

Financing the Public University in the New Millennium

James J. Duderstadt

President Emeritus
University Professor of Science and Engineering

The University of Michigan
Ann Arbor, Michigan

University of Washington
Seattle, Washington
November 29, 2000

Introduction

It is both an honor and a pleasure to be invited to Seattle to compare notes with you on how the University of Washington and the University of Michigan can face the financial challenges of the new millennium. Actually, it would have been more enjoyable if our two institutions could shared experiences while competing against each other in the Rose Bowl this New Years. But thanks to a last second field goal, Washington is matched this year against Purdue, and we'll have to use this meeting instead.

There have long been close relationships and many similarities between the University of Washington and the University of Michigan:

1. The University of Washington is the flagship institution in the northwest, just as Michigan is the flagship in the midwest.
2. Our institutions are both regarded as national leaders in research, generally ranked one-and-two in the amount of federally funded research our faculty attract.
3. We both have prominent athletic programs, not infrequently facing each other on New Year's Day. (I'm wearing my Rose Bowl watch from the UM victory over UW in the 1993 Rose Bowl. However I rarely wear the Rose Bowl watch from the year before when UW thrashed Michigan enroute to a national championship.)
4. Michigan provided one of Washington's presidents, Charles Ostergaard, while Washington taught Michigan how to do "the wave" in the 1970s.

More apropos of the today's topic, during the 1980s, Michigan sent a team of administrators to visit Washington to compare notes on how to handled deep cuts in state appropriations, just as today my visit will focus on some of the challenges of financing public universities in the brave, new world of limited resources, market forces, and rapidly changing societal needs of the 21st Century.

I wish I could suggest a magic bullet to handle the financial challenges particular to the University of Washington, such as a software tax or a tax on dot.com websites. But there are no easy answers. Rather, coping with the

financial realities of a rapidly changing world will require corresponding changes in our institutions.

To this end I should note that while our universities have many similarities in characteristics such as the size, quality, and leadership of our various programs, we are remarkably different in the way we finance and manage these activities. Of particular interest here are the differences between our institutions in areas such as:

1. Resource portfolios
2. Financial reserves
3. Management cultures
4. Relationships with state government

These differences have arisen because of Michigan's strategy to proceed down a somewhat different path in recent decades from most other public universities. We have consciously chosen to financially restructure our institution, evolving from the character of a "state-supported university" to what one might call a "privately-supported public university".

While this path may not be attractive or even possible option for the University of Washington, it seems useful to describe it to you. It is, in fact, the path being taken by most of the leading public universities east of the Rockies!

A Case Study: The University of Michigan

Throughout much of the twentieth century the University of Michigan benefited from generous state support when a booming automobile industry made the Michigan economy unusually prosperous and a time when the University of Michigan was the only major university in the state. However by the 1970s, the energy crisis and foreign competition weakened Michigan's industrial economy. Furthermore, regional needs, ambitious leadership, and sympathetic political forces allowed a number of other public colleges in Michigan to grow into comprehensive universities, thereby competing directly with the University of Michigan for limited state appropriations.

During the 1950s and 1960s, almost 70 percent of the University's operating budget was provided through state appropriations from general tax

revenues. However, over the past three decades, this has dropped to less than 10 percent of the University's total operating budget in the 1990s and less than 20 percent of its General and Education budget. During this period the University of Michigan evolved from "state-supported" to a "state-assisted" to a "state-related" to, today, what might be only characterized as a "state-located" university. Yet even this last identifier is questionable, since the University has campuses around the world, from Hong Kong to Seoul to Sao Paulo to Paris. In fact, the University has launched major new cyberspace "virtual" universities that have released it entirely from the constraints of geographical location. One of my colleagues suggested that University of Michigan today remains only a "state-molested" university, referring to the abuse it sometimes receives from opportunistic state politicians.

Perhaps a better way to phrase this is to observe that the University of Michigan has become, in effect, a privately-financed public university, supported by a broad array of constituencies at the national—indeed, international—level, albeit with a strong mission focused on state needs. Just as a private university, it must earn the majority of its support in the competitive marketplace (i.e., via tuition, research grants, and gifts). It allocates and manages its resources much as private universities. Yet it still retains a public character, committed to serving the people whose ancestors created it two centuries earlier.

This privately financed character actually evolved over a three decade period, shaped by increasingly pessimistic estimates of state support and the pragmatic vision of a sequence of Michigan presidents and provosts, including Robben Fleming, Frank Rhodes, Harold Shapiro, and Billy Frye. But it took on a heightened urgency in the late 1980s and early 1990s when our leadership team faced even dimmer prospects for state support.

To confirm our concerns, we conducted an array of focus groups and conversations with state leaders in the public and private sector. Each group was asked to challenge the following two premises:

- 1) Because of the limited will and capacity to support higher education, and in the face of a weakened economy and other social needs, the state would, at

best, be able to support higher education at the level of a regional four-year college—not at the level of a world-class research university.

- 2) Further, political pressures would make it increasingly difficult for state government to give priority to state support for flagship institutions. Instead, strong forces would equalize state appropriation per student across all state universities.

In the end, few of our state leaders were able to disagree with our premises. All believed that the University's only prudent course was to assume that state support would continue to deteriorate throughout the 1990s.

With this "reality check" behind us, we set out to develop a business plan based upon the following objectives:

- 1) To build alternative revenue streams (tuition, federal grants and contracts, auxiliary enterprises, and private giving) to levels sufficient to compensate for the loss in state support while building reserves sufficient to allow us to ride out the inevitable economic storms;
- 2) To deploy our resources far more effectively than we had in the past by focusing on quality at the possible expense of breadth and capacity, and while striving to improve efficiency and productivity; and
- 3) To enhance the University's ability to control its own destiny by defending our constitutional autonomy and building strong political support for our independence.

Let me consider each component of our restructuring strategy in turn:

Diversifying the Revenue Base

State appropriation had been a declining share of the University's revenue base for many years, with State of Michigan falling from among the top five

states in the nation in its support of higher education in the 1960s to the bottom third of the states in the 1980s. Hence, while we had some hope that we would be able to protect higher education in Michigan against the massive cuts in state appropriation experienced in other states such as California, Ohio, and New York, it was also unlikely that we would see any real growth in state support in the short term. Indeed, from a planning point of view, the very best we could expect was to see state appropriations for the University track the inflation rate during the 1990s. State support was likely to continue to decline as a percentage of our resource base for the foreseeable future.

Sponsored research funding from federal and industrial sources played an important role in our strategies. We took a number of steps to provide faculty members with both the encouragement and support to seek research funding. For example, we developed policies which would provide principal investigators with discretionary dollars correlated with the amount of indirect cost recovery on their grants. Substantial resources were committed to the development of specialized research facilities such as wet laboratories, electron microscopes, and clean rooms. We opened and staffed a permanent office in Washington to more effectively lobby for university research.

Largely as a result of these and other actions, the University's sponsored research activity increased very rapidly throughout the late 1980s and 1990s. In 1992, the University of Michigan joined the University of Washington as one of the nation's leading research universities as measured by research expenditures, which today amount to over \$500 million per year.

Tuition was another critical component of our strategy. While non-resident tuition rates were essentially at private levels and therefore constrained by the private marketplace, in-state tuition rates were quite low, particularly when measured against the costs of institutions of comparable quality. State support had by this time eroded to the point at which it could no longer compensate for the difference between in-state and out-of-state tuition for those Michigan residents enrolled in the University. The University's aggressive efforts to maintain strong financial aid programs in the face of rising educational costs had protected the principle that any Michigan residents academically qualified to enter the institution would have their demonstrated financial need

met. Indeed, when the financial aid provided to in-state undergraduate students was taken into account, it was clear that the average discounted tuition had remained remarkably stable during a period in which state support had plummeted.

Clearly, given the inadequate subsidy of both the costs of education of Michigan residents and the needs of the University, we saw many compelling reasons why in-state tuition should be increased. We calculated the potential of this revenue source this way: If one assumes a difference of \$17,000 - \$6,000 = \$11,000 between average out-of-state and in-state tuition levels, then the gross tuition potential for the roughly 22,000 Michigan residents enrolled at UM-AA is $22,000 \times \$11,000 = \242 million. Of course, the University's commitment to broad access would require that a certain fraction, say one-third, of these dollars go into increased financial aid. But even so, this would yield an estimated potential additional tuition revenue of \$160 million per year. Note as well as that one could realize additional tuition revenue either by increasing in-state tuition levels to a higher fraction of out-of-state levels, or by modifying the in-state/out-of-state enrollment ratio.

What was a realistic goal for additional tuition revenue? Although the present in-state tuition was less than 30 percent that of out-of-state, historically it had been closer to 40 percent to 50 percent, even with significantly higher state support. Further, although the in-state/out-of-state ratio of our undergraduate student body was at 70 percent/30 percent, it had historically averaged closer to 60 percent/40 percent. Our target for the near term would be to adjust to be approximately 40% of out-of-state tuition, while the target for percentages of in-state and out-state undergraduates was set at 60% / 40%. The in-state/out-of-state enrollment adjustment would generate \$24 million/year, while the increase in in-state tuition would generate \$44 million/year. (Here I might note that while we were on track toward this target by the mid-1990s, my successor has encountered stronger political resistance from our Regents and had to back off to more modest 30%-30% level, with very significant financial implications.)

Private giving was also critical to our strategy. Although we had long regarded private giving as providing the margin of excellence for our academic programs, we concluded that it would increasingly provide a substantial

component of the base support as well. In 1990, the University began working toward the goal that by the end of the decade, the annual level of private support, that is, private giving plus distributions from endowment, would exceed state appropriations. This would require increasing private support to more than \$300 million per year by the end of the decade.

Key in this effort was the launch of a \$1 billion fund-raising campaign, the largest in the history of public higher education, which succeeded in raising \$1.4 billion. By the end of the decade, private support of the University had risen to over \$380 million per year (\$230 million per year of private giving plus \$150 million from endowment distribution), far exceeding our original target.

The funds generated by auxiliary units of the University, particularly the University Hospitals, were the fastest growing component of our resource base through the past decade. Throughout the 1980s and early 1990s, the University Hospitals were able to generate very significant bottom-line margins in the range of \$60 M to \$100 M per year. Yet these were also the most uncertain of our resources because of the rapidly changing national health care environment, which leads me to a second topic: reserve funds.

The Importance of Reserves

Many public colleges and universities have been forced to operate in a hand-to-mouth mode, totally dependent on state largesse from appropriation cycle to appropriation cycle, with little funding capacity to respond to unusual challenges or opportunities. Indeed, some public institutions have even been required to return unexpended appropriations to the state treasury at the end of the fiscal year.

Yet the obligations of the public university are far too significant to leave to the whims of the legislative appropriation process, at least for the short term. Students must be educated. Patients must be treated. There are federal obligations for research grants and contracts to be fulfilled. And the university must respond to a host of other important services to both the public and private sector. Moreover, while costs structures are generally both relatively fixed and straightforward to estimate, the revenues associated with many activities such as

patient care in hospitals or television income for athletic events can be quite unpredictable. For this reason, prudent management would suggest the wisdom of building significant reserves in the accounts associated with key activities.

At the University of Michigan, where we had sufficient autonomy from state controls to allow us to manage our own financial affairs, we made it a very high priority to accumulate sufficient reserves to protect both the university and its programs and employees in the event of a serious downturn in state support. We had learned a hard lesson from the difficult days of the late 1970s and 1980s when a serious recession reduced state appropriations by roughly 30%, necessitating traumatic budget cuts, program reductions, and staff downsizing. To this end, we used expenditure control to build reserves in both operating and capital academic accounts at both the central and department level. Furthermore, we used excess revenues during prosperous years to build reserves in the accounts of volatile auxiliary activities to levels such that the interest earned by investing these reserves would cover any conceivable shortfall in revenues. For example, in Intercollegiate Athletics, we tried to carry reserves of at least \$25 to \$30 M, while for the University Hospitals, we built reserves to over \$1 billion. In both cases, the reserves were roughly comparable to one year of total revenue.

Of comparable importance to the financial strength of public universities are endowment funds. Endowments are contributed funds, held and invested by the university in perpetuity, whose proceeds are dedicated for a particular purpose such as supporting a distinguished faculty member (an endowed professorial chair), a student (an endowed scholarship or fellowship), or perhaps an academic program. Generally the benefactor's name is associated with the endowed activity. Through sophisticated asset management and aggressive fund-raising, we were able to increase our endowments during the 1990s by more than ten-fold, from \$200 million to over \$3.4 billion in 2000.

While such reserves had an important impact on our capacity to effectively manage the university in the face of the inevitable and unpredictable challenges and opportunities, they also had a second important benefit. They allowed us to make the case for higher credit ratings from Wall Street agencies such as Moody's and Standard and Poors, thereby allowing us to issue debt

through bonds and other instruments at lower interest rates. More specifically, as the University achieved a more balanced revenue portfolio and built its reserves to significant levels, we became one of the first two public universities (the University of Texas being the other) to achieve the highest credit ratings of Aaa, something that heretofore only elite private universities such as Harvard and Princeton had been able to achieve.

Resource Allocation and Cost Containment

But, of course, diversifying the resource base of the University and building reserve accounts were strategies only on the income side of the ledger. was only one element of the strategy. Effective cost containment and wise management of resources were also important features. Through aggressive efforts such as total quality management and process reengineering, we reduced the administrative costs of the University to among the lowest of our public and private peers. For example, broad strategic planning activities in the Office of the Provost and the Office of the Vice President and Chief Financial Officer and the transformation process of the University Hospitals led to the implementation of an effective University-wide total quality management program (M-Quality). The University restructured and repositioned the management of both its endowment and operating capital. It moved toward more realistic pricing of University services, through increased tuition and fees and the negotiation of indirect cost rates for sponsored research. And in 1996, we brought up the necessary administrative systems to allow the implementation of a new resource and cost allocation system, responsibility-centered management.

Many universities—particularly public universities—have relied for decades on a system of resource allocation best described as “incremental budgeting” based on a fund-accounting system.¹ In this system, a unit begins each fiscal year with the same base level of support it had received the previous year, incremented by some amount reflecting inflation, a unit’s additional needs and aspirations, and the university’s capacity to provide additional funds. These resources are partitioned into specific funds, more determined by historic traditions than strategic management, e.g., the General and Education Fund,

Restricted Fund, Restricted Expendable Fund, Auxiliary Fund, and Capital Fund. Beyond simply serving as an accounting tool, firewalls are constructed between these funds to limit transfers.

This system worked well enough during the three decades following World War II when the increases in public support outpaced inflation. Universities had the additional dollars each year to launch many new initiatives, to do many important new things, without disturbing the resource stream to ongoing activities. But, with the erosion in public support—particularly state support—that began to occur in the late 1970s and has continued through today, it has become apparent that such incremental budgeting/fund accounting approaches are increasingly incapable of meeting new challenges and opportunities. Indeed, in the face of a more limited resource base, they eventually lead to the starvation of all university activities.

The more constrained resource base facing higher education during the 1990s and beyond will force many institutions to abandon incremental budgeting if they are to preserve their core values, mission, and character. Universities must retain the capacity to set priorities and allocate resources to these priorities. There are many ways to do this. One can continue to implement targeted resource reallocation based upon decisions made by the central administration, assisted by faculty advisory groups. But in most universities today, not only are most costs incurred at the unit level, but this is also where most of the institution's revenues are generated. Hence centralized resource-management schemes are incompatible with the realities of highly decentralized resource generation and expenditure.

An alternative is to totally decentralize resource management, that is, to institute an “every tub on its own bottom (ETOB)” strategy, similar to that used at Harvard and several other private institutions. Each unit has full authority and responsibility for its financial operation. A serious drawback is that it is difficult to address university-wide values or objectives with such a highly decentralized approach.

The University of Michigan chose a hybrid approach known as responsibility center management.² This is a financial management process that shares the resource allocation decisions through a partnership between academic

units, administrative units, and the central administration. More specifically, responsibility center management is aimed at three objectives. First, it enables resource allocation decisions to be driven by the values, core missions, and priorities of the university rather than dictated by external forces. Second, since it replaces the traditional fund-accounting systems by an accurate knowledge of the true resource flows throughout the university, it provides a far more strategic framework for allocation decisions. Finally, responsibility center management allows both academic and administrative units to participate, as full partners with the central administration, in making these resource allocation decisions

In its simplest form, responsibility center management allows units to keep the resources they generate. It holds them responsible for meeting the costs they incur. It then levies a tax on all expenditures to provide a central pool of resources necessary to support central operations (such as the university library) while providing the additional support needed by academic units unable to generate sufficient resources to support their activities. It differs from ETOB models in that the central administration retains control over significant general university resources—in Michigan's case, our \$300 million state appropriation—to use for subsidizing priorities such as undergraduate education and academic units such as the arts while allowing us to better respond to institutional opportunities and challenges, that is, to steer the ship.

It is clear that the highly centralized, incremental budgeting accompanied by fund-accounting systems may no longer suffice in the rapidly changing resource environment of the contemporary university. Moving from crisis to crisis or subjecting institutions to gradual starvation through across-the-board cuts simply are not adequate long-term strategies.

Planning and Financial Management

Over the past decade, it has become increasingly clear that universities must develop more effective financial management systems, capable of sustaining their core missions—teaching, research, and service—in the face of the rapid changes occurring in their resource base. Good managers will make good (cost-effective) decisions when they are provided with the necessary information

and proper incentives. The first challenge for a university is to select good managers and to provide training for them. The second challenge is to identify the appropriate level at which decision-making authority should lie with respect to each type of decision. If it is at too high a level there may not be an understanding of the primary impact on the unit or individuals (e.g., if the president were to assign faculty to courses). If it is at too low a level there may not be an understanding of the secondary impact on related units or individuals (e.g., if each faculty member were to choose his or her own courses).

The most dramatic change will have to be in the way universities plan. It will be necessary to start all planning exercises with significantly tightened and restrictive revenue assumptions. No longer will it be feasible—or even acceptable—to develop expenditure budgets first and then to close the gap between expenditure plans and revenue projections by a price increase (e.g., tuition). There will have to be much more care in setting priorities, along with a painful acknowledgment that in order to do something new we generally will have to eliminate something old. Innovation by substitution, not growth by incremental resources, will have to become the operative management philosophy. For instance, an academic unit that wishes to embrace a new sub-field of its basic discipline may be required to phase out some other activity in order to make room for the new endeavor.

Underlying nearly all of these comments is the fundamental premise that we cannot afford to engage in planning which is always "cost-plus" in nature. We cannot always start with where we are in a given unit and allocate existing resources to ongoing activities, and then depend on additional resources to undertake a new or innovative activity. We must instead consider eliminating, reducing, or otherwise changing a current activity to make budgetary room for the new activity that we believe to be important.

Key in this phase of financial restructuring was the building of effective leadership and management teams, extending from the Executive Officers to the lowest management levels. The Executive Officers of the University accepted the leadership responsibility for the various initiatives proposed by the business plan. Key in this effort were the roles played by the three senior officers, the president, provost, and chief financial officer in these strategic efforts.

Some General Observations Concerning the 1990s Business Plan

The University of Michigan's bold plan for financial restructuring during the 1990s was remarkably successful. Although state appropriations declined to less than 10% of our operating budget, the diversification of our revenue portfolio, the restructuring of our cost structures, and the implementation of sophisticated mechanisms for managing the financial, physical, and human assets of the university enabled us to become one of the strongest public universities in the nation (as measured both in financial terms by Wall Street and in academic quality terms by an array of rankings).

One of the great challenges the University faced through the 1980s was the need to upgrade an aging physical plant. A combination of low interest rates and construction costs, state capital outlay, private support, and support from auxiliary activities finally enabled the University to launch a massive \$2 billion to rebuild most of the facilities on its four campuses. While the rebuilding and/or major renovation of most of the campus during the past decade was an extraordinary accomplishment, of comparable importance was the massive effort to eliminate the deferred maintenance backlog that arose during the 1970s and 1980s. Further, major efforts were made to provide ongoing support for facilities maintenance so that such backlogs would not arise in the future. Note that key in these efforts was our ability to arbitrage by using our top credit rating to borrow construction funds at low interest rates, and then re-invest these funds in high earning endowment accounts during the period of construction.

Of course part of this shift was due to the University's great success in using its reputation not only to compensate for eroding state support, but to actually increase its resource base from alternative revenue sources such as student tuition, federal research support, private giving, and the income from auxiliary activities such as its hospitals, while building substantial reserves and endowment to protect the University from fluctuations in the economy. In parallel with this shift in resource base—and in some ways, driving it—was the implementation of a highly decentralized system of resource acquisition and control, in which both the academic and administration units were given both

authority and responsibility for both generating resources and controlling expenditures. Key to this strategy was the University's unusual constitutional autonomy that enabled it to control revenue sources such as tuition while adopting far more effective methods of resource allocation and cost containment. As a result, today the University of Michigan has become recognized as a leader in developing and executing the strategy of "privatizing" its resource base.

We believed it extremely important to pursue a balanced strategy. Our three primary objectives were to increase resources available to the University, to constrain costs and enhance the quality of the University, and to protect the assets (financial, physical, human) of the University. We needed to achieve a balance among the attention, energy, and effort directed at each objective.

External public perceptions at the state level, and their consequent political implications, threatened our strategic efforts. For example, there seemed little understanding at the grassroots level of the importance of the University of Michigan and its impact on the state. Further, there was growing hostility toward the independence of the University, fueled, in part, by public concerns about the costs of education and the rise of populist, anti-intellectual attitudes. And, of course, there is remarkably little public awareness of either the true costs—not to mention the value—of a quality college education, or of the serious erosion in state support of this activity.

The ever-broadening mission of the University, along with its increasingly complex and interwoven array of constituencies, suggested that we need to rethink how we managed the institution. In the past, we had taken great pride in lean management, relying heavily on academic and relatively inexperienced leadership. In reality, by 2000 the University had become a \$3.5 billion per year enterprise, with another \$6 billion under active management. We were comparable in size and complexity to Fortune 500 company. Further, for the past decade the University had grown at over a 10 percent per year compound rate. As our society became ever more knowledge-dependent, the University might be expected to grow even more rapidly in the years ahead.

It was clear that we needed to think more carefully and extensively about the management of the University. For example, we asked ourselves whether we needed to encourage the Board of Regents to evolve more rapidly into a true

“board of directors,” complete with a standard committee structure (Audit, Compensation and Organization, Finance, etc.). Did we need to intensify our efforts to ensure greater accountability across the University with additional audit operations, tracking and information-management systems? Did we need to recruit a more experienced management team to handle the complexities of the UM, Inc.? Did we need to provide more formal training for all faculty moving into key management positions (department chairs, directors, deans), e.g., through the Executive Education program in the School of Business Administration?

Finally, we seriously questioned whether we were thinking boldly enough. While the business plan we developed and implemented moved the University forward quite rapidly, there was nevertheless a growing concern that we should have been more aggressive. Perhaps we were thinking too narrowly, constrained by the mindset of a university of some distant past which did not even resemble the university of today, much less that of the next century.

Some Comparisons: UW vs. UM

Similarities

- The University of Washington and UM-Ann Arbor are comparable in size (with 37,000 students, although UM-AA is somewhat more graduate-intensive).
- Both of us receive about the same level of state appropriation (\$300 million) or about \$8,200 per student.
- Both of us have experienced a decline both in the percentage of state General Fund appropriations for higher education and a decline in our share of these appropriations as other Michigan public colleges and universities competed for a larger share of pot.

- Both institutions are national leaders in sponsored research, receiving about \$450 million a year from government sources.
- Both of us have medical centers, although UM-AA is about three times the size of UW in revenues (\$1.1 billion/year).

Differences

Our revenue portfolios are quite different, however, in three respects:

- First, UM-AA generates over \$510 million in tuition revenue compared to \$217 million for UW.
- Second, UM-AA's private fund-raising seems a bit more aggressive, raising over \$200 million last year (and completing a \$1.4 billion campaign in 1997).
- Third, our income from endowment is considerably higher, amounting to over \$150 million (at payout rates of 4.5% on a \$3.5 billion endowment).

As a result, although we have comparable enrollments, UM-AA has a considerably large budget than UW:

	Total	G&E
UM	\$2.86 B	\$1.71 M
UW	\$1.67 B	\$1.37 M

This translates into considerably higher faculty salaries and program quality (UM typically ranks with UC-Berkeley among publics and comparable to the top 10 private universities in both faculty salaries and program quality).

Tuition and Financial Aid Policies:

UM-AA sets both its own tuition levels and its instate-outstate student mix. Our instate students pay tuition from \$7,000 instate UG to \$20,000 for some professional programs. Outstate students pay tuition comparable to private institutions, ranging from \$20,000 UG to \$30,000 professional. We have been able to maintain outstate student enrollments of 30% to 35% undergraduate and well over 50% at the graduate and professional level.

However, we also have a need-blind admission policy coupled with a long-standing commitment to meet the full financial need of any Michigan resident enrolling in our undergraduate programs. (Total financial aid expenditures amount to over \$150 million.)

Reserves and Debt Financing

We have intentionally build up very substantial reserves for those activities characterized by unpredictable revenue streams (e.g., university hospitals and intercollegiate athletics). This, coupled with conservative financial management, have enable us to achieve the highest Aaa credit rating, allowing us to do debt financing at extremely low rates.

Management Culture

We are very highly decentralized in our financial management. Our responsibility center management system is essentially an “every tub on its own bottom” system with the exception that the central administration controls the allocation of the state appropriation (some \$300 million per year).

Institutional Autonomy

In contrast to UW, UM-AA has leveraged its constitutional autonomy over the years to give us (or at least our Regents) essentially complete control over all

aspects of the University, from student admission and enrollment to tuition to financial management. To be sure, state government can determine the magnitude of our state appropriation each year, but it cannot dictate how we use these funds. (Besides, they currently amount to only about 10% of our total budget and 17% of our General and Education budget.)

Note, we have occasionally found it necessary to sue the state (very politely and diplomatically, to be sure) to reassert this autonomy. We are careful to challenge the state's authority only in areas that are not only important to the University but where we believe we can win in the courts so that our autonomy is reinforced.

The Broader Landscape

The financing of the university—the structure of its internal costs, the pricing of its educational products, the acquisition of the resources necessary to support its activities—has become the center of a national debate. The rising costs of higher education during a period of stagnant or declining public support and the consequent increases in tuition have triggered great concern about both the access to and quality of higher education. Nowhere is this debate more intense than in public universities, where most of the nation's college students are educated.

The ever-increasing costs of the university should not be surprising in view of the exponential increase in knowledge and the growing educational needs of our society. The demands upon our public colleges and universities continue increase, with the population college age students growing once again while the needs of adult learners are expanding rapidly. States expect public universities to provide the basic and applied research so important to economic growth in a technology-dependent economy. The needs for professional services in areas such as health care, technology transfer, and extension all continue to grow. Yet, state governments are less inclined to provide the funding increases necessary to allow public universities to respond to these growing needs of a knowledge-driven society in the face of other social priorities such as crime, health care, and K-12 education.

Beyond this issue of public priorities is a continuing struggle to assign the values of higher education to the public vis-a-vis the individual, by asking the classic questions of “Who benefits?” and “Who pays?” As a nation we seem to be in the process of replacing an earlier social contract that views higher education as a public good, benefiting society at large and hence deserving of public support, with a view of a college education instead as primarily an individual benefit that should be financed through the marketplace

It seems clear that the financial challenges to the public university require a serious rethinking and possibly even restructuring of all of its financial activities, from asset acquisition and allocation to financial management to cost containment.:

- Universities need to explore new financial models that strive to build far more diversified funding portfolios, less dependent upon state appropriations, that enable public universities not only to increase the resources available for academic program support but moreover provide resilience against the inevitable ebb and flow of state support.
- Universities need to build adequate reserve capacity, both in the budgets of operating units and through endowment accounts.
- The allocation and management of resources, the containment of costs, and the adoption of efficiency measures common from business such as systems re-engineering and total quality management are important strategies
- But perhaps most significant is an entirely new approach to financial management, responsibility, and accountability that will enable the public university to thrive during a period of constrained public support.
- Public universities must break free those traditions that depend heavily upon generous state support, and instead manage their financial affairs much as private universities. They must become more entrepreneurial

and proactive, seeking both the resources and the autonomy that will allow them to thrive in spite of the vicissitudes of public funding. In a sense, they must become privately financed and privately managed public universities.

Financial Management, Responsibility, and Accountability

Despite the fact that in many ways, the public university has become one of the most complex institutions in modern society—far more complex, for example, than most corporations or governments—its management could best be described as “amateur.” That is, although competent professionals have usually been sought to manage key administrative areas such as investments, finances, and accounting, the general leadership, management, and governance of the university has been the responsibility of either academics or lay board members. In fact, many universities take great pride in the fact that they not only are led and managed by “true academics” with little professional experience, but also governed by lay boards with little business or educational experience.

Today the typical public university affects the lives not simply of thousands of students and faculty but thousands more staff members and hundreds of thousands of community and state citizens that depend upon its critical services such as education, health care, and economic development. Furthermore, these institutions attract and expend billions of dollars of public and private funds. We can no longer pretend that the detached, amateurish academic leadership model is sufficient. Nor is it any longer sufficient to rely upon politically selected lay boards for their governance. Like other major institutions in our society, we must demand new levels of accountability of the university for the integrity of its financial operations, the quality of its services, and the stewardship of its resources.

Although some universities still draw much of their leadership from academic ranks, more and more are recognizing that the vast scope, complexity, and impact of these institutions requires the presence of talented and qualified management professionals. Too much is at stake, both for the institution and the society it serves, to tolerate the limited experience and business acumen of the

academy. In fact, there are increasing calls for more formal training in business and management for all of those in academic administration, from presidents to deans to department chairs. Too many people depend upon their decisions; too many dollars are involved; too much legal liability is at stake, to rely upon the limited management experience of most academics.

Yet, even with adequate training and experience, the administration of the public university faces many challenges. Most institutions lack serious financial planning—which is not surprising given that the academy resists any suggestion that academic units should develop a business plan. Universities are plagued by a serious incompatibility in the responsibility and authority assigned to those in administration. All too often those charged with the responsibility for various activities simply are not provided with the authority to carry out these tasks. By the same token, many with relatively little responsibility have great authority to prevent decisive action. Little wonder that the university administration is frequently unable and unwilling to tackle major issues such as the downsizing or elimination of obsolete programs in order to free up resources for new initiatives. Sacred cows such as intercollegiate athletics continue to graze on the core academic programs of the institution.

This mismatch between authority and responsibility can be attributed to many factors, for instance, a faculty culture that resists strong leadership, or the relatively short tenure of most academic administrators. But ultimately all of these factors trace to the political nature and the limited experience of the governing boards at most public institutions. In a legal sense, the governing board of a public university is responsible for its integrity. They have a fiduciary responsibility for its financial operations, as well as a legal responsibility for its welfare. Yet, this responsibility exists largely in theory and not practice, since board members are rarely held personally accountable for their actions. Indeed, governing boards as bodies are rarely evaluated with respect to their competence and actions.

Most governing boards of public universities are determined through political processes. Members are either appointed by public leaders or elected through partisan political processes. Political factors are far more important than expertise or institutional commitment in determining board members. Once

appointed or elected, board members generally serve for long terms—typically 6 to 10 years—subject only to a recall action taken by the electorate or removal for malfeasance by the courts. There is ample evidence to suggest that, for all practical purposes, board members are effectively isolated from accountability for even the most blatant incompetence or grievous misbehavior.³ Political accountability falls far short of true fiduciary accountability.

This should be contrasted with the liability of directors of a major corporation, who can be held not only personally liable for their board decisions and actions, but can be removed in a timely fashion by a vote of the shareholders.

Furthermore, the governing boards of private universities can deal with unsatisfactory performance by removing any of their members through board action. Not so for the members of public governing boards, who can be removed only by action of the electorate or the governor—and then only when their term has expired. This absence of direct accountability of the governing board is one of the most serious factors in leading to weak management and leadership of public universities.

The Privatization of Public Higher Education in America

Today in the face of limited resources and more pressing social priorities, the century-long expansion of public support of higher education has slowed. While the needs of our society for advanced education can only intensify as we evolve into a knowledge-driven world culture, it is not evident that these needs will be met by further growth of our existing system of public universities.

The terms of the social contract that led to these institutions are changing rapidly. The principle of general tax support for public higher education as a public good and the partnership between the federal government and the universities for the conduct of research are both at risk. These changes are being driven in part by increasingly limited tax resources and the declining priority given higher education in the face of other social needs.⁴

We now have at least two decades of experience that would suggest that the states are simply not able—or willing—to provide the resources to sustain growth in public higher education, at least at the rate experienced in the decades

following World War II. In many parts of the nation, states will be hard pressed to even sustain the present capacity and quality of their institutions. Little wonder that public university leaders are increasingly reluctant to cede control of their activities to state governments. Some institutions are even bargaining for more autonomy from state control as an alternative to growth in state support, arguing that if granted more control over their own destiny, they can better protect their capacity to serve the public.

Most pessimistically, one might even conclude that America's great experiment of building world-class public universities supported primarily by tax dollars has come to an end. Put another way, the concept of a world-class, comprehensive state university might not be viable over the longer term, at least in terms of an institution heavily dependent upon state appropriations. It simply may not be possible to justify the level of tax support necessary to sustain the quality of these institutions in the face of other public priorities, such as health care, K-12 education, and public infrastructure needs—particularly during a time of slowly rising or stagnant economic activity.⁵

One obvious consequence of declining state support is that the several of the leading public universities may increasingly resemble private universities in the way they are financed and managed. They will move toward higher tuition-high financial aid strategies. They will use their reputation, developed and sustained during earlier times of more generous state support, to attract the resources they need from federal and private sources to replace declining state appropriations. Put another way, many will embrace a strategy to become increasingly privately financed, even as they strive to retain their public character.

In such "privately financed, public universities" only a small fraction of operating or capital support will come from state appropriations. Like private universities, these hybrid institutions will depend primarily upon revenue they generate directly from their activities—tuition, federal grants and contracts, private gifts, and revenue from auxiliary services such as health care—rather than upon direct appropriations. They will manage these resources much as private universities, moving toward more decentralized "tub-on-their-own-

bottom” budgeting philosophies in which their academic units have both the responsibilities and incentives for generating resources and containing costs.

State universities choosing—or forced—to undergo this “privatization” transition in financing must appeal to a broad array of constituencies at the national and global level, while continuing to exhibit a strong mission focused on state needs. In the same way as private universities, they must earn the majority of their support in the competitive marketplace, i.e., via tuition, research grants, and gifts, and this will sometimes require actions that come into conflict from time to time with state priorities. Hence the autonomy of the public university will become one of its most critical assets, perhaps even more critical than state support for some institutions.

Several public universities such as the University of Michigan and the University of Virginia are well down this road. Several other leading public research universities are likely to follow as state appropriations continue to decline as a fraction of their revenue base. However even if this strategy represents a viable option for some of the leading public universities to maintain their quality during a time of constrained or declining public support, it does raise a number of important issues. For example, how does one preserve the public character of a privately financed institution? Clearly as a public university becomes more independent of the purse strings from state appropriations, it becomes less inclined to follow the dictates of state government, particularly if it possesses constitutional or statutory autonomy. No longer is its “public” simply the taxpayer, but rather an array of stakeholders including parents and students, federal agencies, donors, and business and industry. Such privately-supported public universities face a particular challenge in balancing their traditional public purpose with the pressures of the marketplace.

As we enter the new millennium, there is an increasing sense that the social contract between the university and American society may need to be reconsidered and perhaps even renegotiated.⁶ It may be time to consider a new social contract, linking together federal and state investment with higher education and business to serve national and regional needs, much in the spirit of the land-grant acts of the nineteenth century. Key to this effort is our ability as

a society to view higher education as, in part, a public good that merits support through the investment of public tax dollars. In this way, our nation could best protect the public purpose of the higher education enterprise and sustain its quality, important traditions, and essential values while better enabling it to respond to the needs of a twenty-first century society.

¹ Balderston, Frederick, E., *Managing Today's University: Strategies for Viability, Change, and Excellence* (Jossey-Bass, San Francisco, 1995) 398 pp.

² Whalen, Edward L., *Responsibility Center Management* (Indiana University Press, Bloomington, 1991) 204 pp.

³ National Commission on the Academic Presidency, "Renewing the Academic Presidency: Stronger Leadership for Tougher Times," (Washington D.C.: Association of Governing Boards of Universities and Colleges, 1996); Richard T. Ingram, *Transforming Public Trusteeship*, Public Policy Paper Series (Washington, D.C.: Association of Governing Boards, 1998).

⁴ Robert Zemsky, "Rumbling," *Policy Perspectives*, The Pew Higher Education Roundtable, sponsored by the Pew Charitable Trusts, (April, 1997); ⁴ Robert Zemsky and Gregory Wegner, "A Very Public Agenda," *Policy Perspectives*, Vol. 8, No. 2, Knight Higher Education Collaborative, Philadelphia, (1998).

⁵ Joseph L. Dionne and Thomas Kean, *Breaking the Social Contract: The Fiscal Crisis in Higher Education*, Report of the Commission on National Investment in Higher Education (New York: Council for Aid to Education, 1997).

⁶ Vernon Ehlers, "Unlocking Our Future: Toward a New National Science Policy," a report to Congress by the House Committee on Science (September 24, 1998).