Stress Testing

How Can You Ensure Your Institution's Fiscal Health?

By Stephen G. Pelletier // Volume 23, Number 5 // September/October 2015

These days, finances at most colleges and universities are stretched nearly to the breaking point. By what markers and metrics can board members best gauge an institution's fiscal health?

Prior to Sweet Briar College's subsequent rebirth, its closing raised many questions, not the least of which was, "Couldn't we have seen the college's demise coming?" Or, to be more precise, aren't there markers of financial health that can tell us when an institution risks fiscal meltdown? Similar questions arose around the banking industry after the financial collapse of 2008. In response, federal legislators enacted regulations to make the workings of big banks more transparent.

While no one is clamoring for similar regulations in higher education, might colleges and universities draw lessons from the experience of the banking industry? In an era when many institutions must be especially diligent in working to maintain financial equilibrium, how can boards best assess financial viability and vitality in the institutions they serve?

In short, what forms of financial stress testing work in higher education?

Broad Metrics

In its official description as law, the Dodd- Frank Wall Street Reform and Consumer Protection Act, which went into effect in 2012, seeks to "promote the financial stability of the United States by improving accountability and transparency in the financial system." Toward that goal, Dodd-Frank introduced requirements that American banks undergo regular "stress tests" to assess their financial health.

While not tantamount to Dodd-Frank's level of scrutiny, the federal government subjects colleges and universities to financial stress tests of sorts. Each year, the U.S. Department of Education assesses the "financial responsibility" of private and proprietary institutions based on its review of their audited financial statements. (Public institutions are assumed to have a governmental safety net and thus are exempted.) The department weighs factors like institutional debt, assets, and net income to derive an institutional composite score that it uses to help assess an institution's suitability to participate in federal student-aid programs.

Institutions with composite scores below 1.5 are subject to inclusion on a federal list of colleges and universities whose financial situation the Department of Education monitors, again in the context of the awarding of federal studentaid funding. The latest roster, issued in July and listing 483 institutions, was dominated by more than 270 proprietary schools, colleges, and universities. But the list also included about 100 private, nonprofit institutions. Public universities and a handful of foreign institutions rounded out the list.

In 2012, the National Association of Independent Colleges and Universities (NAICU)—in consultation with the National Association of College and Business Officers (NACU BO), the Council of Independent Colleges (CIC), and financial experts—issued a report critical of the government's financial responsibility test. Among other criticisms, the report said government regulators misinterpret or miscalculate financial formulas and use outdated accounting definitions and standards. (After his institution was cited for having "failed" its financial-responsibilitytest for fiscal year 2008–09, then-Guilford College President Kent Chabotar wrote eloquently on the topic in the July/ August 2011 issue of *Trusteeship*.)

A recent task force on federal regulation of higher education, convened by the American Council on Education at the request of a bipartisan group of U.S. senators, examined these issues as well. In a report issued in January 2015, the task force found that the department "has incorrectly interpreted and implemented the accounting definitions and standards used to calculate... financial responsibility" and "failed to follow the statutory requirement to consider the overall financial health of an institution" before failing institutions based solely on their composite scores. The task force called for better policies and more transparency around the test, as well as a provision that would allow institutions to submit additional evidence of their overall financial health.

Yet another marker that is often weighed as a measure of an institution's financial condition is its credit worthiness, as assessed by such organizations as Moody's, Standard & Poor's, or the Fitch Ratings. Those can tell an important part of an institution's financial story, but because not every college or university issues debt, institutions don't necessarily have such a rating. Rating agencies are currently modifying their standards to ensure their continued relevancy.

Other Markers That Matter

Government ratios and independent credit ratings can add to an institution's knowledge base about its financial health, but college and university leaders know that they need to take a deeper dive into their financial performance to reap the kind of information that can drive informed strategy and decision making. Since the 1970s, many institutions have used financial ratios to better understand and interpret financial statements—a construct that was pioneered by KPMG and subsequently fine-tuned by the accounting/consulting giant and partners such as Prager McCarthy & Sealy. (KPMG ratios informed development of the Department of Education's financial tests.)

Essentially, KPMG built off experience in business to establish key benchmarks to assess the financial health of colleges and universities. Those principles are documented in the seminal book *Strategic Financial Analysis for Higher Education* (Prager & Co.), now in its seventh edition, and most recently authored by KPMG, Prager, Sealy & Co., and the consulting firm Attain. Each edition of the book has reflected changes in economic and market conditions and has offered improvements and updates in the methodology.

To distill a rich set of markers and formulae to their barebones essence, the KPMG model focuses on four distinct inquiries:

- The *Primary Reserve Ratio* explores whether an institution's resources are sufficient and flexible or liquid enough to support its mission.
- The *Net Operating Revenues Ratio* looks at whether operating results show that the institution is living within its available resources.
- The *Return on Net Position Ratio* examines how well the institution's asset performance and management support its strategic direction.
- The *Viability Ratio* assesses how strategically the institution's financial resources, including debt, are managed to advance the institution's mission.

The four ratios are melded to produce the Composite Financial Index (CFI), a summary measure of an institution's financial health. The CFI model is predicated on an assumption that institutional strategic planning, risk management, and financial analysis are all interrelated. As the introduction to the most recent edition of *Strategic Financial Analysis for Higher Education* states, "The alignment of strategic financial goals with actions and risk assessment will improve strategic decision making and chances of institutional success.… The mission, as articulated in the strategic plan, is the institutional driver; financial capacity and affordability measure the feasibility of the institution's aspirations."

On the plus side, the KPMG approach to financial ratio analysis proffers important tools proven to help colleges and universities conduct their own version of financial stress testing. Overall, the methodology's intentionality about linking finances, strategy, and risk assessment creates a powerful lens for viewing institutional health. Shedding considerable light on an institution's resources, financialratio analyses help institutions measure performance against strategic goals. The ratios and composite index form a robust framework through which institutions can assess their overall financial standing, risks, and operating efficiency. The data enable institutions to plumb critical questions, such as how liquid their resources are and how well they are using and managing debt. The tools help institutions identify problem areas that need attention and can suggest avenues for improving financial practices. Moreover, the ratios lend themselves to at-a-glance, dashboard reporting, and to presenting complex information in ways that may be more accessible to users not intimately familiar with spreadsheets and more technical presentations of financial data.

Experts are quick also to note the limits of financial-ratio analysis. The ratios shine light on financial statements, but they cannot substitute for deep understanding of the statements themselves. Similarly, the ratios tell only part of an institution's story—institutions need a deeper analysis that includes both qualitative and quantitative assessment. Decisions should not be made based on ratios alone, experts say, but rather should also reflect qualitative evaluations. Looking at data over too short a timeframe might suggest false trends. In addition, colleges and universities that benchmark their ratios with peer institutions need to be very careful to ensure that such comparisons are truly apples-to-apples, as it were.

Additional Factors

While the KPMG framework can provide a certain level of assessment of an institution's fiscal position, experts say those reviews alone do not provide enough detail to fully test financial strength. Rather, they say, every institution needs to also factor in circumstances that are not fully reflected in the ratios. Key markers might include an institution's net assets, the tuition discount rate, and spending of the endowment. Overall, colleges and universities need more robust, comprehensive, but nuanced analytical tools to evaluate these and other critical factors as a means to assess an institution's fiscal vitality. And each institution needs to shape its own markers, tailored to its unique circumstances. For example, an institution might have a sound and strategic reason for a temporary decline in its net assets.

AGB board member Verne O. Sedlacek, a visiting fellow at the M.J. Murdock Charitable Trust, retired as president and CEO of Commonfund in 2015. Earlier he served as president of John W. Henry & Company, Inc., a large alternative investment manager, and as executive vice president and chief financial officer for the Harvard Management Company. Sedlacek says that while models like KPMG's ratios are helpful as a start in assessing an institution's financial health, "every institution is going to be different in terms of its sensitivity to revenues and expenses." Accordingly, he says, financial reviews should look at the distinct circumstances of a given institution. "It can't be done generically. It needs to be done on an institution-by-institution basis," he says. "You have to be able to drill down into individual institutional cash flow." As part of governance, Sedlacek says boards should spend a portion of their meetings talking about different assessments of institutional fiscal health and their impacts and then use that information to "see if there's anything you can do to ameliorate some of the stresses."

"Just having an index score doesn't tell you much," says Michael Townsley, a consultant with Stevens Strategy and former president of the Pennsylvania Institute of Technology. "To really understand what's going on, you need to take those ratios and break them apart, then watch the trends that emerge and manage those."

Townsley, the author of *The Small College Guide to Financial Health: Beating the Odds* (NACUBO, 2009), says that "there are certain other variables that are also predictive of whether an institution is having problems." Trends in new student enrollment are one such marker, he posits, along with graduation rates, student-loan default rates, and student attrition. Other potential financial stressors, he says, are the institution's cash position, uncollected receivables, and, of course, the flow of gifts and grants.

At smaller colleges and universities, for example, Townsley says the balance of financial health could be shifted by loss of cash reserves, significant increases in uncollected receivables, and a tougher federal response to an institution identified as being in a weak financial position. Changes in student demographic trends—such as shrinking pools of 18- to 22-year-olds in some regions—can also be financial game-changers. "You'd better know why students aren't choosing you," he says.

"A metric that I don't think people track very well and should is cash flow out of operations," Townsley says. "In higher education, there are three cash flows to be concerned with. One is the money that comes out of operations, or net income adjusted for receivables. The two others are cash flow from financing activities and from investment activities. If you look at a lot of institutions, you'll discover that there is no cash flow, or there is in fact a negative cash flow out of operations. And the institution is being supported by things like one-time sales of investments or new bonds or additional borrowing for cash or things like that. If an institution isn't generating sufficient cash and is depending upon these other sources to fund itself, it is in a weak position."

Another pertinent question, Townsley says, is to assess the extent to which net tuition revenue, after discounting, covers institutional expenses. Overall, he says, a decade ago, in many institutions, such revenue would routinely cover the costs of instruction, academic affairs, and student services. But now, he says, “it’s down to the point where in most institutions it is just barely covering instruction and some academic affairs expenses. So that coverage is an important factor.” Townsley’s proposed strategies for institutional health also include refining the strategic plan as needed, finding new ways to compete in the existing market, targeting new markets, honing the institution’s programmatic array, cutting costs, and partnering with other institutions to realize efficiencies.

For long-term institutional financial sustainability, Townsley points to a model of economic equilibrium first developed by Richard Cyert, who was president of Carnegie Mellon University from 1972 to 1990. Cyert’s model is predicated on an institution having sufficient quality and quantity of resources to fulfill its mission, sustain its purchasing power, and maintain its facilities.

Among other factors, the concept of equilibrium weighs net income, what an institution has to do to make up any deficits, how many new students it might need from a financial perspective, the extent of borrowing, and cash flow. “The neat thing about equilibrium,” Townsley says, “is that you can look at current conditions, but you can also apply that to future conditions, to see if things are going to change based on the information that you have about the institution.”

Another expert says college price and competition for students go hand in hand as bellwethers that institutions and their boards—particularly at private institutions— need to monitor closely. “Consumers are becoming very cost-conscious, and private universities are having to fight harder for the same number of students,” says Richard A. Beyer, a former college president and board chair whose background also includes successful stints as a technology CEO and senior operating executive of a $1-billion public company. “And so issues of cost—and when I say cost, I mean price from the consumer standpoint—become really important. That puts stress on institutions to either adjust their price, lower costs, or come up with innovative ways to deliver education at a more affordable price.”

Beyer, who was formerly on the AGB board, emphasizes that it's not enough to just assess an institution's financial information. Beyond that exercise, an institution needs to act strategically on the intelligence it gleans. "Understanding the financial model is critically important," he says. Noting that many institutions are cutting costs, Beyer says that "there's a big difference between cutting costs and lowering costs. Cutting costs is actually very temporary— oftentimes it is basically what might be called 'death by a thousand cuts.'"

In that vein, Beyer says smaller colleges and universities might, for example, rely on trimming salaries or 403(b) contributions as cuts of last resort to meet shortterm financial pressures. "But, if you are having to cut costs like that just to make your numbers, then from a modeling perspective, one might look at that and say that even though you have been able to meet your budget, the way that you did it isn't necessarily sustainable on a long-term basis," he notes. "So I think one of the things that small colleges need to look at is how they can lower their costs as opposed to just cutting costs. Lowering costs has much more permanency to it."

Beyer suggests that a crucial question is: "How can an institution deliver its product differently in ways that might result in lower costs and perhaps higher marginal contributions, but also a lower price from the consumer standpoint?"

He notes, "That really takes innovation. I think one of the big opportunities— it's either going to be an opportunity or a challenge—will be how do colleges become much more entrepreneurial and innovative in how they address the challenges facing higher education as opposed to just simply cutting costs."

Getting Granular

Michael J. Cooney, a partner in the law firm Nixon Peabody, where he directs the firm's focus on higher education and exempt organizations, says, "I've seen boards go from looking at their financial statements to, for example, looking at what the rating agencies say about them. But from a stress testing perspective, I don't think that's enough. They should look at trend lines particular to their institution and then at their peer group or groups." It is a question, he says, of an institution scrutinizing its data at a more granular level than ratios may suggest, in ways that reflect the broader factors that affect the market in which it competes.

“Because this is a strategic issue, not just a financial one, the entire board, and not just the finance committee, needs to have an understanding of a number of different elements and the trends related to those elements,” Cooney says. “Board members should identify all of the relevant metrics and keep a very close eye on them moving forward, because they will greatly inform their decision making.”

He suggests that such metrics might include evolution in the student populations the institution seeks to recruit, and, of course, nitty-gritty attention to what students are paying, how much the institution is discounting tuition, and what levels of net revenue it is realizing. Other markers, he says, might be market penetration in terms of admissions, how fully an institution uses its facilities, and ROI on particular programs.

Moreover, Cooney says, “There absolutely does need to be a continuous review of programs as to which ones are really relevant from the financial efficacy perspective.” Regarding capital financing, he says boards need to ask, “What are we building, and why?”

Cooney further urges institutions to assess their financial condition over a sufficiently long period of time. “Looking at any one year can really be very misleading, because even with perfectly clean opinions about the financials, that may not fully indicate what’s going on in the market for the institution,” he says. Cooney also argues that institutions need to take the long view: “Twenty years ago we could sit back and look at maybe a five-year period of time year-by-year and have confidence that things wouldn’t be much different. But the rate of change in the industry is increasing, as it is across most industries. It’s just shocking to see how quickly things change.”

Assessing an institution’s endowment requires its own finesse. Sedlacek, who has spent the bulk of his career managing investments, says that the crash of 2008 was instructive in that it showed how interrelated institutional revenues are. That’s something he suggests board members need to pay attention to. For example, he says, student enrollment, discount rates, state support, the flow of philanthropic gifts, and the value of appreciated property are "highly correlated to markets." The implication? Board members need to consider discussion about the endowment in the larger context of all institutional revenues.

While this article focuses on the vagaries of the enrollment-driven budget structures, where instruction is the main cost, institutions that have significant research components must review a different set of budgetary concerns having to do with the flow of revenue through grants as well as regulatory restrictions, risk, and a complex array of other considerations that will not be considered here. Boards at researchintensive institutions must, of course, orient themselves to weigh those complex factors as part of the distinct version of financial stress testing that their universities must undertake.

No Perfect Answer

"To me, the board's focus should be on working with the administration to do a full stress test of the entire operations of the institution," Sedlacek says. But he offers this caution: "In any risk analysis, we tend to make perfect the enemy of good. But there is no perfect answer." Managing risk, he says, "is much more of an art than a science."

Results from financial stress testing offer insights for institutions willing to act decisively. Beyer says that those that have been focused narrowly on where to pinch pennies need to take a bigger-picture look at their finances. Whether ideas come from the administration, faculty, board, or other stakeholders, "there's great imagination on campus" that can offer new solutions to persistent problems, he says. The trick, he believes, is to "allow that imagination to flourish and enable the institution to address challenges through a different lens, one of prosperity versus disparity."

Beyer continues, "A lot of innovation is going on outside the campus walls." Whether the focus is blended learning, new curricular offerings, online learning, competency-based learning, or any of a number of other areas where education is evolving, "the likelihood of partnering with third parties to implement new models will probably be more of the norm, versus institutions trying to do it themselves."

“Trustees as a group need to be educated and to understand and be willing to look at the metrics of success for their institutions somewhat differently,” Cooney says. “Boards should be continually inquisitive as to how things may be different tomorrow and how we need to measure these factors. Then, they need to be prospective in their thinking about where their institutions are going to be in three, five, or 10 years. The stronger ones will be those that, in reaction to a particular event or proposal or situation, have the ability to say, ‘We’ve been thinking about this for a number of years now, and we have a pretty good sense as to what we need to do. Or what we need to avoid.’”

Ultimately, Cooney suggests, helping the institutions they serve pass their financial stress tests—and position themselves for a stronger financial future—is “an essential element in preserving what for the United States has been an industry at the very top, worldwide.” Noting that “We are the envy of the world in terms of our colleges and universities,” Cooney says that boards “all have a collective responsibility that we do this right.”

Sample Metrics and Markers

When thinking about metrics for assessing financial stress in colleges and universities, perhaps the most salient truth is that no one size fits all. That is, if it wants the most value from financial stress testing, an institution has to develop its own set of measures for tracking its financial health, based on its own distinct circumstances, financial conditions, market forces, and mission.

Within that context, institutions and their boards will likely want to take a deep dive into a number of broad buckets, including many of the following:

- Trends in enrollment, tuition rates, tuition discounting and financial aid, and net income from tuition
- Institutional resource allocation, budgeting, spending, and cash flow
- Endowment assets, payouts, restrictions, and liquidity
- Institutional debt, strategic use of debt
- Goals and execution of fundraising strategies
- Liquidity of assets overall and related risks
- The institution's credit rating
- Program productivity and efficiencies, cost of education
- Short- and longterm capital need, merits and risks of capital investments
- Spending on faculty and staff, energy, technology, and investments

- Revenue streams from research support and associated expenses and risks
- Financial risk management, enterprise risk management, financial risk capacity and tolerance
- Institutional financial trend lines compared to peer institutions
- Facilities usage, physical plant deferred maintenance
- Financial implications of federal and state legislative policies and regulations
- Opportunities for new revenue streams and partnerships
- Transparency and integrity of financial reporting, quality of internal financial analysis and reporting
- Market factors, competitive advantages/disadvantages, demographic trends