

Take a Strategic Direction With Debt

The right strategy can direct your institution toward smart financing decisions about its entire debt portfolio.

By John H. Augustine

WHEN WAS THE LAST TIME YOU REEXAMINED YOUR INSTITUTION'S DEBT management policies and practices? Several factors and shifts in the external environment may prompt you to make this task a priority.

The amount of public debt issued by colleges and universities in the United States has averaged nearly \$12 billion annually during the past 10 years, according to the Securities Data Corporation. Reasons for this significant market share include the very strong credit profile of most colleges and universities, a competitive capital market among investors who see higher education debt as a solid investment, attractive interest rates, new technology requirements, and a new cycle of investment by institutions in their building infrastructure, including new residence halls and recreation centers.

At the same time, a dramatic shift has occurred concerning the nature of higher education debt. As recently as 10 years ago, 98 percent of college and university debt was traditional fixed-rate. Today's tax-exempt debt markets offer a tremendous array of financing opportunities for colleges and universities, including long-dated bonds, swaps, interest rate locks, caps, off-balance-sheet structures, and commercial paper programs.



A second key shift involves the transition for most colleges and universities from a project-by-project debt management approach (for example, separate bonds for a residence hall project or a research initiative) to a more consolidated approach whereby an institution's debt portfolio is managed as a whole. This itself necessitates a more strategic view of debt management.

The sheer complexity of financing opportunities today and the flexibility they provide make evident the need for well-thought-out debt management strategies that dovetail with an institution's mission. This goes beyond implementing a standard

policy. In short, it means thinking about debt management as we do endowment and asset management—as something that requires continuous assessment of market realities and institutional objectives.

For instance, your college or university may have as a core objective to enhance the learning environment within your residence halls. If this requires living accommodations for faculty, dining facilities, and classroom space incorporated into the main structure, then you may not want to implement a third-party student housing deal with a project and financing structure where you don't have control of the outcome. Instead, you may decide

The Trade-Offs of Credit Offerings

There are many financing options available today for funding college and university projects. As indicated in the graph below, the financing spectrum ranges from full-recourse general-revenue debt to true non-recourse debt. Each financing option is impacted by factors such as the institution's debt capacity, the cost of capital, the degree of college or university control, and the extent to which the institution's legal structure is open or closed.

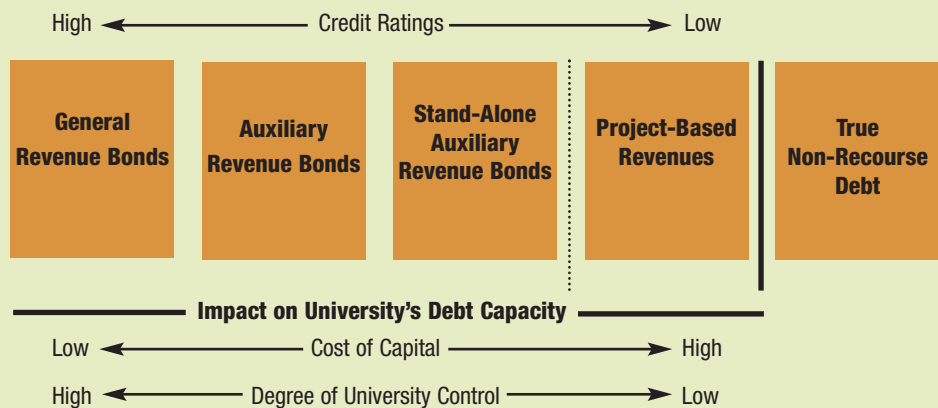
The complexity of these factors and the financing options available make it important to understand the trade-offs involved in any given choice. The higher education finance market discussion of so-called off-balance-sheet, or non-recourse, student housing transactions—which are actually “on” credit—represent another option on the credit spectrum of financing vehicles available to colleges and universities. For instance, the off-balance-sheet, third-party-based approach using a separate 501(c)(3) for student housing projects implies tighter and more covenants, a higher cost of capital, and a more closed, legal structure. However the off-balance-sheet approach, particularly in the case of certain public universities, may save time and cost in the design and con-

struction process. Still, while this option may at first appear to be non-recourse debt, this is not entirely the case from the capital market's perspective. It is usually included in the market's evaluation of debt capacity.

Alternatively, a number of project-based transactions have been completed involving 20-25 percent equity contributed to the transaction by a third party or parties with the debt at 75-80 percent of value. In light of the Enron-like troubles with the off-balance-

sheet (but ultimately on-credit) structure, these true non-recourse, off-credit financing approaches are generating a great deal of interest among colleges and universities—whether tax-exempt, taxable, or a combined approach. At the same time, true non-recourse debt bears the disadvantage of possibly lower credit ratings, a higher cost of capital, a lower degree of university control, and a relatively closed legal structure. Still, this approach can preserve an institution's debt capacity. By recognizing the limits and opportunities inherent in each option within the full spectrum of credit offerings, a college or university can choose the one that best reflects its needs and objectives.

THE SPECTRUM OF FINANCING ALTERNATIVES



Source: Lehman Brothers, 2001

You must realize from the outset that whatever debt management strategy is put in place will be subject to external, philosophical, and financial constraints.

to reduce the cost of capital and roll these projects into the institution's general revenue bonds, or to structure subordinate standalone project revenue bonds issued by the institution, which are also less expensive than the third-party route.

Conversely, if student housing or health care is not a core concern of your institution, then you may decide to establish these programs as a separate credit that limits your risk. Or, you may allow a separate entity to develop and finance these as standalone enterprises. The actual amount of credit risk transferred away from a college or university that is accomplished through third-party standalone financing—regardless of whether it is on or off the balance sheet—depends on the specific structure of the transaction. But remember, there is no free lunch: Because a college or university often expends its own credit to issue higher-rated (in other words, underlying investment-grade) third-party transactions—often to gain bond insurance—the cost of obtaining this kind of funding today on start-up enterprises such as student housing may result, often inadvertently, in a higher cost of funding tomorrow for the institution as a whole.

Whatever the core mission and objectives of your college or university, selecting from available financing options and structuring these to meet institutional objectives first requires strategic thinking about debt management.

Developing a Debt Management Framework

Because the overall objective of debt management is to optimize the use of capital, to construct a debt management framework you must begin with a review of your institution's asset and liability mix as well as its operating cash flows and business strategies. And you must realize from the outset that whatever debt management strategy is put in place will be subject to various constraints. These limitations fall into three general categories.

1. External constraints. Certain legal and regulatory restrictions are among the external constraints likely to have the biggest impact on debt management decisions. For instance, tax-exempt debt management for colleges and universities involves understanding the implications of indirect cost recovery; regulations pertaining to the use of facilities funded with tax-exempt bonds; limitations on arbitrage with proceeds from tax-exempt bonds; possible restrictive covenants, as in loan agreements; and unique opportunities involved in issuing tax-exempt bonds, such as the continuing investor market demand for long-dated maturities.

Likewise, an institution's fundraising and development arms must be coordinated with its debt plans, especially in situations where gifts are tagged or identified for specific purposes and thus become ineligible for tax-exempt financing. A number of insti-

tutions are still financing these projects as a kind of gift anticipation note with variable rate debt so that the debt can be redeemed at par when the actual restricted gifts are received.

Perhaps the biggest change this year affecting most public colleges and universities is the implementation of the GASB 35 accounting standards and the required shift to an aggregated, full accrual financial report. As with the change to FASB 117 for private institutions, this won't change the economic picture for these institutions, although it will result in most showing operating losses, due primarily to the change in the state appropriations treatment. GASB 35 requires segment reporting for revenue bonds with specific, identified revenue pledges—though not, of course, for general revenue structures. However, debt market participants have shown little concern with these changes, identifying them largely as format changes to the financial statements.

Overall, the legislative front for tax-exempt debt has been mostly favorable, although the Internal Revenue Service continues to pay close attention to off-balance-sheet financings with unaffiliated 501(c)(3)s.

2. Philosophical constraints. An institution's charter and bylaws mandates, as well as its enterprise business objectives and mission, may place certain parameters on the debt management framework. The fundamental assumptions and limits of the institution regarding operating margins, cost of investment, capital spending, capital structure, debt capacity, leverage, credit rating, and target returns on the capital employed must all be reflected in the debt management strategy. A review of these basic assumptions is required on a regular basis to ensure that the financial operations of the enterprise reflect the aims of the college or university.

3. Financial constraints. A college or university's financial condition and the costs and benefits associated with its debt financing decisions present certain challenges in developing a debt management strategy. Four primary factors include *liquidity management, operational management, credit management, and interest rate management.*

Factors Affecting Strategy

For the most part, debt management concentrates its time and effort on interest rate management, since this has the most direct impact on the cost of borrowing. However, liquidity management, operational management, and credit management may also play a significant role in shaping an institution's debt management strategy, depending on the level of emphasis each is given.

• **Liquidity management.** Liquidity management can be defined and measured in terms of an institution's ability to access the markets required to finance operational as well

as debt service requirements in an expedient and cost-effective manner. Liquidity management implies the maintenance of cash positions to meet short-term liability requirements even when the cost of “carry” on the cash invested is negative. In the corporate, taxable market, liquidity management can cause liability managers to enter a financing market where the maturity or currency is otherwise undesirable simply to retain access to financing through regular issuance. Given the relative infrequency of issuance in higher education finance and the relative absence of cash flow or working capital borrowings, the issue of market access is less critical, even in cases of non-investment-grade debt.

- **Operational management.** Operational management, or risk of the so-called back office or settlements operations, is best incorporated with the audit and accounting functions since these risks are an integral part of the systems and legal documentation integrity.
- **Credit management.** Credit management issues appear most frequently in connection with ongoing rating agency and investor relations management across a broad array of college and university credit factors. At times, certain credit rating guidelines are articulated. For instance, in the corporate sector it's common for major industrial companies to articulate a specific rating guideline of staying in the “A” category, as did General Mills in a recent annual report. Of course, these rating guidelines are shorthand for a great deal of strategic and competitive analysis.

At other times, a specific rating agency guideline is not articulated. In short, a broader strategic intent is outlined. For instance, the University of North Carolina at Chapel Hill articulates the university's credit rating guidelines as part of its debt policy in its 2001 comprehensive annual financial report. It states a goal to “manage the university's credit to maintain the highest acceptable credit, which will permit the university to continue to issue debt and finance capital projects at favorable interest rates while meeting its strategic objectives. The university will limit its overall debt to a level that will maintain an acceptable credit with the bond rating agencies.”

Recently, a discussion of the pros and cons of third-party privatized transactions—particularly related to student housing—has dominated college and university credit management. Enron's collapse and today's renewed focus on accounting issues cast a harsh light on the potential abuses of these off-balance-sheet financings. In fact, many corporations are moving away from these transactions. Recently Cisco Systems unwound nearly \$2 billion in synthetic leases, com-

plying with the capital markets' current distaste for off-balance-sheet transactions. Much of the current Enron controversy involves a misunderstanding of the financial and operating trade-offs involved in the available spectrum of financing options. The concept of a credit spectrum of revenue bond financing options is critical to understanding and assessing strategic debt capital management and planning, including the debt allocation process among competing projects and objectives. (See sidebar, “The Trade-Offs of Credit Options.”)

- **Interest rate management.** Interest rate management involves establishing a rigorous methodology based on specific objectives, horizons, and measures. Because the potential advantages of interest rate management are so great, it deserves a closer look.

A Closer Look at Interest Rate Management

In general, a debt management strategy based on interest rate management has six categories.

1. Cost objective: the objective of the institution regarding management of the cost of borrowing. The nearly universal objective is to minimize the cost of incremental new financings while decreasing the embedded cost of the existing debt portfolio.

2. Risk objective: the objective of the enterprise regarding the uncertainty of the cost of borrowing. The aim here is to minimize the variability or uncertainty of the cost of incremental new financings as well as to minimize the embedded cost of the existing debt portfolio. The idea is not to view the variability of borrowing costs in isolation but within the context of the institution's cash flow and balance sheet.

3. Strategic horizon: the time horizon under which the institution defines, analyzes, and evaluates its long-term financial policy objectives. This horizon typically corresponds to the planning cycle used by the institution and will range from 1 to 30 years, although most institutions focus on a period of between 5 and 10 years.

4. Performance horizon: the time horizon under which the institution evaluates its incremental progress toward its objectives under the strategic horizon. This horizon can range from a month to a year or longer depending on the nature of the liability management process and the pace of transactions and capital markets.

5. Cost measure: units in which the cost of the debt portfolio is measured. Typically the debt portfolio is measured in either a mark-to-market internal rate of return or yield, a book or original cost internal rate of return or yield, or a present value.

6. Risk measure: units in which the uncertainty or variance

Enron's collapse and today's renewed focus on accounting issues cast a harsh light on the potential abuses of off-balance-sheet financings. In fact, many corporations are moving away from these transactions.



of the cost measure is denominated. The risk measure usually is determined by the selection of the cost measure and is reported as absolute variance for the purpose of performance evaluation. It is also cast in statistical terms (most often standard deviation) for strategic and analytical purposes.

The role of cost and risk objectives. The objectives categories are among the most difficult to ascertain, since these require making assumptions about the fundamental operating and business goals of any given enterprise. They often involve the input of non-financial colleagues within the institution. While the objectives categories appear relatively straightforward at first glance, for two

reasons they are typically the most difficult to define.

First, the objectives themselves are diametrically opposed in efficient capital markets where cost and risk are negatively correlated. For instance, in the current market, lower-cost variable rate debt entails greater risk in the form of cost uncertainty. Second, to make meaningful liability management decisions, the financial officer requires a great deal of information about the precise nature of the cost/risk trade-off. However, the discipline required both to define these objectives and to establish a cost/risk decision-making framework is one of the most valuable elements of any debt management process.

The role of strategic and performance horizons. The horizon categories inherent in interest rate management are also somewhat paradoxical in nature since they include both a short-term and a long-term perspective. Again, these two relatively simple categories may become problematic because of inherent conflicts that a short-term and a long-term perspective necessarily entail.

For example, employing a short-term perspective alone would not allow the finance team to anticipate large movements in interest rates, which could ultimately undermine a debt management strategy during the long term. Alternatively, a long-term perspective does not accurately account for short-term debt management decisions, including possible opportunities offered by bonds, a short-term fixed-to-floating interest rate swap, or a partial fixed-rate hedge of underlying variable rate debt. In addition, actively incorporating two horizons in any analytical methodology substantially increases the technological requirements of the system used to produce information and make measurements.

The role of cost and risk measurements. Unlike the objective and horizon categories, the measurement categories in this financial model are more complementary. Measurement of the cost and risk of an institution's debt portfolio must be consistent with the measurements used in the business planning process. This must be flexible enough to report on the results of contemplated transactions and prospective scenario analyses. It is also important that the institution communicate these various measures—especially the risk measure—to nonfinancial professionals within the institution. (See sidebar, “Communicating With Nonfinancial Folks.”)

While these conceptual categories form the essential foundation of a debt management strategy, they cannot become viable unless incorporated into a framework that can be used by policy makers and debt portfolio managers alike. This can be accomplished by synthesizing all these concepts into a benchmark against which the existing debt portfolio can be managed and evaluated.



Communicating With Nonfinancial Folks

It's always challenging to convey financial information in terms that nonfinancial colleagues and stakeholders can understand. Here are tips for communicating with nonfinancial folks so they can then make informed decisions about the institution's finances.

- **Think and speak from a nonfinancial perspective.** Very likely your president lives in a different time horizon—perhaps geared more to an academic time frame. Likewise, board members have varied interests and concerns. The better you can anticipate where others are coming from, the more effectively you will communicate financial concepts and steer your stakeholders in a strategic direction.
- **Make comparisons.** When presenting a debt management strategy or benchmark for your institution, make clear up front the primary differences between a college or university and any other entity, such as a corporation. Whereas a college or university generally links asset life to debt life, many corporations don't focus their strategic horizons so closely. And because universities have a host of nonmonetary goals (unlike most corporations), the risk profile will be different for both entities, with colleges and universities often able to deal with apparently higher risk since their horizon can withstand greater ups and downs during the long term.
- **Do your homework.** Come to the presentation prepared with background information, worst-case scenarios, and forecasts. No one wants to sit through a staff or board meeting in which the group spins its wheels about a matter that can't be resolved until additional context is provided.
- **Focus on mission and strategy, not transactions.** Present information in light of your institutional mission and objectives. Don't come to the board saying you have a great idea for a transaction that would save X dollars in five years. Instead, lead with a focus on the institution's core objective (for example, building a new recreational facility or entryway to the campus) and then show how the specific transaction will support that endeavor.

Establishing a Debt Management Benchmark

The crucial interpretive role a benchmark plays makes it particularly useful as a management and assessment tool. As in the discipline of asset management, debt management benefits from managing toward cost and risk objectives by means of an established benchmark. The typical debt management benchmark is a debt portfolio that represents the idealized debt structure for the institution. Such a benchmark would incorporate each of the objective, horizon, and measurement categories already discussed.

For instance, some institutions have identified as an overall debt management benchmark a weighted-average cost of capital of 5 percent or below in the current market. This benchmark would also include a targeted fixed-to-variable rate debt allocation of 70-percent fixed and 30-percent variable net of swaps. In addition, the benchmark would assume an overall average life of debt of at least 25 years along with a number of other assumptions. Other institutions have identified a benchmark where the target percentage of fixed-to-variable rate debt is more weighted to variable rate debt in the current market.

In considering what benchmark might best serve your institution, a brief review of benchmarks created by industrial corporations, governments, and financial institutions may prove

helpful for comparison. Just as each of these entities uses benchmarks in a different manner, the diverse needs and characteristics of individual colleges and universities also call for a variety of benchmarks tailored to specific needs.

Industrial corporation benchmark. A typical industrial corporation with long-lived assets and a requirement for a fair amount of working capital might have a debt management benchmark composed of 60 percent 30-year non-call financing, 30 percent 10-year callable financing, and 10 percent floating-rate financing. Such a benchmark would reflect the financing of the long-dated assets along with a long-term liability to eliminate the uncertainty of the cost of financing the asset. This isolates the variability of the return on the asset to business factors, which are separate from interest rate and foreign exchange fluctuations. It also expresses a risk preference that accepts a certain degree of cost variability in return for a lower portfolio cost by funding a portion of the assets in the intermediate term while taking advantage of call options. Finally, the floating rate portion of the benchmark implies the financing of a short-dated cash position used to fund working capital requirements as needed.

If the corporation had a source of revenue not denominated in the local currency, it would be natural for the benchmark to contain a foreign exchange component, the debt service of

Employing a benchmark enhances an institution's ability to evaluate prospective debt management strategies using scenario analysis.

which would approximate the magnitude of the foreign revenue involved. An additional consideration with the corporate benchmark is the cost of equity financing and the degree to which the equity markets will be used in financing the corporation.

The equivalent concept for colleges and universities is the value of gifts and contributions invested by an institution. In fact, such an allocation echoes what a college or university may choose to undertake given the even longer-lived assets of an institution of higher education. At the same time, one could argue that a college or university—with a focus on a long-term horizon (although depending on the risk profile)—may be better suited to manage the variability of a larger percentage of variable rate debt. Of course, one also has to consider the interest rate cycle at the time and the prospect of changes to those short-term variable rates of debt.

Government entity benchmark. For a government borrower, the benchmark will also generally correspond to the source of its revenues. If the objective functions make stability of debt service paramount, the maturity of the benchmark will usually be the longest available. This generally means at least as long as the strategic horizon of available fixed-rate instruments. Since governments often have less flexibility than do corporations, the existing liability portfolio can also serve as a benchmark because it captures the cumulative effects of past financing and of liability management decisions. With their largely independent ability to raise revenues through tuition and other programs, public colleges and universities usually have more freedom to construct a benchmark that, for example, employs more variable rate debt than the typical governmental bond issuer.

Financial institution benchmark. Financial institutions are unlike corporations or governments in that their benchmarks are provided rather than constructed in the form of financial assets currently on their books. In the case of either the corporate or government financial models, the inherent objectives, horizons, and measures are synthesized and expressed as financial assets. In the case of a financial institution, the existing assets are composed of financial instruments and therefore already represent a benchmark. This assumes that the operations and strategic plans have been incorporated into the types of assets acquired. The creation of a debt management benchmark for a financial institution requires characterizing the broad spectrum of asset types and accounting for the acquisition of new assets on the margin. In most cases, only interest rate risk is managed, and assets are funded directly or synthetically.

College or university benchmark. In the case of either a public or private college or university, the benchmark will reflect an integration of three important entities: the academic plan, the

operating budget, and the capital plan. An integrated capital plan would take account of debt capital and equity capital. In this case, equity capital refers to gifts and contributions as well as the surplus of revenues over expenditures an institution is able to add to its balance sheet. Measures of debt capacity and risk tolerance would be determined within the overall strategic framework of the institution.

A debt management benchmark, as reflected in the debt portfolio, would be guided by principles such as matching the life of the underlying physical asset with the life of the debt. However, given the uniquely long investment horizon of colleges and universities (in other words, in perpetuity), still another application of the matching concept would take into account the financial as well as the physical assets of the institution. This suggests considering debt with a longer final maturity—depending, of course, on the interest rate environment.

A number of issues lie outside the confines of a formulaic resolution to various financing opportunities. These include the question of liquidity maintenance; the appropriate credit rating level to achieve the institution's objectives; the nature and type of financial covenants, if any, required for market access at a given rating level; and the relative cost of financing along the yield curve. Still, while these issues cannot be resolved directly, the discipline of establishing a debt management benchmark makes these issues more manageable because it makes them more measurable.

Employing a benchmark also enhances an institution's ability to evaluate performance in an ongoing manner, to segregate the effects of market movements from the impact of debt management strategies, and to evaluate prospective debt management strategies using scenario analysis. Once established, the benchmark becomes the standard against which debt management decisions can be analyzed and evaluated.

Even so, it's important to remember that a benchmark is just that—a standard and a management tool. Effective debt management focuses first on mission and objectives and not on a particular transaction opportunity in isolation. For instance, effective debt management matches an institution's debt horizon to complement its campus master plan, or revises it in light of an incoming administration or enhanced student life objectives. While a debt management strategy is in essence a snapshot of the institution at any given time, what really brings the strategy to life is subjecting it to technical analysis.

The usefulness of a debt management benchmark in *retrospective* performance evaluation does not require complex analytical resources apart from the ability to price the existing debt portfolio and the benchmark portfolio on a regular basis. Assuming the

existence of a relatively active market or of widely available comparable securities, this task can be accomplished in a straightforward manner. However, constructing a benchmark within a prospective, or analytical, planning approach is more complicated since it requires access to fixed-income analytics.

Adopting a Prospective Approach

Constructing a benchmark using a prospective methodology achieves three broad functions. First, it incorporates a process by which a large number of potential future interest rate yield-curve environments is provided. This allows for evaluating the benchmark portfolio, the existing debt portfolio's performance, potential debt management transactions, and potential new financing transactions under simulated future market conditions.

Second, such an approach allows for predicting the cash flow—and therefore the financial performance—of financial instruments in future market conditions. This allows for precise valuation of the benchmark, existing portfolio, contemplated debt management transactions, and contemplated new issuance transactions using randomly generated market environments.

Third, a prospective/analytical approach facilitates benchmark construction by providing a framework that presents both cost and risk. This framework is important for understanding the expected cost and risk trade-offs implied by the prospective benchmark. Both standard transactions and structured products can be properly evaluated for their cost and their risk impact on the benchmark and for the existing debt portfolio. The impact of a portfolio of instruments is often not immediately or intuitively apparent, and a prospective view brings potential cost-benefit as well as risk-reduction opportunities to the forefront, thus increasing the chances of accurate assessment.

While the prospective/analytical approach provides a framework for thinking about debt management, it is still only a means to an end. As in all financing decisions, the overall strategic objectives of an institution should drive its decision making. Likewise, the conceptual and analytical portions of the debt management process are only as useful as an institution's ability to engage in active debt management. This means that the debt manager must be able to execute transactions to realize institutional objectives in two basic formats: standard cash market transactions and synthetic transactions.

Cash market transactions. These comprise the actual selling or purchasing of debt in the capital markets, either for funding, refinancing, investment, or hedging. A variety of execution techniques exist for selling and repurchasing debt. These range from continuous offerings to underwritten offerings on the sell side, and from open market operations to tender offers on the

repurchase or investment side. While one execution technique may present advantages over another at any given time and in any given market, the essential definition of the transaction is based on the fact that it occurs in the cash market.

Synthetic transactions. Alternatively, synthetic transactions involve the use of structured products such as swaps and options (for example, caps, floors, options on swaps, and forwards). Because these structured products are based on and priced in the underlying cash market, nearly every debt management transaction can be structured both in the cash market and the synthetic market and then differentiated by cost. By employing an analytical approach, the ability to evaluate both cash and synthetic transactions is substantially enhanced because the prospective cost of the contemplated transaction can be quantified and the transaction evaluated in the context of the existing debt portfolio and against the benchmark.

Debt management is a complex and challenging task. It involves a rigorous and continuous assessment of the conceptual framework that underpins an institution's objectives, horizons, and measurements. It also involves the careful construction of a debt management benchmark that, while not comprehensive in its ability to provide answers to all the dilemmas posed by the challenging nature of the process, is nonetheless capable of expressing the fundamental conceptual categories that define an institution's core objectives and risk preferences. Above all, this keeps a college or university on track with its mission and aims. Finally, without the benefit of an analytical methodology, even the best conceptual work and performance evaluation will be limited to a retrospective view. For a forward-looking institution, the benchmark model may provide a useful framework for engaging in ongoing financial assessment and can benefit a college or university that looks to the future.



John H. Augustine

Author Bio John H. Augustine, managing director, leads the Higher Education Finance Group at Lehman Brothers, headquartered in New York City.

E-mail jaugust@lehman.com