2007 fiscal year, colleges were devoting 42 percent of their endowments to alternative investments, up from 23 percent in fiscal 2000, according to Commonfund, a money manager for nonprofit institutions. Endowments grew so fast that many schools, including Yale, hiked their payouts—the percentage allocated to the operating budget. Private equity was particularly rewarding, averaging a 16.9 percent annual return to university endowments.

Now, the recession that has already undone the reputations of Alan Greenspan, Robert Rubin, and other economic sages threatens Swensen’s too. Nearly every sort of alternative investment has been slammed, undermining Swensen’s diversification rationale, and his advice to downplay liquidity has backfired. With private donations dwindling and students clamoring for aid, universities that followed the Yale model find themselves in a plight that could be called cash-22. The publicly traded stocks they still own have plummeted in value, leaving the schools overdependent on illiquid alternatives—and constrained by contractual obligations to invest even more. The Yale model assumes returns when private holdings go public, but no initial public offerings are taking place.

From the best and brightest on down, most universities failed to anticipate this quandary. Harvard, Duke, Columbia, and the University of Virginia are looking to unload private equity at a loss by trading it on a secondary market that has emerged as a last resort during the cash crunch. Many schools are also trying to redeem shares in hedge funds—generally considered the most liquid alternative investment—only to encounter “gates” or “lockup clauses” in their contracts that prevent them from getting their money back. Brandeis University, which boosted its allocation to alternative investments from 29 percent of its endowment in 2003 to 65 percent in 2008, has seen its endowment drop 23 percent since June, and several of its big donors have been hit by losses in the Bernie Madoff fraud. To raise cash, Brandeis has considered closing its art museum and selling its renowned collection of contemporary art. Other schools are imposing salary and hiring freezes and delaying building projects. Like many investors who bet on mortgage-backed derivatives and similarly novel strategies during the boom, the Yale model’s adherents have painfully learned the old lesson that greater returns carry greater risk.

“Institutions were attempting to emulate the Yale model because it seemed to make sense,” says the chief investment officer for a university with a billion-dollar endowment. “Now this is the squeeze that everybody’s in. Were we wrong to go into this asset class? Is the asset class dead forever? Do we have to change the model

going forward? These are all questions people are grappling with.”

David Salem regards Swensen as a mentor. He is the founding president of The Investment Fund for Foundations, or TIFF, which manages approximately \$7 billion for more than 700 nonprofits, including Harvard, Stanford, and Yale-New Haven Hospital. The two men are occasional squash partners; Salem is the better player, and Swensen doesn't like to lose. After one defeat, Swensen brooded during dinner and finally interrupted an unrelated conversation with Salem to exclaim, “Damn, I should have won that point!”

Over a virtuous lunch of grilled-chicken salad in TIFF's Harvard Square office late last year, Salem told me that many endowments “slavishly imitated” Yale. “It's hard for institutions that haven't been as successful as Yale to resist the temptation.” The Yale model is probably “true over time,” he added. “But in calendar '08, it's exactly wrong. The less liquid you are, the more you're getting hurt.”

Nevertheless, Yale doesn't seem to be hurting as much as some of its imitators. That's because Swensen, it turns out, hasn't always followed his book's advice. He pursued success and liquidity, employing lessons he had learned from prior bubbles and crashes to ensure ready access to cash. Now, with his counterparts at other top colleges dumping private equity investments in a panic, Swensen, ever the contrarian, is looking to buy more. Those who know him would expect nothing less.

At Ted Smith's going-away party in 2003, his co-workers at the University of Virginia's endowment management office presented the analyst with two keepsakes. Predictably, one was a pewter cup in the style designed by UVA founder Thomas Jefferson and engraved with the university's rotunda logo. The other was a book: Swensen's *Pioneering Portfolio Management*, signed by Smith's colleagues on the front and back flyleaves.

That gift, Smith says, “tells you something about how things were” at Virginia in that era. Its investment staff couldn't escape the Swensen doctrine. In May 2000, the month that his book was published, Swensen spoke at a board meeting of the university's management arm. UVA's investment brass made *Pioneering Portfolio Management* required reading for every employee. And in 2002, the previously conservative university targeted a startling 85 percent of its endowment toward alternatives.

The Yale model was “very, very influential” at Virginia, says Henry Kaelber, chief financial officer of the university's investment office from 1997 to 2003. “Everybody respected, recognized, and saw great results from the Yale model.” Today, UVA epitomizes the predicament of Swensen's acolytes—particularly in its overexposure to private equity. Normally, it takes years for an endowment to build up significant private equity holdings. That's because when an endowment pledges a certain sum to private equity managers, they don't invest all the money at once. Instead, they ask for it gradually as suitable opportunities arise to buy companies.

But Virginia and other universities tried a shortcut, outlined in a 2001 article by two of Swensen's top lieutenants.

The schools pledged sums to private equity that far exceeded their investment targets. Although Virginia set a target of investing 20 percent of its endowment in private equity, it committed 35 percent, or \$1.8 billion. The rationale was that the actual investment wouldn't substantially exceed 20 percent because as the outside managers gradually drew down the money, the university's coffers would be replenished by returns from IPOs

of companies that the funds had bought. This approach, says an endowment insider, “is precisely why we are where we are today—why UVA is crunched.”

When the market soured, Virginia couldn't rely on revenues from successful buyouts to pay its obligations, since IPOs have dried up. In addition, some of its private equity investments tumbled in value, such as its stake in a 2004 Bain Capital fund that acquired now-struggling retailers like Toys R Us in highly leveraged deals. Nervous endowment officials announced plans to fund capital calls by selling \$400 million apiece in stocks and hedge funds.

The university has also cut spending and frozen salaries.

UVA officials maintain that the university has ample cash to meet its obligations. But Kaelber says the university increased its holdings in private equity too fast. “The word that comes to mind is overindulgence,” he says.

Graying but still boyish at 55, Swensen wears his devotion to Yale on his chest, his lanky frame comfortably encased in a fleece athletic vest with Yale insignia. Yet underneath, he remains the blunt, cocky outsider who stormed New Haven as a graduate student in 1975. Back then, he rebelled against the snobbery of a Yale-sponsored wine tasting and organized a beer tasting, which proved so popular that it has become an annual event.

Swensen has just returned from London, where he vied with several money managers in an all-night session of a particularly fiendish poker variant called Beirut. When I ask if he was a winner, he just grins. Swensen is an animated talker, rubbing his hands together or gesturing out the window of his office toward the university's administration building. Normally, he works alongside his 22 staffers, who monitor the endowment's performance. The bulk of the money is actually invested by outside fund managers whom Swensen handpicks through a vaunted process of extensive interviews, research, and other due diligence.

Swensen tells me that Yale is about to break precedent and announce endowment results before the end of the fiscal year. They aren't good: down 25 percent, to \$17 billion from \$22.9 billion. He concedes that the economic crisis has identified “real weaknesses” among some of Yale's outside managers, including one who put together a land-development fund without enough capital.

On the other hand, Swensen points out, he's still beating the stock market, which has slid by an even greater amount. When critics deride the performance of alternative investments, “they aren't asking, ‘Relative to what?’ Hedge fund returns are negative. That's very disappointing, but they're still far superior to equity returns,” he insists, spinning the numbers like a campaign manager. Although it's too early to evaluate how private equity has done, he adds, “I'd bet, two or three years from now, when we look back, high-quality private equity managers will produce superior returns” to public equities.

Swensen disavows any responsibility for the troubles of other endowments that adopted the Yale model. He's heard the attacks, he says: “Sometimes it's me personally, or Yale. They put my name on it, or Yale's name on it, and criticize the approach.”

Although other colleges may have embraced alternative investments without sufficient liquidity, he says, that's not his fault. “I never took the position liquidity wasn't important,” he insists, just that it's generally overvalued.

Yale's followers, he adds, may have lacked its expertise in picking outside managers and its access to premier funds. (His book did caution imitators that "playing follow the leader exposes institutional assets to substantial risk.") In any case, he says, other universities may be "overreacting a little"—rushing to sell commitments for fear of capital calls that may never come.

Yale, he emphasizes, won't budge. "It's hard to sell illiquid assets in a market that values liquidity above all else," he says. Instead, "we're actually looking at opportunities to pick up things in the secondary market."

He vigorously defends his approach: "It's wrong to say, on the basis of a few months, that the model is in question." The value of diversification, he predicts, will reemerge as the economy recovers. "My response to the argument that diversification has failed amid the crisis is that you're looking at too short a time horizon," he says. "I suspect, give us another couple of years, you'll see the benefits." As for liquidity, widely considered his model's vulnerable point, Swensen says that Yale was prepared and is deploying "every tool in its toolbox." For instance, it raises cash by selling Treasury bonds and notes on the so-called repo, or repurchase, market with an agreement to buy them back. He professes to be "pretty relaxed about Yale's situation."

Nevertheless, Yale has capped pay increases for faculty and professional staff and plans to cut the budget for nonfaculty 7.5 percent, largely through attrition. It also may be forced to postpone construction on two new residential colleges, which means that a Swensen College won't be christened anytime soon.

Swensen's fascination with finance and his competitive spirit emerged during his upbringing in the small town of River Falls, Wisconsin. The eldest of six children of Richard Swensen, then dean of arts and sciences at the University of Wisconsin's River Falls campus, and his wife, Grace, who would become a Lutheran minister, he used cash gifts from relatives for his church confirmation to buy shares in Kodak and AT&T.

It was a close-knit family: Although they were high achievers and could have had their choice of colleges, the children all stayed home and attended UW–River Falls. Sibling rivalries flourished, particularly between Swensen and the next oldest, Stephen. During one handball game, Swensen broke a finger but refused to quit. "He wasn't going to let his younger brother beat him," recalls Stephen, now director for quality at the Mayo Clinic.

Their one-upmanship has lasted into adulthood. After both became authors, Swensen liked to point out that his books outranked Stephen's in sales on Amazon.com. Swensen would also describe his brother's medical texts, which contain scientific photos, as picture books. Stephen's standard retort was that his books were more expensive and therefore more important. "He is a very, very competitive person to this day," Stephen says.

Obsessive too. This past summer, the brothers hit the links at a family reunion in Minnesota. "While we were golfing," Stephen says, "he did tens of millions of dollars of rebalancing"—buying or selling to realign the endowment with its allocation targets. "It apparently didn't distract him from his game, because he still beat me."

After six years in exile on Wall Street, where he worked in corporate finance for Lehman Brothers and Salomon Brothers, Swensen returned to Yale in 1985 when his mentor, James Tobin, arranged his appointment as chief investment officer. As Swensen tells the story, he looked to other universities for guidance, since he had never managed a portfolio, and was surprised to find that 90 percent of their assets were invested in domestic

stocks, bonds, or cash. He thought this approach didn't make a lot of sense—and the Yale model was born.

Some of his counterparts at other universities say they made similar moves but Swensen hogged the credit. Asked if Swensen was a pioneer, the former head of another major endowment sniffs, "That's the title of his book." While praising Swensen as a "leading thinker in this area," former Duke chief investment officer Eugene McDonald says, "What he was doing out there, the rest of us were doing also."

"Relative to Harvard, he's not a pioneer at all," says an industry source. "I wish he would back off on the personal credit thing and take recognition for having a tremendous investment record."

Josh Lerner, a Harvard Business School professor who wrote case studies of the Yale investments office, says that Harvard and Yale "were more or less tracking each other."

Swensen disagrees. "There's no question Yale was substantially ahead of Harvard, Princeton, Stanford," he says. "They followed after a short lag, a year or two. I don't want to pound my chest about this, but it's pretty clear."

Even within Yale, Swensen wasn't a one-man show. It wasn't until his longtime friend Dean Takahashi joined the investments office in 1986—he's now senior director—that Yale began tilting toward alternatives. In his book, Swensen acknowledges that Yale's approach to investing represents their "joint intellectual property."

Whether Swensen was first or not, he was widely acknowledged as the best. His peers cite his uncanny talent not only for picking managers but also for structuring their fees to maximize incentives for high returns. "He's a great leader," Lerner says. "He's got a core of people who have stuck with him a long time. Like David himself, they could have made more money and gained more glory on Wall Street."

Swensen has kept Yale's returns on top despite a stressful domestic life. Alexander, the second of his three children, was stricken with lymphoma in 2000, at the age of 12. According to his uncle Stephen, Alex came "very close to death" and required a bone-marrow transplant. Then, in 2002, after 20 years of marriage, Swensen and his wife, Susan, separated and she filed for divorce.

The ensuing court battle, chiefly over the children's schooling and whether Susan could move them to Vermont, was bruising. The couple agreed to communicate only by email or voicemail; in 2004, Susan chided Swensen for forgetting her birthday and being "critical of everything I have done without playing an active role in the kids' lives." Swensen asserted in court documents that he "played a significant role" and coached his younger son Timothy's sports teams.

The divorce was finalized in 2005, with joint custody. Swensen was ordered to pay alimony of \$35,000 a month—more than the salaries of all but three Yale employees: Swensen himself, the president, and the provost. Swensen, who earned \$2.7 million in salary and deferred compensation in 2006, the last year for which Yale has reported data, is the school's highest-paid employee.

Swensen is happier now. According to his brother Stephen, he has a "lovely" long-term girlfriend with children from a prior marriage. Alex, considered cured, attends Clark University in Worcester, Massachusetts. Swensen's eldest child, Victoria, goes to Yale. And the financial crisis hasn't quelled Swensen's passion for his job.

"He has zero, zero, zero interest in ever doing anything except what he's doing," Stephen says. "He wants to

die doing what he's doing."

Though he didn't mention the episode in his book, Swensen learned to take precautions to safeguard liquidity during the 1999–2000 tech boom. At the time, Yale's venture capital holdings included several internet firms that went public and soared to astronomical valuations. Worried that they were absurdly overvalued, Swensen hedged them. In the end, he was proved correct: The bubble burst, and Yale protected its prior gain. But in the short run, Swensen had to figure out how to raise cash to support the hedges, particularly when prices moved against Yale and it received margin calls. A person close to the endowment says that the hedging during the tech bubble served as a "liquidity fire drill."

The experience helps explain why Yale may face less of a cash squeeze now than some other endowments. Updates of a Harvard Business School case study of Yale's investments office convey a preoccupation with liquidity that would most likely surprise Pioneering Portfolio Management readers. "Swensen and Takahashi wondered about the risks and challenges that the coming years would pose to the Yale endowment," states the 2006 study. "One was the increasing illiquidity of the portfolio."

Swensen was as skeptical of the mortgage boom as he had been of the tech bubble. At his urging, one of his outside managers made what Swensen calls a "supersize" bet against subprime-mortgage-backed securities, which paid off when the real estate market collapsed. In December 2007, three months before the fire sale of investment bank Bear Stearns, Swensen moved Yale's operating funds from money markets into Treasury bills.

"That's a pretty extraordinary move," Swensen says. "We were saying we'd forgo normal income from cash because we were worried about the integrity of the system." His decision proved prescient in September, when the country's oldest money market fund "broke the buck"—meaning that its value dipped below a dollar for each dollar invested. "When will I go back into money market funds?" he asks. "When a sense of calm returns to the markets. We're a long way from that."

In contrast to Yale's cautious use of working capital, Harvard adopted a riskier strategy—and is now suffering for it. Under Harvard's decentralized, "every tub on its own bottom" governing structure, tuition and government grants are typically paid to individual schools—the undergraduate college, law, business, and so on—rather than to the university itself. The central administration borrows its working capital from the schools, paying them the Treasury-bill interest rate, and then pools most of the money—which amounts to several billion dollars a year—with Harvard's endowment. In boom times, it pockets the difference between the T-bill interest rate, typically 4 percent, and the endowment's higher return.

Over the years, Harvard told *Condé Nast Portfolio* in a statement, this pooling has "generated additional monies that have allowed the university to fund centrally many projects for the common good," ranging from graduate housing to financial aid.

Not this year. Harvard acknowledged that its "working capital pool has been negatively impacted by its exposure to the market downturn." The university has to cover its debt to the schools. Since Harvard's endowment is weighted toward alternative investments—although not as much as Yale's is—the pooling of working capital with the endowment hurts the university's liquidity. Now the nation's richest university is looking to sell \$1.5 billion in private equity and has retrenched more dramatically than Yale. Harvard has frozen faculty salaries and halted nearly all searches for tenure-track appointments. Its investment arm has announced plans

to cut staff by 25 percent.

Moreover, Harvard's endowment appears to be more leveraged than Yale's. While Yale invests with some firms that use leverage, it largely avoided the mega-buyouts of recent years that are now groaning with debt. Harvard, which manages its endowment internally, uses "a variety of financial instruments with off-balance-sheet risk," including "futures, options, credit default swaps, exchange agreements, interest rate cap and floor agreements, and forward purchase and sale agreements," according to its 2008 financial report. Although Harvard's endowment outperformed Yale's in the fiscal year that ended June 30, before the economy tanked, Swensen is unlikely to suffer that indignity this year: Harvard is said to be anticipating a loss of at least 30 percent, compared with Yale's 25 percent.

The financial crisis continues to test the faith of Swensen's disciples. Most are hanging in—but not the California Institute of Technology. Until 1997, Caltech had a plain-vanilla portfolio, with only 1 percent of its endowment invested in alternatives. Then, after consulting with Swensen and other Ivy League endowment managers, Caltech boosted alternatives to 25 percent. It raised alternatives again in 2002, to 40 percent, and in 2006, to 60 percent, including 25 percent in hedge funds, 13 percent in private equity, 10 percent in real estate, 8 percent in timber, and 2 percent apiece in energy and commodities.

But in August 2007, recognizing that the U.S. economy was shaky, Caltech decided to begin selling domestic stocks and keep 10 percent of the endowment in cash. Now, Caltech is backing away even more and converting 40 percent of its endowment to cash, mainly by selling stocks and redeeming investments in hedge funds that weren't locked up. Chief investment officer Sandra Ell says she considered selling private equity as well but sat tight because the secondary-market prices were too low. "You'd be lucky to get 30 to 50 cents" on the dollar, she says.

"We literally saw there was truly no place to hide," Ell says. "Every single pocket of our portfolio was affected. Our view is truly that this situation could get even worse and it's not going to get better for another year. Our goal is not to make money now. Our goal is to preserve that capital off which the institution funds its operations."

Swensen says Caltech-style market timing is risky: "When you go away from a sensible long-term strategy, you have to be right twice—when you exit and when you get back in."

While Caltech is an extreme example, many universities are reassessing the Yale model. Allan Bufferd, treasurer emeritus at MIT, says endowments and foundations are "reexamining their asset allocation policy" and "more rigorously considering their liquidity risk."

"We were an early mover in all the nontraditional stuff too," says William Spitz, who retired in 2007 as Vanderbilt University's chief investment officer. "We weren't very far behind Yale and Harvard." But now, he explains, "I've heard people say, 'All these different kinds of investments got clobbered. Maybe we don't need such a complex portfolio.'"

Rice University in Houston faces particularly intense liquidity pressures because it relies on its endowment to contribute almost half of the operating budget, a higher proportion than most other schools. Scott Wise, who in two decades as Rice's chief investment officer has led its Swensen-esque diversification from stocks and bonds into nontraditional investments, says it's carrying more cash in its portfolio and trying to sell some hedge

funds: “We’re all learning that many of the hedge funds were not as liquid as was expected.”

Fortunately, endowment managers seeking counsel in these troubled times can turn to a fully revised and updated edition of *Pioneering Portfolio Management*, published early this year by Free Press. On January 9, it ranked 1,269 on Amazon.com, far ahead of *High-Resolution CT of the Chest: Comprehensive Atlas*, by Eric Stern and Stephen Swensen.

The new edition tempers the original’s attitude toward liquidity. For instance, the heading “Illiquidity’s Attractions” has been replaced by the more neutral “Illiquidity and Information.” And the topic sentence of that section—“Illiquidity accompanies several characteristics prized by serious investors”—has been deleted.