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7. EFFECTIVE UNIVERSITY MANAGEMENT IN DIFFICULT TIMES

INTRODUCTION

Any thoughtful discussion of university management in difficult times must occur in at least two contexts. The first is framed by the past half-century, a period in which we have seen the progressive collapse of state financial support for public colleges and universities in the United States, with simultaneous demands for increased student enrolment. The second is the more recent timeframe of the past year, a period whose global financial crisis and concomitant recession have exacerbated the problems that took shape in the last half-century, as historic decreases in US states' tax revenues have led to additional reductions in state support for public colleges and universities. Private universities have shared in the more recent suffering, because of considerable endowment losses that have coincided with losses in the equities markets. While US universities struggle through the recession, institutions in other parts of the world are somewhat protected by more robust government support. The damage that has occurred in the past half-century and especially in the past year has left public colleges and universities and also many private institutions, particularly in the US, in a precarious condition. We are struggling to preserve our commitments to teaching, research, and service, because of financial constraints, increased operating costs, and other pressures. Effective management is the best, perhaps the only solution to the predicament in which we find ourselves in these difficult times.

For the purposes of this paper, discussion of world-class universities in the US will include the members of the Association of American Universities (AAU), top-tier Land-Grant institutions, and a few anomalies with distinguishing characteristics. In particular, this paper describes institutional practices at the University of Virginia and at other US colleges and universities as they seek to sustain their commitments to teaching, research, and service in spite of the financial constraints arising from the economic downturn of recent years.

THE ISSUE OF GOVERNANCE

Management in colleges and universities is a function of governance. Governance systems for higher education differ greatly from nation to nation, and even among US colleges and universities, governance takes many different forms. Private universities are typically governed by one of two types of boards: self-perpetuating boards

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made up of laypersons, with heavy alumni involvement; or self-perpetuating boards made up of university employees (senior administrators). These boards are flexible and characteristically small, sometimes as small as five persons. In private universities with self-perpetuating boards, there is usually an inner circle responsible for governance and a larger outer circle of people responsible for fund-raising. Governance systems for public universities in the US range from relatively simple structures that place a single campus under the governance of an appointed board of trustees, to the complex configurations seen in state university systems (California and Texas, for example), with their overlapping boards of regents and trustees.

Some US colleges and universities are Land-Grant institutions, and some are not. The distinction is important, because it is directly related to the institutions' founding missions and their modern-day purposes. Land-Grant colleges are the result of the federal government's Morrill Acts of 1862 and 1890, which gave eligible states 30,000 acres of federal land to sell off to finance the establishment of public colleges (The Library of Congress Web Guides, 2009). The 1862 Act dictated that Land-Grant colleges and universities should provide farmers and their children with an education in science, engineering, military tactics, to meet the need for trained military officers to fight in the American Civil War (1861–1865), mechanical arts, agriculture, and other practical matters to prepare them to participate in the work of the Industrial Revolution. The concept had already begun to take shape prior to passage of the Morrill Acts, for in 1855 Michigan State University became the first Land-Grant university (known then as the Agricultural College of the State of Michigan), and similar institutions were soon after established in Pennsylvania (the Farmers' High School of Pennsylvania, later Pennsylvania State University) and Iowa (Iowa State Agricultural College, later Iowa State University).

The first Land-Grant institution created under the Morrill Act was Kansas State University. Some states today have both kinds of public universities: Michigan with Michigan State University as the Land-Grant and the University of Michigan; and Virginia with Virginia Tech as the Land-Grant and the University of Virginia. Among the private universities, several have Land-Grant origins, and some still retain limited Land-Grant functions. In 1852, Yale instituted its engineering school and the degree of Bachelor of Philosophy (science) and instruction in these programmes was consolidated in 1854 into the Yale Scientific School that, on being renamed the Sheffield Scientific School, became Connecticut's Land-Grant college. MIT began as a Land-Grant college, and still retains a strong emphasis on scientific and technological research. Today, Land-Grant colleges and universities continue to fulfil their mandate by providing accessibility to higher education for great numbers of American young people, and several of these institutions are among the nation's most distinguished public research universities. Some still carry out assignments that stem naturally from their origins. For example, Land-Grant universities manage databases of genetic strains of plants and animals throughout the US — the University of Connecticut for chickens, the University of Illinois for corn, and University of California-Davis for viticulture and enology, amongst others.

In spite of the discrepancies among colleges and universities in the US — private and public, Land-Grant and non-Land-Grant — many institutions have faced common

challenges in recent decades. Many public universities, in particular, have been beset by massive reductions in state support with simultaneous demand for increases in student enrolments. These pressures have forced these institutions to seek greater operating autonomy from their respective state governments; reform tuition policy whilst ensuring access and affordability; and to increase dependency on private support.

THE CONTEST FOR CONTROL

In the past half-century, the management of public colleges and universities in the US has often been a story of give and take between institutions that desire greater freedom from state control and state legislatures that seek greater control over those institutions. Whilst this statement is truer of non-Land-Grant public universities than of the Land-Grant colleges and universities, it does not greatly misrepresent the normal course of relations between the states, which own and support all US public institutions other than the service academies, and the now-more, now-less independent public universities. Others, most notably California, support multiple complex systems of universities, some subject to direct legislative directives and others protected by provisions in state constitutions or in their charters. The differences between these two kinds of public universities are ultimately less significant to this topic than the various ways in which the states have defined the legislature's or the governor's role in directing university affairs. In some instances, most notably Texas, legislative involvement in the affairs of two large public university systems is often said, however fairly, to be considerable. In other instances, with perhaps Michigan the best case, trustees elected by all the registered voters in the state govern the universities, thus at least in theory protecting against inappropriate intrusion on the part of the state government.

Two decades of more or less steadily declining state tax support, often coming with demands for the public universities to expand their enrolments and more recently the extreme US version of the global economic crisis, have exacerbated the levels of financial and political demands made on the public universities. That said, it is important to acknowledge that more than a few states, Iowa for example, but also others in the American Middle West, have scrupulously protected tax funds for the public universities, until very recently. In the same vein, not all reductions in tax funds have resulted from considerations of education. For example, so-called taxpayer revolts in California and Virginia, and legislative responses to them, have had more to do over time with reductions in tax support for the universities than general economic conditions, although more recently these states' cuts have been driven primarily by the national recession.

In the states whose situations I know best, Connecticut and Virginia, political responses to recessions have differed radically, in spite of the fact that the economic conditions in the two states have been remarkably similar. In its recession of 1989–1992, Connecticut's governor repeatedly promised to restore funds cut from the university as rapidly as possible, and indeed by 1996 he had done so. By contrast, responding to Virginia's somewhat less severe recession of 1990–1992,

three consecutive governors put politically popular reductions in tax rates ahead of supporting the public universities, and in fact made three state functions (education, healthcare facilities and support for indigent persons, and highway construction maintenance) absorb most of the reductions initially driven by the recession, then subsequently by tax cuts. This history has had ironic consequences: what were once the most reliable supporters of public higher education have become the least reliable, with the consequence that the best public universities now compete with the private national universities (Stanford, Harvard, etc.) for philanthropic gifts, with remarkable success; and what were once the least costly American universities for students to attend have had to charge higher tuitions and fees than they once did, with the consequence that many students who could once earn the cost of attendance by working whilst attending, now must borrow to pay their fees, thus limiting their options for postgraduate studies.

Disparate though conditions are among the states and among their public universities, these events of the last two decades have forced some of the states to reconsider and restructure their relations with their public universities and at the same time compelled many of the universities to find new ways to deal with state governments. These changes actually began more than half a century ago and in one specific case, the political leaders in Vermont, then as now a sparsely populated, largely rural state, convinced themselves and the voters that it could profit by the uncommon excellence of its state university, which at the time competed successfully with many of its regional private competitors (Dartmouth, Middlebury, Colgate, Hamilton—then as now, prominent liberal arts colleges). By the early 1990s, Vermont was a noteworthy, but peripheral exception, to the general rule among the states of supporting education ahead of all other obligations that particularly existed in the heady 1980s when virtually all of the states were wealthy. Consequently, Vermont moved to make its public university more expensive for non-Vermont students than most if not all of its private competitors. Over time, in-state students also paid uncommonly high fees, because having cut tax appropriations to the university and committed the money elsewhere the state could not repair the damage done to the university, other than by raising taxes, a strategy not acceptable to the voters. The result is that a university that, while small, supports major research programmes, and still has some of uncommonly high quality, has become increasingly a local option for Vermont students, rather than a regional or national option for all students.

External intrusions into university affairs, often politically motivated, have exacerbated tensions during the last half-century. In 1949, Clark Kerr, a University of California professor who later served as UC president from 1958 to 1967, fought on behalf of the faculty against a loyalty oath required by the Board of Regents. In this regard, the Board had imposed a requirement that all university employees sign an oath affirming loyalty to the US Constitution and denial of membership or belief in organizations (including Communist organizations) advocating overthrow of the US government. However, many employees resisted the oath for violating principles of shared governance, academic freedom, and tenure. Clark Kerr experienced another form of intrusion nearly two decades later, when Ronald Reagan, three weeks after

he was elected governor in 1967, directed the board of regents to fire him from the UC presidency. Moreover, Reagan did not believe that a great university needed to be supported by public funding, so he cut the UC budget by 10% and proposed that it should sell the collections of rare books in Berkeley's Bancroft Library. Furthermore, he insisted on the setting of a political standard for appointing faculty members in the departments of sociology and philosophy, which he considered as being hotbeds of liberalism.

SECURING GREATER AUTONOMY

Public colleges and universities have been forced by economic realities, political intrusions, and other pressures to re-evaluate their relationships with their state governing bodies. Some schools have responded with new management models that fundamentally redefine these relationships. One watershed case occurred in Virginia, where administrators and trustees from colleges and universities in the state worked to secure passage of the Restructured Higher Education Financial and Administrative Operations Act of 2005 (The State Council of Higher Education for Virginia, 2005). The legislation has given Virginia's higher education institutions the capacity to plan effectively for their future and manage their operations more efficiently. It marks a major adjustment of the colleges and universities' relationships to state regulatory agencies, especially with regard to spending, tuition, construction, and personnel and asset management. With new freedoms come new responsibilities. Colleges and universities that benefit from restructuring must meet a set of state goals that include creating six year financial plans; setting and meeting financial and administrative performance standards; working with specified K-12 schools or districts to improve student achievement; stimulating economic development in distressed areas of the state; meeting enrolment demands; and making attending college affordable for all Virginia students while also enrolling more transfer students from Virginia's community colleges. The State Council of Higher Education for Virginia (SCHEV) assesses performance in meeting these goals annually and if it deems an institution successful at meeting the state goals, the institution becomes eligible for a series of financial incentives.

One distinct advantage of the Restructuring Act is that it avoids the one-size-fits-all approach that has characterized other arrangements between public universities and their states. Restructuring has offered Virginia's public colleges and universities the opportunity to apply for three distinct levels of autonomy. That is, all of these colleges and universities, after their respective boards have committed to meet the aforementioned statewide goals included in restructuring, achieve Level I status. After securing this status, the institutions that continue to advance their financial and administrative strength may then enter into memoranda of understanding to achieve Level II status. Institutions that achieve what is termed Level II autonomy may then seek additional, more comprehensive autonomy, through a management agreement, which outlines board approved policies in the following areas: 1) capital outlay; 2) leases; 3) information technology; 4) procurement; 5) human resources; and 6) finance and accounting. In 2006, the general assembly approved the management

agreement negotiated by the University of Virginia with the governor, which re-affirmed its authority to set its own tuition and gave authorization for it to independently manage operations in these six core areas. William and Mary and Virginia Tech also achieved Level III autonomy, whereas other institutions in Virginia fall somewhere in between Level III autonomy and Level I autonomy.

REFORMING TUITION POLICY

In its English origins the word tuition means the teaching or instruction of students. (When conceiving the University of Virginia, Thomas Jefferson described students "… rising under a luminous tuition, to destinies of high promise.") (The University of Virginia Library, n.d.). However, in modern times in the US, tuition refers to the fees that colleges and universities charge students for their instruction. In Asia, universities use the word fees to describe the same charges, whilst in the UK, "top-up fees" are a new way of charging students who study at universities in England and Wales. Prior to 2006, most British students paid some portion of their tuition — a capped fee based on their families' incomes. Top-up fees allow universities to charge students additional fees to finance more closely the actual costs of providing courses. Top-up fees are controversial, with critics arguing that the fees will discourage students from going to college, because of the large debts they will incur.

Tuition policy is a serious matter for both public and private colleges and universities in the US. Although these institutions are different in many ways, the current economic crisis has put both the public and private in the same leaking boat. That is, the demand for higher education has never been greater, but securing the funding to pay for it has seldom, if ever, been more difficult. The operating budgets of private universities depend heavily on income from their endowments, where for some these supply as much as 30% to 40% of their annual operating budgets. By contrast, state universities depend on allocations of tax monies set by their states' legislatures and the economic downturn has dramatically reduced tax revenues to the states. With endowment losses and the concomitant drop in payout, and with availability of state funding so thoroughly diminished, all institutions are hard pressed to fund the costs to meet their business practice.

The simple solution would be to increase tuition to meet institutions' budget needs, but students, tax paying parents, legislators, and the media are highly aware and often critical of the steady increase in tuition over the past two decades, an increase that has exceeded the annual rise in the cost of living. In this regard, faculty and students in the University of California system recently protested against the state legislature's approval of a 20% cut in funding and the university administration's response, which proposed a 32% increase in tuition and mandatory furloughs for faculty members.

When reforming the policy for setting tuition, institutions need to think beyond the usual considerations: the market, what peer institutions charge, what potential students expect to pay based on previous years' charges, and the availability of financial aid to offset tuition for needy students, without overburdening them with loans. Various ideas have emerged regarding how to reform tuition policies, including

charging differential tuition rates programme by programme to reflect the variations in the actual costs of a student's education (both undergraduate and graduate), holding tuition at the same cost as the student's year of entry, and removing the caps on out-of-state enrolment at public institutions, thereby increasing the number of such students who pay higher tuition. However, in many cases the current model for setting tuition is a one-size-fits-all approach: charge rates that are consistent with benchmark institutions and meeting enrolment targets is vital to this approach. Steady enrolment or enrolment growth is the common assumption, but very seldom does academic and long-term resource planning precede and then determine realistic enrolment targets to fit the plan, i.e., scale the size of the programme to available resources. An alternate approach would be to set enrolment and tuition limits first and then plan to raise the funds from other sources necessary to meet the budget.

Yet another model starts with the institution's mission and subsequently sets tuition with the goal of linking the mission to the budget. This might mean eliminating programmes that are not essential to the mission, or it might mean lowering enrolment levels. In this regard, if the quality of instruction is primary to the institutional mission, then this becomes the key factor in building the budget and planning enrolment and such an approach might require hiring more faculty members to lower the faculty-to-student ratio. One of the more radical proposals has been to differentiate among the community colleges, four-year universities (dedicated primarily to teaching), and research universities and even to reduce the number of research universities altogether. In this regard, tuition is lowest at the two-year colleges, and highest at the research universities, where support for research activities is very costly. However, regardless of what measures we may take to rethink the cost of tuition, universities need to work to establish education as a priority in the minds of the public and of their legislatures, by promoting the truism that education is an investment in future generations. In particular, this should involve disseminating the fact that higher education prepares citizens to be contributing members, both intellectually and financially, to the nation and to the localities where they work. Moreover, as part of any public-relations campaign, higher education institutions should define clear terms of public accountability and make readily available the proof that they are living up to the standards they have set.

With regard to tuition policy, there is often a discrepancy between concept and practice, for whilst the trustees of US public colleges and universities technically have authority to set tuition, legislators and governors have frequently interfered with this authority. Such erratic fiscal policy coincided with a period when the universities were growing more complex and the various demands for state resources were increasing. However, since the necessary recent restructuring Virginia's institutions have gained more control over tuition which has helped them to deal with the volatility of appropriations, ensure greater stability and predictability, and to enable long-term planning. With this greater control, Virginia's colleges and universities have gained more freedom to price tuition according to market demands and at a benchmark closer to its peer universities. Several political realities in Virginia have tempered our ability to set tuition at true market rates, however. For example, members of the General Assembly's House of Delegates must run for

election every two years, so they are continually held accountable by their hometown constituents for unpopular decision, including those related to tuition increases at Virginia's public colleges and universities. These elected officials tend to make tuition control a campaign theme every two years. In this regard, from time to time, members of the general assembly have tried to insert language in appropriation bills that would limit tuition increases and supersede the tuition policies outlined in Virginia law. Another political reality is that in Virginia the governor is elected to a single four-year term without the opportunity to run for a second term and he/she also has the authority to appoint the members of the governing boards of the state's universities. These appointments often reflect political affiliations, which can often change, rather than commitment to the institution and this has limited our ability to create long-term plans or to build durable collaborative partnerships with the incumbent governor. Despite these constraints, the additional freedoms that have resulted from restructuring have enabled us to enhance the quality of education we offer, strengthen economic development, and improve access to higher education.

INCREASING ACCESS AND DIVERSITY

Nowadays, the leaders of US colleges and universities often speak of commitments to diversity, but the concept of diversifying the student body by attracting students from every racial, ethnic, geographic, and socio-economic background, is relatively new. Until about a half-century ago, few institutions bothered to seek out talented students from the full spectrum of the population. It was easier to let the students who excelled and who were from families with adequate financial means find their way to the universities of their choice. Seeking out the talented students in underserved and under-represented populations has required more work. Now, providing access to higher education for students from all populations has become a sort of national mission in the US, with colleges and universities making commitments to robust financial aid programmes to offset tuition increases and to ensure that college education remains affordable during difficult economic times.

At the University of Virginia, we created the AccessUVa financial aid programme in 2004, before passage of the restructuring legislation, to provide support for students from low- and middle-income families (The University of Virginia, 2004). Through this programme the university promises to meet 100% of demonstrated need for all admitted undergraduate students. Moreover, it replaces needs based loans with grants for students from families with incomes up to 200% of the poverty level, and limits the amount such loans that any student is required to take on. This latter piece of the programme is targeted at middle-income students whose families earn between $75,000 and $149,999, many of whom are supporting more than one college student at a time. The university assesses the programme's success in increasing enrolment and enhancing the experience of AccessUVa students, by tracking the number of applications received from low- and middle-income students, the percentage of low-income students in the student body, and the financial aid recipient participation in such activities as internships and study abroad. AccessUVa students graduate with manageable amounts of debt so they can go on to medical

school, law school, or do public-service work if they so choose, rather than rushing into jobs to begin paying off loans.

UNC-Chapel Hill created the Carolina Covenant in 2003 to meet 100% of demonstrated need for those students whose families' incomes are 200% or less of federal poverty guidelines (The University of North Carolina, 2003). Both AccessUVa and the Carolina Covenant guarantee students whose families have such income levels that they can attend the institutions without incurring debt. Moreover, both include comprehensive efforts by the universities to recruit more students from low-income families. The University of Michigan launched M-PACT in 2005, so that now eligible students' financial aid packages include higher percentages of grant support and decreased percentages of loans (The University of Michigan, 2005). For this, Michigan provided an initial $9 million in seed money to jump-start the programme so that 2,900 in-state undergraduates at the Ann Arbor campus could benefit and the state authorities hope to raise a permanent endowment of at least $60 million for the programme.

These initiatives have spurred other programmes, like the University of Florida's Florida Opportunity Scholars programme (FOS) (The University of Florida, n.d.), which provides full grant/scholarship financial aid packages to freshmen Florida resident students, from families which make less than $40,000 per year. The programme was made available to first generation in college Florida resident, first-time in college (FTIC) freshmen students, enrolling beginning in summer 2006 or later Recipients receive a full grant and scholarship package each year for enrolment on a baccalaureate degree programme and two million dollars in grant assistance was committed for the 2006–07 inaugural years. The University of Maryland created a financial assistance programme called Maryland Pathways in 2005 (The University of Maryland, 2005), which is a three-tiered programme that reduces the debt component and increases the grant component of the student's financial aid package, including the elements: Work Grant, Pell Grant Supplement and Senior Debt Cap. When fully implemented, Maryland estimates that it will cost $1.6 million annually. The University of Texas has a similar programme called the Longhorn Opportunity Scholarship, which provides scholarships to students from high schools in census tracts with average family incomes of less than $35,000 and whose students have been historically underrepresented at the university (2009). The programme also combines coordinated focused mentorship opportunities, designed to provide substantial assistance to students in their first year of enrolment.

Further, some states have become involved in increasing access through needs based financial aid programs for in-state high school graduates attending in-state institutions and New York State's Tuition Assistance Programmes and California's Cal Grant programmes are two notable examples. Another needs based programme worth mentioning is the D.C. Tuition Assistance Grant Programme that allows residents of the District of Columbia to attend public institutions in other states, but they pay only the tuition charged to in-state students in those other states.

Some of the most selective private institutions in higher education with vast resources have taken aggressive steps to increase access. In this regard, Princeton University was the first to do so in 1998 when it eliminated all loans from financial

aid packages, followed closely by Harvard who matched this and also went further when it announced in the spring of 2004 that parents of students of families earning less than $40,000 a year would not be required to pay anything towards their students' education. However, students coming under this scheme are still required to contribute through academic and summer job earnings.

The US federal government runs Federal Student Aid, an office of the U.S. Department of Education that provides federal aid for students, including Pell grants, Stafford loans, PLUS loans, and work-study programmes, which can supplement aid provided by state or local government and scholarships and other support provided by colleges and universities. Students fill out the Free Application for Federal Student Aid (known as the FAFSA) form to determine their eligibility for federal student financial aid, which consists of numerous questions regarding the student's finances, as well as those of his or her family.

Whilst federal support and aid programmes like the Carolina Covenant, AccessUVa, and others mentioned above would be important in any economy, the need for this kind of aid has become dramatically apparent during the past year, as the global economic meltdown has taken its toll on family finances in US households. The combination of the recession's effects and the failure of US federal and state financial aid programmes has made this a particularly difficult time for families to plan and pay for college education for their children. Moreover, the demand for financial aid will continue to rise as unemployment rises into 2010 and as more parents face salary cuts and freezes and other forms of diminished income. Comprehensive financial aid programmes, like AccessUVa, are expensive to finance. With respect to this particular form, in 2009–10 the university's unrestricted contribution to this programme will be $29.7 million and this cost will continue to rise as the recession continues. For instance, in the years since AccessUVa was introduced, the number of students demonstrating some level of financial need has increased by 15.3%, to almost 27% of the student body in the most recent academic year. The University funds this programme with revenue from various endowments designated for needs based financial aid, from internal reallocations, from profits or by using excess reserves in a variety of units that receive external revenue, from tuition, and from private gifts. We have launched a fundraising programme this fall to build an endowment for AccessUVa, so that we can meet this predictably increasing need in the years ahead. Many other colleges and universities have launched similar campaigns specifically to attract support for financial aid.

INCREASING PHILANTHROPIC SUPPORT

Philanthropy, in general, can be categorized as giving by persons, foundations, and other donor groups to non-profit entities, with those giving benefiting from associated tax advantages. Fundraising is the active solicitation of those gifts, which often subsequently are converted into endowments that allow their value to grow in the markets. In this regard, in colleges and universities virtually all endowed funds are invested, and a portion of the earnings is released each year to support their needs as well as to meet the purposes specified by donors. Based on historical averages,

a $1 million endowment gift made today can be expected to pay out about $500,000 over the next 10 years, and during the same period its principal will have grown to more than $1.8 million, because of reinvested earnings. Funds generated through endowments provide important sources of funds that universities would not be able to generate through less aggressive investments. For example, one dollar invested in Harvard's long-term endowment pool on July 1st 1989, would have grown to over nine dollars by June 30th 2009 and this includes accounting for losses reported this past year. The same dollar invested in a passively managed portfolio of stocks and bonds would only have grown to $3.60. Moreover, an endowment of $1 billion invested in Harvard's endowment pool from July 1989 through June 2009 would be valued at $2 billion today, even after providing a 5% per year spending distribution increased by a 3% per annum inflation rate. That same $1 billion of endowments invested in a passively managed portfolio of shares and bonds would have declined to $750 million after accounting for spending and inflation. Further, today, a 5% spending distribution from the $2 billion of endowments would be $100 million a year versus $38 million per year from the $750 million of endowments.

Because of historic reductions in state support for public universities in recent decades and simultaneous increases in operational costs, US public universities now pursue philanthropic gifts at least as aggressively as private universities do and often with equal success. As of August of this year, 33 American universities were pursuing capital campaigns with goals of at least $1 billion and amongst those universities, roughly half are public. In September 2006, we launched the public phase of a $3-billion campaign at the University of Virginia, which at the time of its announcement was the largest goal ever announced by any American university, public or private. Since that time, five private universities have launched campaigns with goals of $3 billion or more: Columbia ($4 billion); Cornell ($4 billion); Stanford ($4.3 billion); the University of Pennsylvania ($3.5 billion); and Yale ($3.5 billion). During the same period, four public universities have announced $3-billion goals, these being the State University of New York; City University of New York; University of California-Berkeley; and the University of Texas. All of these campaigns are ambitious, especially for public universities, and particularly with the current state of the economy.

The extreme US version of the global economic crisis has taken a toll on fund-raising in the past year. An April 2009 *Chronicle of Higher Education* analysis found that gifts to a dozen colleges that have been pursuing campaigns of at least $1 billion since 2007, had fallen by 32% from the previous 12 month period. A spring survey by the Council for the Advancement and Support of Education of fund raisers across higher education in the US and Canada, found that in the year ending June 30, they expected their gifts to be down by 4%. Nevertheless, colleges and universities have seen an average of 7% annual growth in giving over the last 20 years and whilst the recession has led to the postponement and cancellations of capital campaigns in some American colleges and universities, others are still thriving in spite of the economy. With respect to this, the crisis has affected philanthropic giving at the University of Virginia, to some extent, but perhaps less than one might expect considering the scale of the financial meltdown and its

effects on personal wealth in the US. At the end of the 2008 calendar year, we were about three-quarters of a percentage point behind our campaign target (61.8% of the goal achieved with 62.5% of the time having elapsed). On 1 April 2009, we were exactly 2% behind (63.6% achieved in 65.6% time having elapsed), thus the gap has widened, but only marginally so. As of 31 July 2009, the university had raised $1.985 toward its goal, or 66.2% of the total, with 69.8% of the time having elapsed and in early September, we reached the $2 billion mark, about eight weeks behind schedule. Other universities are making similar progress, with Columbia having raised $3.2 billion and Cornell $2.5 billion towards their $4 billion goals. Moreover, Stanford has raised $3.8 billion toward its $4.3 billion goal and UC-Berkeley and City University of New York have raised roughly half of the funds toward their $3 billion goals.

Although fundraising at American colleges and universities has become more sophisticated and complex in recent decades, the concept of soliciting friends and benefactors for support is nothing new. In fact, fundraising for higher education in the US dates back at least to the time of Thomas Jefferson, who asked his friends and colleagues for financial support to create the University of Virginia in the early 1800s and in the 200 years since then capital campaigns have been important pieces of our evolving financial self-sufficiency model at the university. In the early 1990s, sudden, singularly vicious, state funding cuts were even more common than they are now. In this regard, the state governor, in 1990–91, called for a radical scaling-back of research and scholarly activities in Virginia's universities and for a general renunciation of the state's commitment to excellence in higher education. The university responded to the losses in state support with a fundraising campaign that totalled $1.43 billion in 1995–2000. This successful campaign and subsequent prudent investments allowed the university to mitigate damage from the collapse in state support. The Board of Visitors used these new resources to support essential new construction, to pay for maintenance of buildings no longer supported by adequate public funds, and most critical of all, to make institutional funds the core support for both faculty and students, thereby working to reverse the process of deterioration that had occurred whilst the state did not have the means to pay salaries consistent with the market or to meet its share of the cost of financial aid to students. In sum, under the current economic circumstances the importance of philanthropic support has become increasingly important at our university and at every college and university in the US.

MANAGING THE ONGOING ECONOMIC CRISIS

In the past two years, some of the best institutions in the US, including private institutions, have been forced to take dramatic steps to reduce expenditures and otherwise mitigate damage from the historic meltdown in the global economy and the particularly severe US recession. Many selective private universities rely heavily on their endowments to sustain their operating budgets, and as a result those institutions have been severely affected by the economic downturn. Harvard has taken several steps to combat the economic crisis and a loss of 27.3% in its endowments, the biggest percentage decline in over 40 years. In fact, it had relied on its

endowments for roughly a third of its annual operating budget. To absorb these losses, it has frozen staff hiring, laid off 275 employees, offered 1,600 staff members a voluntary early retirement plan, scaled back its expansion plan for a separate campus in Allston, reviewed compensation costs, and cut spending.

As of early December 2008, the market value of Duke University's endowments was approximately 19% lower than on July 1st 2008. Its overall approach to weathering the financial downturn has included identifying cost reductions, savings and efficiencies in all school and administrative budgets; recognizing that the current downturn may be of sustained duration and that they must look for both one-time and more durable interventions; reviewing and potentially delaying proposed capital projects, until funding sources are clearly defined; and seeking resources for their strategic priorities, whilst continuing to protect core commitments, including faculty excellence and student financial aid. Moreover, to offset a $125 million budget shortfall the university has worked to cut $100 million from its $2 billion operating budget and used $500 million in new bond debt, normally reserved for capital needs, to cover operations. Similarly, the Johns Hopkins University's endowments lost 20% of their value in the first six months of the fiscal year beginning last July, and revenue for the 2010 and 2011 fiscal years will be $100 million short of previous estimates. In response to the economic crisis, it has frozen all hiring and most salary increases and reduced top administrators' pay by 5%.

The value of Stanford's endowments is expected to plummet by 30% in 2009, the largest single-year decline in the university's history. In monetary terms, valued at $17.2 billion in 2008, this is expected to fall to $12 billion this year, which is the same level as 2005. Moreover, having spent $933 million from its endowments in 2009, it will reduce that spending to $829 million in 2010 and make further reductions in 2011. In response to a directive to adjust to a new baseline budget, Stanford schools and units have laid off 412 staff members and eliminated their positions over the last eight months, a decision spurred by the steep decline in the value of the university's endowments. Approximately 60 more people will lose their jobs by the end of the year; many of them have already been notified that their positions will be eliminated as part of the university's response to budget reductions. Between December 18th 2008, and August 14th 2009, Stanford also laid off 72 staff members whose positions were funded by sponsored research. In addition to laying off staff, the university froze 50 open faculty positions, implemented a campus-wide salary freeze, eliminated unfilled staff positions and suspended construction projects valued at $1.1 billion. In addition, the university's schools and units cut spending on travel, food, marketing activities, computers and other equipment, professional services, conference fees and printing.

The University of Virginia relies less on its endowments to sustain its operating budget and has fared differently. In addition, officials at the university took aggressive measures to identify problems early, plan for them, and anticipate necessary corrective actions. These actions have included the following.

– Spending: Imposing strict limits on spending regardless of funding sources;
– Hiring: Holding open any existing and future vacant positions. Recruitment and hiring that are essential to preserve safety and revenue capacity must be approved

in advance by the provost or chief operating officer. Approval standards are rigorous;

- Managing Employee Levels: Establishing a transfer programme that will take stock of current talent available within the university and match it for use in departments that may need certain skills or resources. This programme will help preserve the university's workforce by retaining employees (transferring them) within the university instead of hiring from outside;
- Salaries: Planning no across the board general fund faculty and staff salary increases in two years (2008–2010). Certain special salary adjustments for reasons other than routine cost of living are granted on a case-by-case basis. Examples include: salary changes associated with staff and faculty promotions, counter offers, and unique competitive situations;
- New Hires: Setting salaries at levels equivalent to or below the salary of the person being replaced when the university must hire replacement personnel;
- Construction: Deferring new construction or renovation projects that depend on departmental operating funds or reserves and that have not been started, unless specifically approved in advance by the COO. This is a strategy to preserve departmental reserves for essential uses during the downturn;
- Travel: Limiting travel as much as possible. Priority will be given to teleconferencing when it is feasible; and
- Private Support: Reviewing estimates of private funds used to support unit operations and (as appropriate) making adjustments for diminished revenue streams in the short term. In addition, the university is increasing efforts to raise expendable funds from donors, to address shortfalls in funding for essential initiatives, most notably AccessUVa.

Thus far, we have been able to manage state budget cuts without layoffs, but it has not been easy. For the university to absorb these repeated cuts, total employment (the total payroll) has had to shrink to sustainable levels. Using retirements, routine turnover, and transfers, administrative units (not counting those in the Medical Center) have let go more than 100 positions during the last year. Moreover, in activities that are not absolutely essential to our core business of offering and supporting academic programmes, the coming year will bring reductions the will, at the very least, match this scale, but layoffs will continue to be a last resort. In this regard, layoffs are bad business logic in universities, because our chief investments are in people whose whole career accomplishments add up to the universities' net value. In addition, they are not compatible with an institutional culture in which the continuity of core business and perpetual innovation and reinvention matter, because we aim to grow stronger, especially so in bad times. Further, layoffs cost money, possibly more than they might save, because most staff and faculty members work in teams that have to be rebuilt from scratch, if allowed to collapse during a recession.

As the financial meltdown began to subside but the recession continued in the early months of 2009, secondary shocks became apparent in the US, particularly at the state level. In Virginia, tax collections fell by 21.3% in April compared to the previous year and in June, they fell another 8.8%, which represented the largest drop in state tax collections in recorded history. Virginia law requires our

governors to manage shortfalls by reducing allotments from the state's general (tax) funds to its agencies, which include public colleges and universities. Because little elasticity for growth currently exists in other revenue sources for the University of Virginia, the recession promises now to be the most serious financial setback of modern times, and because the university's mission and functions are far larger than they were in 1929, perhaps of all times. Since this recession began, it has already dealt with several prior state cuts spanning three fiscal years. This past summer, Virginia's governor required that all agencies provide plans for dealing with additional reductions equal to 5%, 10%, and 15% of their remaining state general fund appropriations for this year. In early September, he announced that the cut would be 15% or $19 million, but with federal stimulus funds offsetting a portion of the cut, thereby bringing the actual reduction down to $10.3 million. Further, the prior reductions were all ordered as permanent cuts in spending. The governor has stipulated that these additional reductions *may* continue through the next biennium (2010–2012), one of several signs that state leaders recognize the damage done by the seriatim cuts, and want to leave public agencies options for an eventual recovery.

Virginia's revenue crisis is by no means unique in the US and California, New York, Florida, North Carolina, and another 20 or so states have reported similar or worse numbers. As a result, public colleges and universities in these states are contending with reductions that are as severe as that of our university, and in some cases, worse. At the University of Virginia, we are better able than many of our peer universities to deal with cuts for two key reasons. First, despite market losses the university's fiscal managers are continuing to generate funds for academic programmes and to predict and effectively manage downturns. For example, wise endowment management has given the university strength and stability in the last decade, regarding which some history will provide a perspective. In 1998, the university established an investment management company as a subcommittee of the University's Board of Visitors' Finance committee. The investment company, called the University of Virginia Investment Management Company (UVIMCO), was created for a number of reasons, including to pool and manage numerous foundation monies into one endowment, improve hiring practices, increase salaries, and to establish the investment entity's own auditors, legal counsel, and payroll system. Also of importance was the opportunity to improve the university's ability to honour its confidentiality assurance to its investment managers. The intent behind the formation of UVIMCO was also to provide continuity to the management of the endowment and to provide outside investment expertise to the finance committee. Many US universities have disaggregated the investment function from the other duties carried out by boards of trustees (the Harvard Management Company being one of the more prominent examples). Evidence from the last half-century shows that this disaggregation is good practice, as it puts investment planning in the hands of professionals and allows board members to carry out responsibilities better suited to their areas of expertise.

Despite a ca. 25% drop in the value of the endowment, as a result of the recent global economic crisis, that of the University of Virginia has performed very well

over the long term. As of 30 June 2009, UVIMCO oversaw investments totalling $4 billion, which included the university's endowment and foundation assets as well as current funds invested in the long-term pool. During the 12 months ending on 30 June, the long-term pool had declined by 21%. Over longer-term periods, however, UVIMCO's returns compare favourably to benchmarks, for as of June 30th the endowment's multi-year returns were 3 year =1.6% compared to -8.2% S&P; 5 year =6.5% compared to -2.2% S&P; 10 year =9.5% compared to -2.2% S&P.; 20 year =11.6% with no S&P comparison. So far, the university has incurred somewhat less damage from losses in the markets than we would have predicted from prior experience and indeed, less damage than other large endowments are reporting.

Second and perhaps most essential for managing budget cuts, the university does not rely on a single major source of funds, such as the state or the endowment, with some wealthy private universities in the US reportedly drawing more than 40% of their expenditures from their endowments, but instead we rely on a diverse variety of sources: tuition set at a realistic level; patient fees at the Medical Center calculated to cover the real cost of providing care; endowment payouts set at levels that dampen the effects of downturns as well as upturns (and this year will fund 5.2% of the university's total operating budget); predictably strong annual and capital giving from alumni, parents, and friends; auxiliary revenues that cover the full cost of non-core functions; ticket sales; and state funding (which provides a smaller and smaller portion of the budget). Because these revenue streams are well diversified and predictable, we can manage them in unison to maximum advantage. Moreover, the diversity of revenue sources has allowed the university to keep its credit rating high, for despite a struggling economy and state budget cuts, it has repeatedly received AAA bond ratings from the top three rating agencies.

Actions taken by the US federal government to mitigate damage from the economic crisis have created opportunities for the University of Virginia and other colleges and universities to gain strength. In February 2009, US President Obama signed into law the $787 stimulus package known officially as the American Recovery and Reinvestment Act (ARRA) of 2009 (US Government, 2009). The university received $10.7 million in ARRA funds from the state to partially offset increases in tuition for in-state students and is now also pursuing such funds from federal agencies like the National Institutes of Health and the National Science Foundation. Researchers have applied for competitive grants, to date totalling over $277 million, and have received awards of $25.2 million over two years. Overall, the university's sponsored source of revenue, sponsored research funding, grants and agreements received from a variety of public and private sources, reached $295.93 million in 2008–09. Moreover, it was the first institution of higher education in the nation to offer benchmark level taxable Build America Bonds, which are partially subsidized by the U.S. Treasury, through the AARA. Savings from this programme are approximately $2.1 million annually and more than $60 million over the life of the bonds.

In sum, dire economic conditions often give us the opportunity to re-examine common practices in every area of our universities, rethink priorities, cut back on

nonessential spending, and find less expensive ways of achieving our goals. Officials at the University of Virginia and at other colleges and universities in the US are working to ensure that they sustain excellence in teaching, research, and service, despite the economic downturn. Further, through knowledge creation, research, and workforce development, colleges and universities will serve as agents of the recovery that is now beginning to take shape.

ADDENDUM: WHERE WE HAVE FAILED

Effective management has helped sustain colleges and universities in difficult times. In some instances, however, we have failed to anticipate problems or to adequately address them as they have appeared. One of higher education's failures has been our inability to effectively prepare students from diverse backgrounds for success in college level work. In this regard, students from a wide range of socio-economic, racial, and geographic backgrounds enter college with varying levels of aptitude, but in spite of orientation, counselling, and advice programmes, we have not succeeded in levelling the playing field for all incoming students. One alternative that has been embraced in the UK is to outsource college preparation to a third-party vendor. In this regard, Kaplan International Colleges is part of Kaplan, Inc., a leading provider in lifelong education owned by the Washington Post Company. These colleges teach academic preparation programmes especially designed for international students, in partnership with a select group of top UK universities: City University London, the University of Southampton, the University of Glasgow, the University of Liverpool, the University of Sheffield, and Nottingham Trent University. Each international college is based on the campus of these partner universities and the participating students have access to all the university's facilities, including guaranteed accommodation. Furthermore, they are guaranteed admission at the partner university upon successful completion of their study programme and they also provide teaching space and quality assurance. The international colleges are designed for international students and offer foundation certificates, diploma and graduate diploma programmes, and academic courses for pre-master's preparation. Moreover, the foundation certificate, diploma, and graduate diploma programs differ between the colleges, as does the progression upon completion. For example, at Nottingham Trent International College students who successfully complete diplomas in business or computing progress to the second year of a three year undergraduate degree course. At Glasgow International College, business and engineering students progress to the diploma programme and then into the third year of a four year undergraduate degree. The international colleges also offer pre-sessional English programmes, intended to increase English language ability of international students and to build their confidence in using English before joining an academic course. These programmes are not perfect, but they offer a viable solution to a problem that higher education leaders have been confronted with for decades.

Deferred maintenance is another failure that afflicts even the most prestigious colleges and universities. The Association for Higher Education Facilities Officers, along with the National Association of College and University Business Officers,

defines deferred maintenance as "maintenance work that has been deferred on a planned or unplanned basis to a future budget cycle, or postponed until funds are available." Postponing maintenance and repairs is easy to do when other, seemingly more urgent, fiscal needs arise. The assumption is usually that any repair postponed until 2010 will indeed be completed in that year. However, when, as so often, repairs are postponed again and again, and when multiple repairs are postponed for multiple buildings or for entire systems of infrastructure, the aggregated cost necessary to pay for repairs to a university's physical plant can be staggering. In other words, if ignored for too long, deferred maintenance will necessitate very expensive, wholesale repairs to (or replacement of) buildings or other segments of the physical plant, where failing to attend to basic maintenance needs in the short term will lead to mounting costs in the long term and in some cases additional early replacement costs of buildings that fail to reach their projected life expectancy, because the most basic repairs were postponed year after year. At the University of Virginia, in 2005, we determined that the aggregate cost of completing all deferred-maintenance projects [E&G only] was $114 million. In 1981, Harvard University rather famously discovered that it had accrued $70 million in deferred maintenance for the Harvard Business School alone. In 2001, Harvey Mudd College (a small but highly respected liberal arts college in California renowned for its engineering programmes) found that the total cost for its deferred-maintenance projects had reached $12 million, a sum that was, at the time, almost half of the college's entire yearly operating budget.

In the United States, a common measure for calculating a college or university's backlog of deferred maintenance is the Facilities Condition Index: the total deferred maintenance cost divided by the total net replacement value. This index may be calculated for an individual building, a group of buildings and associated infrastructure, or for an entire physical plant. In 2005, the University of Virginia's Facilities Condition Index was 10.4 and because a score in excess of 10 is considered to denote "poor condition", the university's administrators and its governing body elected to take decisive action to improve it, by normalizing maintenance schedules and bolstering funds that could be used to pay for deferred maintenance. Methods for building reserve funds to pay for deferred maintenance vary greatly. At Duke University, a portion of every federal research grant or private foundation gift is set aside, in order to offset costs associated with deferred maintenance, whereas at Penn State University, a portion of every tuition fee paid by entering students is set aside for deferred maintenance. At the University of Virginia, we have instituted a series of policies that require, for instance, annual re-investment of at least 1.5% of the replacement value of buildings and equipment. Furthermore, we now endeavour to build an endowment for maintenance into calculations when seeking private or governmental funding for any construction project. Through these and other efforts, the university has set a goal of reducing its Facilities Condition Index to 5 by 2014 and only time will tell whether we can reach this goal.

Yet another failure in higher education relates to the introduction and steady evolution of computer-based management systems to support virtually all university business. This has revolutionized our operations, from the way we handle student

admissions, course registration, and academic transcripts, to the way we keep financial records, manage our library holdings, and support the work of faculty in the classrooms. Software providers have thrived on the opportunity to convince universities that each one requires specialized, custom-made, integrated management systems, designed to meet each institution's individual requirements. However, most universities could have adopted a variety of standard, off-the-shelf software and saved a great deal of time and money in doing so, the potential drawback to this was considered to be that standard software might have required adapting some university procedures to fit the strengths of those various software packages, rather than the other way around. Nevertheless, customized integrated systems may be beneficial in some ways, but experience tells us that they do not work well at the intra-university level, and certainly can be problematic at inter-university level, when there are multiple systems involved. As a consequence, if we consider the cost and time required to design, install, test, and de-bug the management systems, the investment can be staggering and perhaps unjustifiable. Moreover, constant improvements, increased speed, and new applications, mean that universities will continue to struggle in the future to remain technologically up date and also having to always weigh up the purposefulness of any new expenditure.

REFERENCES

The Library of Congress Web Guides. (2009). *Morrill Act*. Retrieved from http://www.loc.gov/rr/program/bib/ourdocs/Morrill.html

The State Council of Higher Education for Virginia. (2005). *The restructured higher education financial and administrative operations act*. Retrieved from http://www.schev.edu/ Restructuring/restructuring.asp

The University of Virginia Library. (n.d.). *Jefferson digital archive*. Retrieved from http://etext.lib.virginia.edu/etcbin/ot2www-foley?specfile=/texts/english/jefferson/foley/public/JefCycl.o2w&act=surround&offset=9844651&tag=8747.+UNIVERSITY+OF+VIRGINIA,+Necessity+for.+--+[continued].+&query=luminous+tuition&id=JCE8747

The University of Virginia. (2004). *AccessUVa*. Retrieved from http://www.virginia.edu/financialaid/access.php

The University of North Carolina. (2003). *Carolina covenant*. Retrieved from http://www.unc.edu/carolinacovenant/

The University of Michigan News Service. (2005). *U-M expands M-Pact, replacing loans with grants*. August 8, 2006. Retrieved from http://www.ns.umich.edu/htdocs/releases/story.php?id=460

The University of Florida. (n.d.). *Florida opportunity scholars 2008–9 annual report*. Retrieved from http://fos.ufsa.ufl.edu/doc/FOS%2008-09%20Annual%20Rpt%20FINAL.pdf

The University of Maryland. (2005). *Maryland pathways*. Retrieved from http://www.financialaid.umd.edu/MarylandPathways.html

The University of Texas. (2009). *Longhorn opportunity scholarship*. Retrieved from http://www.texasscholarships.org/types/osfs/los.html

US Government. (2009). *American recovery and reinvestment act of 2009*. Retrieved from http://www.recovery.gov/Pages/home.aspx

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