

Chapter 3 Systems of Higher Education

The preceding chapters have made two central points. First, societies have a profound and long-term interest in their higher education institutions that extends beyond the pecuniary and short-term interests of current students, faculty, and administrators. Second, the current state of higher education in developing countries is generally quite weak. While globalization, technological and demographic changes, and the growing economic importance of knowledge are making higher education reform more urgent and challenging than in the past, some of these same factors are also making such reform potentially more attainable.

This chapter explores the web of public and private education institutions, governing bodies, and individuals that form a higher education system. It also examines the formal and informal rules that hold the web together, looking for the structure underlying what can appear to be a chaotic set of activities and entities. The Task Force believes that higher education needs to be developed in a coordinated way, guided by a clear strategic vision. We therefore go on to suggest guidelines for reforming higher education institutions so that they may be integrated more effectively as part of a system that efficiently meets national goals.

In the past, few academics or policymakers adopted a systems perspective when discussing higher education, which is why we devote a whole chapter to this topic. Analysts have tended to focus on individual institutions or

on education systems as a whole. Although this is a sound approach in many circumstances, the nature of higher education differs fundamentally from primary and secondary education, and confers different benefits upon society. An examination of higher education systems in their own right can help to provide much needed guidelines for institutions regarding their roles and aspirations, to highlight society's interest in higher education, and to suggest specific policy mechanisms to advance that interest.

Outline of a Higher Education System

A higher education system consists of three basic elements:

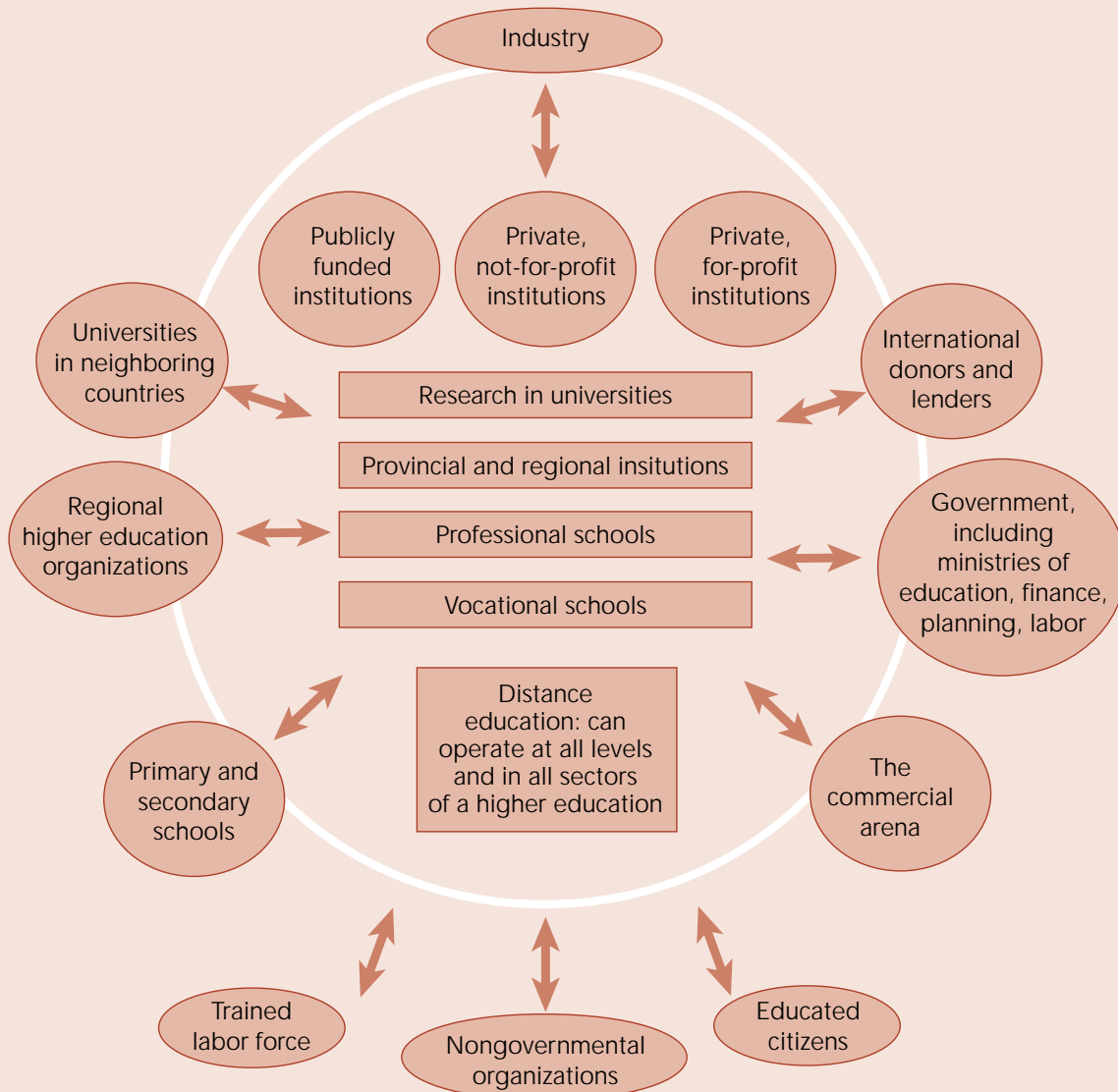
- the individual higher education institutions (public and private, whether profit or non-profit; academic and vocational; undergraduate and graduate; onsite and distance-based, etc.), including their faculties, students, physical resources, missions, and strategic plans;
- the organizations that are directly involved in financing, managing, or operating higher education institutions, comprising a range of both public and private bodies; and
- the formal and informal rules that guide institutional and individual behavior and interactions among the various actors.

The system is not sealed from the outside world: it is at least loosely bound to the overall education system, for example, to secondary schools that provide most of its new students. It is connected to the labor market and the business community, and to various government departments that set the policy en-

vironment in which it operates. It also has international links, to regional and global higher education communities, as well as to bilateral and multilateral donors, foundations, and nongovernmental organizations. (Figure 5 graphically depicts a differentiated higher education system and its place in society.)

Figure 5

Schematic Representation of a Differentiated Higher Education System



Higher Education Institutions

As we have discussed, higher education across the world is undergoing a process of differentiation. This is happening horizontally as new providers enter the system, and vertically as institutional types proliferate. A diverse system, with a variety of institutions pursuing different goals and student audiences, is best able to serve individual and national goals. Recognizing the nature and legitimacy of this diversity helps ensure that there are fewer gaps in what the system can provide, while preventing duplication of effort. It is also helpful for halting institutional drift, where an institution loses focus on its “core business,” failing to recognize that it is already serving a particular group of students well. In the case of mid-level institutions, if their crucial role is not understood they may try to gain prestige by moving up the educational hierarchy. This is unhelpful if it leaves a group of students poorly served and if the institutions are unable to function properly as they move upstream.

It is therefore useful to characterize the main types of institution that are typical within a higher education system. From the outset, we distinguish between public, private not-for-profit, and private for-profit institutions. To some extent, the objectives of these institutions—teaching, research, and service—overlap; so, too, does the autonomy they have to pursue those objectives. However, there are also fundamental differences. Notions of the public interest count more heavily in defining the mission of public institutions than of private ones. Public institutions also tend to be subject to greater bureaucratic control, which limits their autonomy. On the other hand, they are more buffered from market forces, giving them a greater measure of stability. State regulations do affect private institutions, but generally leave them with greater autonomy than public institutions experience

in academic, financial, and personnel matters. All private institutions must cover their costs, but private, for-profit institutions also have the generation of a surplus as a core goal. These financial requirements impose considerable limits on their activities.

Research Universities

Research universities, which stand at the apex of the educational pyramid, tend to be public and certainly not for profit. Their overriding goals are achieving research excellence across many fields and providing high-quality education. They pursue these goals by having relatively light faculty teaching loads, emphasizing research accomplishments in recruitment and promotion decisions, adopting international standards for awarding degrees, and being highly selective in the students they admit. They are most closely connected to advances in knowledge, monitoring breakthroughs in many fields and investigating ways to exploit important results for social and private gain. Their instruction—generally for both first and post-graduate degrees—should be aimed at the country’s most hard-working and best-prepared students. Research universities also have the capacity to offer the most complete programs of general education (see Chapter 6).

Provincial or Regional Universities

Institutions that focus predominantly on producing large numbers of graduates are another key component of a higher education system. They emphasize teaching and the training of “job-ready” graduates, especially those who can meet local skills requirements in areas such as manufacturing, business, agriculture, forestry, fisheries, and mining. They are commonly found in both the public and private sectors and tend to be geographically dispersed so that collectively they can cater to

the many students who do not leave home to attend school. Provincial or regional universities often produce the majority of a country's graduates and tend to lie at the heart of the system's expansion. Some institutions offer two-year tertiary-level degrees, much like community colleges in many developed countries, offering another potential channel for providing mass higher education.

Professional Schools

Freestanding professional schools—and professional faculties in universities—provide training in fields such as law, medicine, business, and teaching, as well as other areas outside the jurisdiction of traditional arts and sciences faculties. These schools typically enroll students directly from high school and offer study programs that focus almost exclusively on technical training in the relevant area. Most developing countries have an urgent need for individuals with specialized professional skills, so professional schools play a critical role in national development, and often occupy a central place within developing country higher education systems. For-profit private institutions, in particular, can be directed into this area by market forces, concentrating on preparing students for careers with high private returns. Professional schools commonly pay little attention to providing a general education that would serve many students (and society) well.

Vocational Schools

Vocational schools operate in much the same way as professional schools, but at a different level. They endeavor to impart the practical skills needed for specific jobs in areas such as nursing, auto mechanics, bookkeeping, computers, electronics, and machining. They may be parallel to (or part of) the secondary education system, or part of the post-secondary

system, but they are not often considered a component of the higher education system per se. These schools, many of which are private and for-profit, play an important role in satisfying real labor-market demands.

Virtual Universities and Distance Learning

Distance learning is an increasingly important part of the higher education system, with its ability to reach students in remote areas and address the higher education needs of adults. It is not in itself a new idea—the University of South Africa, for example, has offered academic degrees through distance study for decades—but is growing at an astonishing rate (see Chapter 1 for data on the largest distance-learning institutions).

Distance learning can be offered by traditional educational institutions or by new institutions that specialize in this mode of study. While recent developments in communication technology and computers have vastly increased the technical viability of distance education, economic viability is still an issue in many countries because of costly and extensive infrastructure requirements. In many parts of Africa, for example, the telephone is still a luxury and long-distance calls are extremely expensive. Efficient distance learning will require affordable telephone and Internet access for this part of the world.

In the past, distance learning has been seen mainly as a cost-effective means of meeting demand, with policymakers paying inadequate attention to ensuring that it provides comparable quality to traditional modes of delivery. The Task Force believes that distance education offers many exciting possibilities. Innovative curricula can be combined with interactive, Internet-based technology, traditional educational media such as television and print, written materials, and direct contact with tutors. It needs, however, to be thor-

oughly integrated into the wider higher education system, subjected to appropriate accreditation and quality standards, and linked to the outside world. Research into how this can be achieved—and how distance learning can fulfil its potential—needs much greater attention.

Desirable Features of a Higher Education System

Effective systems of higher education tend to have a common set of characteristics. We suspect that many of these are prerequisites of any system that is functioning well, and find it difficult to identify any developing countries whose higher education systems would not benefit from an infusion of at least some of the characteristics (and related specific suggestions) discussed below.

Stratified Structure

Higher education systems are under great pressure to improve the quality of the education they offer—but also to educate increasing numbers of students. A stratified system is a hybrid that marries the goals of excellence and mass education, allowing each to be achieved within one system and using limited resources. A stratified system comprises one tier that is oriented toward research and selectivity and another that imparts knowledge to large numbers of students. It cements the distinction discussed above between research and provincial universities, allowing each to pursue clear objectives and avoid the duplication of effort. Stratified systems cater well to the varied nature of students' abilities and interests, and also allow for faculty with different skills to be best used. They are economical in terms of satisfying social needs, producing graduates who are able to fulfil a variety of roles and a generally educated citizenry. Finally, as specialized knowledge becomes in-

creasingly important to economic performance, they enable a higher education system to produce a mix of specialized and broadly trained graduates.

Policymakers need to be more explicit about expecting different contributions from different segments of a stratified system. Expressing a clear vision of the goals and structure of a higher education system is fundamental to setting an agenda for reform, while ensuring that this vision is widely shared is vital to achieving practical results.

Adequate and Stable Long-Term Funding

Higher education institutions can thrive only if their funding levels are adequate, stable and—subject to good performance—secure in the long term. Institutions must plan far ahead if they are to provide consistent instruction and a secure and productive work environment for their faculty. In many areas, insecure funding stifles the ability and the incentive to carry out research.

Governments have a crucial role to play in providing stability. They must finance public institutions on a long-term basis, not as if they were part of a nonessential government sector with the attendant vulnerability to the vagaries of fluctuations in public spending. They must also help create an environment conducive to the sustainable financing of private institutions and help the whole higher education system look to the future, ensuring that tomorrow's operating budgets will be sufficient to maintain and run the new infrastructure higher education will need.

Competition

Traditionally there has been little competition within higher education systems, and the Task Force believes that more intense competition between similar institutions for faculty, students, and resources will help improve stan-

dards by rewarding merit and performance. Competition also generally promotes beneficial innovations and overall quality improvements. Competition is exceedingly difficult to achieve through central decree, but requires a high degree of autonomy for academic institutions, allowing them to exploit their strengths and overcome weaknesses. Adequate market information is also essential: without it, institutions will continue to thrive even when they are weak.

One common indicator of competition is faculty mobility between institutions, which tends to promote a healthy academic environment through intellectual cross-fertilization. Too much competition is also possible, resulting in excessive faculty mobility and a lack of loyalty to institutions. However, most developing countries are a long way from experiencing this problem.

Flexibility

Higher education systems need to be flexible if they are to be most effective. They need to be able to adapt quickly to changing enrollment levels, to the rise and fall of different fields of study, and to changes in the mix of skills demanded in the labor market. Open systems are more likely to keep pace with significant external changes. Scholarly interaction within and between countries, frequent curriculum review, and strong connections to the world stock of knowledge (through substantial investments in Internet access, for example) are all important. Research is also useful. Basic demographic data can help forward planning, enabling institutions to prepare for changes in cohort size, secondary school enrollment, and graduation rates.

Well-Defined Standards

Effective higher education institutions articulate clear standards and set for themselves

challenging goals that are consistent with the needs of their societies and labor forces. International standards are especially relevant in a globalized economy. Some standards are needed for degree requirements when it comes to student performance, faculty qualifications, and achievement. Mediocre institutions are not transformed into great institutions merely by announcing world-class standards: a realistic approach that concentrates on promoting achievable improvements is needed. A culture of accountability is also essential, allowing improvement (or deterioration) to be continually monitored and rewarded.

Immunity from Political Manipulation

Higher education systems are effective only when insulated from the undue influence of political parties, governments, or short-term political developments in educational affairs. Success in research and education requires consistency, with academic decisions—concerning institutional leadership, curriculum, or the funding of research projects—made for academic reasons. Excluding partisan political interests from the operation of a higher education system helps to safeguard meritocratic decisionmaking, one hallmark of an effective higher education system.

Well-Defined Links to Other Sectors

A higher education system does not operate in isolation. An effective system must pay attention to a country's secondary education system in order to take account of student preparation. It will also benefit primary and secondary education through training qualified teachers and demonstrating potential educational innovations. A quality system of higher education will also increase students' aspirations at the primary and secondary levels, leading to higher standards as students compete for tertiary education places.

Strong links between a country's higher education system and other systems both in the immediate region and beyond will have many beneficial effects, including significantly augmenting the resources available to an individual system, helping to overcome intellectual isolation, and allowing the achievement of "critical mass" in a larger number of specialized fields. In addition, a higher education system benefits from close coordination with other domestic public and private entities. For example, advocates for higher education and industry can work together to ensure that graduates have the skills that industry needs. Finally, advocates for higher education need to work comfortably with government agencies responsible for policy setting and finance.

Supportive Legal and Regulatory Structure

Higher education institutions flourish in a legal and regulatory environment that encourages innovation and achievement, while discouraging corruption, duplication of effort, and exploitation of poorly informed consumers. In many systems, initiative is stifled by counterproductive legal constraints and centralized decisionmaking. Higher education is focused on people—regulation needs to foster, not hamper, human potential.

System-Wide Resources

Many tools for improving higher education work best when developed centrally and shared widely. Such tools include management information systems, standardized tests, curriculum, and "knowledge banks" (repositories of information accessible through electronic means). They effectively and efficiently spread the financial and technical burdens of higher education development, allowing multiple institutions to work together.

The government, perhaps aided by inter-

national donors, might also develop "learning commons"—a combination of computing centers, scientific laboratories, and libraries—accessible to students from all institutions of higher education, public and private. A learning commons would permit more effective use of outside higher education resources and permit some institutions to teach scientific subjects that they would not otherwise be able to offer. These commons would need to be located in strategic places throughout the country and be adequately maintained and staffed. They could also serve as focal points for public information, and contribute in this way to strengthening civil society.

Technology is an especially important system-wide resource. The past few decades have seen an explosion of technological capacity in both the industrial and developing worlds. No system of higher education can hope to serve its students, or the national interest, without developing a robust technological capacity. Higher education systems need to encourage all constituent institutions, both public and private, to incorporate advances in computing and communications technology into their administrative structures, their teaching, and their research. Integrating computers into learning is a key task if graduates are to be prepared for the jobs of the future. Students can also benefit tremendously from CD-ROM-based and Web-based curricula, which have the potential to bring high-quality educational materials to all parts of the developing world. Moreover, using the Internet as a means for gathering knowledge connects students and researchers to the worldwide community of scholars, an invaluable step in overcoming intellectual isolation.

The Task Force recognizes that acquiring access to such technology can be prohibitively expensive. International donors therefore have a particularly important role to play in this area. It is also important to ensure that importing technology does not create excessive reliance

on education designed abroad. This issue raises serious concerns about cultural incompatibility and undue external influence. Developing countries need to maintain the unique character of their higher education systems, strengthening their intellectual self-reliance and making an important contribution to the diversity of the global community.

Role of the State

An effective system of higher education relies on the active oversight of the state. The government must ensure that the system serves the public interest, provides at least those elements of higher education that would not be supplied if left to the market, promotes equity, and supports those areas of basic research relevant to the country's needs. The state must also ensure that higher education institutions, and the system as a whole, operate on the basis of financial transparency and fairness. However, the government must also be economical in its interventions. It should only act when it has a clear diagnosis of the problem, is able to suggest a solution, and has the ability to apply this solution efficiently. Poorly-thought-through government action is likely to weaken already inadequate higher education systems.

The exact role of government in higher education has been subject to extensive debate, and can range from extreme state control to total *laissez-faire*. Under systems of state control, governments own, finance, and operate higher education institutions. Politicians frequently appoint vice-chancellors, and ministries dictate degree requirements and curricula. Many developing countries have gravitated toward this model in the postcolonial period, based on the rationale that governments are entitled to control systems that they fund. But state control of higher education has tended to undermine many major prin-

ciples of good governance. The direct involvement of politicians has generally politicized higher education, widening the possibilities for corruption, nepotism, and political opportunism.

Growing awareness of the disadvantages of state control has led many countries to adopt alternative models. State supervision aims at balancing the state's responsibility to protect and promote the public's interest with an individual institution's need for academic freedom and autonomy. So-called buffer mechanisms are important to achieving this balance. Buffer mechanisms generally consist of statutory bodies that include representatives of the government, institutions of higher education, the private sector, and other important stakeholders such as student organizations. Examples of buffer mechanisms would be:

- councils of higher education that advise the government on the size, shape, and funding of higher education; often they are also responsible for quality assurance, promotion mechanisms, and accreditation;
- research councils or agencies that fund and promote research;
- professional councils that focus on specific areas of higher education; and
- governing councils (or boards of trustees).

To be effective, these bodies require clear mandates, well-established operating procedures, and full autonomy from both government and academia. For example, if a particular body is to allocate research funds based on competitive applications from research universities, it must adhere strictly and transparently to a widely accepted set of procedures in soliciting and reviewing applications. It must also have full control over the resources to be allocated and have the authority and tools to sanction parties who do not abide by the established procedures.

Financing a Higher Education System

No treatment of higher education is complete without a discussion of financing, although the Task Force's treatment of this topic is not meant to be exhaustive.

In financial terms, the global higher education sector is sizeable and growing rapidly. We estimate that global spending on higher education is roughly US\$300 billion, or 1 percent of global GDP, and growing at a faster pace than the world economy. Nearly one-third of this expenditure is in developing

countries and, with developing country systems heavily dominated by public universities that tend to have low tuition fees, the costs fall predominantly on the state. Any attempt to improve quality will therefore add to higher education's daunting financial requirements.

Financial dependence on the state means that funding levels fluctuate with the ups and downs of government resources. This process is exaggerated by the fact that higher education is perceived as something of a luxury in most countries. Africa and Latin America in the 1980s provide clear examples of this "feast-or-famine" syndrome, with financial insecurity

Box 4

Makerere University in Uganda

Most universities in Africa have had great difficulty in extricating themselves from an inherited model in which their role as the repository of quality education and contributor to the public good depends upon total state control and finance. This condition persisted throughout the early postindependence years of manpower planning, later experiments with developmental objectives, and the subsequent decade of demoralization and deterioration, when student numbers overwhelmed government resources. In recent years, Makerere University in Uganda has led others in addressing the pervasive problem of how to provide good-quality higher education to large numbers equitably, but without undue dependence on public resources. Restructuring at Makerere has had three central and interrelated elements: implementing alternative financing strategies, installing new management structures, and introducing demand-driven courses.

During the 1990s, Makerere moved from the brink of collapse to the point where it aspires to become again one of East Africa's pre-eminent intellectual and capacity-building resources, as it was in the 1960s. It has more than doubled student enrollment,

instigated major improvements in the physical and academic infrastructure, decentralized administration, and moved from a situation where none of its students paid fees to one where more than 70 percent do. Where previously the government covered all running costs, now more than 30 percent of revenue is internally generated. Among varied uses of this revenue, the most important is application to academic infrastructure and the retention of faculty, permitting them to devote themselves full-time to the teaching and research they were trained to do. Funds gained from nongovernment sources have been allocated, according to prescribed ratios, to library enrichment, faculty development, staff salary supplementation, and building maintenance, including some construction. The most important impact of increased institutional income has been on staff salary structures and incentive schemes. Professors can now earn over US\$1,300 per month with the possibility of added supplementation on an hourly basis from evening classes. The consequence has been to slow the exodus of academic staff and remove their need to undertake a range of activities outside the university. Makerere has also introduced

and instability preventing long-term planning. In many Central American countries, higher education budgets are constitutionally fixed as a percentage of government spending. Although this is intended to depoliticize funding, the Task Force believes that it actually weakens the incentives for good performance, as well as creating a wide perception that higher education receives an unfair slice of the national cake. Most students come from relatively well-off backgrounds, and other vital sectors are continually forced to compete for their budgetary allotments.

In the long run, investment in higher edu-

cation may be expected to promote the growth of national income, providing public funds that can, in turn, be used to finance better quality higher education. But this investment has a long gestation period, far exceeding the patience of financially strapped governments. The lack of sustainable financing therefore continues to limit enrollment growth and to skew higher education toward low-cost, low-quality programs.

The financing of higher education does not need to be limited to the public purse. In fact, higher education can be provided and financed either entirely publicly, or entirely

Box 4 continued

evening classes, boosted income from services like the bookshop and bakery by running them commercially, and established a consultancy bureau with staff where a portion of the generated revenue goes back into the university.

The reasons for Makerere's tradition-breaking accomplishment can be found in the interplay between a supportive external environment and an innovative institutional context. Among the most important contextual factors have been macroeconomic reform, which has led to steady economic growth and increased amounts of disposable income, and political stability, which has strengthened the government's willingness to respect university autonomy. Inside the institution, much of the reform accomplishment can be ascribed to the energy and imagination of the university's leadership, their faith in the benefits of professional, participatory, and decentralized management, their unambiguous sense of ownership of the reform process, and their commitment to a tradition of academic excellence.

The Makerere accomplishment has lessons for other universities in Africa that face similar resource constraints. It shows that expansion—and the main-

tenance of quality—can be achieved simultaneously in a context of reduced state funding. It puts to rest the notion that the state must be the sole provider of higher education in Africa. It dramatizes the point that a supportive political and economic environment is a prerequisite for institutional reform. It also demonstrates the variety of institutional factors involved in creating a management structure suited to ensuring the use of resources, not simply for broadening institutional offerings, but for creating the academic ethos and infrastructure on which the university's contribution to the public good depends.

Clearly, Makerere must make further progress if it is to become a world class institution. Income generation, disengagement from the state, and managerial improvement do not alone ensure academic quality. The flowering of entrepreneurial imagination, and the explosion of course offerings geared to the market, are refreshing in their relevance and departure from past patterns. However, the challenge for Makerere is to find incentives for quality research, as well as teaching, and to promote the public interest above and beyond the limits of the market.

privately (including by nongovernmental organizations), or by some combination of the two. Given that a purely public system is ill-positioned to satisfy the demands for excellence and access, and that a purely private system does not adequately safeguard the public interest, hybrid systems deserve serious consideration. The range of possibilities is depicted in Table 2.

There are both advantages and disadvantages to the provision and financing arrangements that fall into each of the three cells. Public financing and provision of higher education (cell I in Table 2) is, in many ways, the traditional paradigm for most developing countries, and is treated extensively throughout this report.

Private provision of higher education is attractive because it can lead to the delivery of more or better education at the same overall public cost. It can be coupled with public financing (cell II), as in the case of a voucher system in which the government awards funding to students who are free to enroll in different institutions (or gives the money directly to the institution after the student enrolls). In principle, this system gives universities a powerful incentive to provide quality education at a reasonable cost. However, vouchers

are not a cure-all and are ineffective when competition is weak. In many countries reliable information about competing institutions is not available and students are therefore unable to make informed decisions, while in sparsely populated (especially rural) areas there are unlikely to be enough institutions to allow student choice (although distance learning may change this to a certain extent).

Private financing is attractive because it reduces the burden on government budgets, and helps ensure that the costs of higher education are borne by those to whom the benefits accrue. Private financing (cell III) can be achieved in the context of public provision via tuition and fees, as well as grants and contracts from foundations and industry. In the case of private, not-for-profit institutions (and, in principle, public institutions as well), income from private endowment funds can also be used to support teaching and research activities.

Pakistan provides an example of a country whose higher education system has traditionally been dominated by a stifling set of public institutions and oversight bodies. Recently, however, private individuals and corporate entities have proved willing to finance and operate new philanthropic universities (cell III). This has proven beneficial both for indi-

Table 2 Assigning Responsibility for Higher Education

		Provision	
		Public	Private
Financing	Public	I. Free public universities and other institutions of higher education, relying on public funds to cover operating and capital expenditures.	II. Voucher systems under which the government pays a preset amount to the private schools students attend.
	Private	III. Tuition, fees, and income from foundation grants, industry contracts, and privately generated endowment cover full costs.	

vidual students and for the system as a whole. The Aga Khan University (AKU) and the Lahore University of Management Sciences (LUMS) have both been established (and partly operated) through private philanthropy. In the case of the AKU, the goal of establishing a university was to improve the quality of life of disadvantaged Pakistanis through instruction and research in health sciences, education, and other fields. By contrast, LUMS was created to overcome problems of low quality in bureaucratic public universities and to help ensure a steady supply of well-trained business people.

An extraordinary level of private and international resources helped make both AKU and LUMS successful. Of course, most initiatives cannot count on such bountiful financial resources. In addition, entrenched bureaucracies can thwart even the soundest of initiatives. For example, the Bangladesh Rural Advancement Committee (BRAC), one of the developing world's most celebrated non-governmental organizations, applied in early 1997 to Bangladesh's Ministry of Education, under the Private University Act passed in 1992, for permission to start an undergraduate institution. Financing for BRAC University was projected at a much lower level than for AKU or LUMS. Although the application was recommended for approval by the University Grants Commission, it still awaits action by the Ministry of Education, which is in the midst of working with Parliament on crafting a new national education policy. Whereas both AKU and LUMS serve as vivid proof that excellence can be achieved by private institutions that have, among other assets, adequate resources and good relations with the government, the long delays and more limited funding that characterize BRAC's experience are more typical in the developing world.

Jordan, Malaysia, and Turkey—among others—provide additional examples of institutions founded through private philanthropy.

However, business and individual philanthropy toward higher education is relatively uncommon in developing countries. Results could undoubtedly be improved through tax policy, as has been shown in Chile, where the provision of favorable tax incentives provided a powerful boost for higher education. The case of Peru provides further confirmation: university fundraising dropped sharply following the reduction of relevant tax incentives in the mid-1990s.

There is another important downside to private financing—it may preclude the enrollment of deserving students who do not have the ability to pay, and often evokes resentment among students who do. Means-tested scholarship and loan programs are one possible approach to addressing this problem, but they have proven very difficult to administer due to the difficulty of assessing ability to pay, sometimes exorbitant administrative costs, corruption, and high rates of default. The need for scholarships often provides a compelling justification for creating endowment funds, especially in philanthropic institutions, but also in public institutions.

The Task Force believes that a higher education system confined to one of the three cells shown in Table 2 is unlikely to yield desirable outcomes. The goals of a higher education system, which span quality, access, and efficiency, are surely best achieved by a diverse set of arrangements for institutional finance and service delivery. Countries need diverse systems, where some institutions look for funding from a single source while others seek a combination of public and private financing.

Multilateral and bilateral donors also have a role to play in the financing of higher education, in order to encourage the national and international public interest, as well as the contribution that higher education can make to social equity. Long-term and concessionary loans for higher education can help governments invest in higher education in a more

sustained and consistent fashion, while debt relief can be negotiated in exchange for systemic higher education reform. However, the international community needs to be careful about imposing reforms from outside, and also needs to consider carefully the extent to which it can single out higher education for special treatment.

An often-neglected policy is to allow individual institutions the autonomy to develop new ways of raising revenue. Offering executive training programs, marketing the expertise of faculty, and providing various other services such as carrying out laboratory tests and renting facilities, can all provide valuable income. It is necessary to make it legally permissible to receive such funds and to use them in a discretionary manner, and also to impose limits on the extent to which proprietary research can be conducted. Centralized programs for teacher training and experiments with distance learning can also help to contain costs and improve educational quality throughout the system.

Conclusions

The new realities facing higher education (see Chapter 1) mean that many traditional ways of running higher education systems are becoming less relevant. A laissez-faire approach, which assumes that all the components of a higher education system will simply fit to-

gether and serve everyone's needs, is untenable. System-wide coordination is clearly needed. But neither is centralized control the answer. Diversity is greatly needed, as are autonomy and competition among similar institutions. Funding models will also have to adapt, moving toward a flexible system that draws on both the public and the private purse.

The balance between the public and private sector is currently changing. Public higher education systems cannot meet sharp increases in demand and, as a result, the private components of higher education systems (especially for-profit institutions) have grown relatively quickly. But the growth of the private sector has tended to be quite haphazard. As a result, in most developing countries no clearly identified set of individuals or institutions is working to ensure that all the goals of the country's higher education sector will be fulfilled.

A coherent and rational approach toward management of the entire higher education sector is therefore needed. More traditional, informal arrangements are no longer adequate. Policymakers must decide on the extent to which they will guide the development of their country's higher education sector, and the extent to which they think market forces will lead to the establishment and operation of a viable system. Overall, the Task Force believes that government guidance is an essential part of any solution.