ture through the cross-border supply of education is expressed by GATS sceptics. Advocates maintain that a new hybridization and fusion of culture will evolve through increasing mobility and the influence of ICTs. In fact, they believe that this has been happening for decades and is a positive development. Once again, the divergence of opinion shows that there are new opportunities and new threats to consider, especially on the question of acculturation.

#### The Dominance of Trade

Finally, it needs to be asked whether trade liberalization has the potential of dominating the higher education agenda. There is a risk of "trade creep," where education policy issues are being increasingly framed in terms of trade and economic benefit. Even though domestic challenges in education provision are currently front and center on the radar screen of most countries, the issue of international trade in education services will likely increase in importance, perhaps at the expense of other key objectives and rationales for higher education—such as social, cultural, and scientific development and the

role of education in promoting democracy and citizenship.

At this stage, the questions outnumber the answers about the impact of GATS and trade liberalization. The questions are complex as they deal with technical and legal issues of the agreement itself; education policy issues such as funding, access, accreditation, quality, and intellectual property; the larger political or moral issues for society such as the role and purpose of higher education and the tension between the "public good" or "market commodity" approach to education. GATS is new, complex, untested, and a work-in-progress. It is, therefore, difficult to understand or predict its impact. The one thing that is certain, though, is that the higher education sector needs to be better informed and more involved in the debate and provide advice to trade officials about potential unintended consequences or possible opportunities.

This article is based on the report *Trade and Liberalization and Higher Education: The Implication of GATS*, prepared by Jane Knight for the Observatory of Borderless Higher Education: <www.obhe.ac.uk>.

## New Challenges for Tertiary Education: The World Bank Report

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In the global environment, developing and transition economies face significant new trends affecting not only the shape and mode of operation but also the purpose of tertiary education systems. Among the most critical dimensions of change are globalization, the increasing importance of knowledge as a main driver of growth, and the information and communications technologies (ICT) revolution.

Both opportunities and threats arise out of these new challenges. On the positive side, the role of tertiary education in the construction of knowledge economies and democratic societies is now more influential than ever. Tertiary education is central to the creation of the intellectual capacity on which knowledge production and utilization depend and to the promotion of lifelong learning practices. Another favorable development is the

emergence of new types of tertiary institutions and new forms of competition, inducing traditional institutions to change their modes of operation and delivery and take advantage of opportunities offered by ICT. But this technological transformation also carries the danger of creating a growing digital divide among and within nations.

At the same time, most developing and transition countries continue to wrestle with difficulties produced by inadequate responses to long-standing challenges faced by their tertiary education systems. Among these unmet challenges are the sustainable expansion of tertiary education coverage, the reduction of inequalities of access and outcomes, the improvement of educational quality and relevance, and the introduction of more effective governance structures and management practices.

#### Purpose and Structure of the Report

The main purpose of the new World Bank report is to analyze the role of tertiary education in building up a country's capacity to become a knowledge society. The main messages are as follows: (1) social and economic progress is achieved principally through the advancement and application of knowledge; (2) tertiary education is necessary for the creation, dissemination, and application of knowledge, as well as for building technical and professional capacity; (3) the tertiary education systems of most developing and transition countries

are not adequately prepared to play this role, which places these countries at risk of being further marginalized in a highly competitive economy; (4) the state has a responsibility to put in place an enabling framework to encourage tertiary education institutions to be more innovative and responsive to the needs of a globally competitive knowledge economy and to the changing labor market requirements for human capital; and (5) the World Bank can assist its client countries in drawing on international experience and in mobilizing the resources needed to improve the effectiveness and responsiveness of their tertiary education systems.

#### The Rise of Market Forces

Although public funding remains the main source of support for tertiary education in most countries, it is being channeled in new ways and supplemented increasingly by nonpublic resources. Both changes bring market forces to bear in ways heretofore uncommon in the financing of public institutions. New financing strategies have been put in place in the public sector to generate revenue from institutional assets, mobilize additional resources from students and their families, and encourage donations from third-party contributors. Many governments have encouraged the creation of private institutions to ease pressures on the public purse and satisfy pent-up demand.

At the same time, governments are attempting to make the provision of public tertiary education more responsive to the new education and training needs of the economy, the shifting demands of employers, and the changing aspirations of students. They have supplemented the traditional budget transfer mechanisms with resource allocation formulas to foster greater institutional autonomy and better performance. Governments have also established quality control and enhancement mechanisms.

In many countries, the presence of private institutions has brought about more diversity and choice for students while serving as a powerful incentive for public universities to innovate and modernize. From an equity viewpoint, however, increased choice has benefited only those able to pay tuition or with access to financial aid. In many cases, the absence of scholarships and loans has led to increased disparities.

#### Rationale for State Support of Tertiary Education

Continued government support of tertiary education is justified by three important economic considerations. First, that tertiary education investments generate major external benefits that are crucial for knowledge-driven economic development, including the long-term returns from basic research and technology development and

the social benefits accruing from the construction of more cohesive societies. Second, imperfections in capital markets limit the ability of individuals to borrow sufficiently for education, thereby reducing the participation of meritorious but economically disadvantaged groups in tertiary education. Third, tertiary education plays a key role in support of basic and secondary education, thereby buttressing the economic externalities produced by lower levels of education.

In a lifelong learning perspective, student mobility can be encouraged by open systems.

The Evolving Role of the State

As their direct involvement in the funding and provision of tertiary education diminishes, countries rely less on the traditional state control model to impose reforms. Instead, they bring about change by guiding tertiary education institutions with a coherent policy framework, an enabling regulatory environment, and appropriate financial incentives.

Countries and tertiary education institutions willing to take advantage of the new opportunities presented by the knowledge economy and the ICT revolution must take the initiative in launching meaningful reforms. While no blueprint exists for all countries, a common prerequisite may be a clear vision for the long-term development of a comprehensive, diversified, and well-articulated tertiary education system.

The second important dimension of government intervention is the creation of a regulatory environment that encourages innovations at the level of individual institutions as well as private-sector initiatives to expand access to tertiary education. Key dimensions of regulation are the rules for establishment of new institutions (private and virtual), quality assurance mechanisms, financial controls on public institutions, and intellectual property rights legislation. In a lifelong learning perspective, student mobility can be encouraged by open systems based on the recognition of relevant prior experience, degree equivalencies, credit transfer, tuition-exchange schemes, access to national scholarships and student loans, as well as a comprehensive qualifications framework.

The third modality of state intervention involves the funding mechanisms and financial incentives applied to steer tertiary education institutions toward quality, efficiency, and equity goals. These include allocation formulas linking resources to measures of institutional performance, encouragement of resource mobilization by institutions, competitive funds for investments in quality improvement, and student financial aid.

#### Strategic Framework for Future Bank Support

Investment in tertiary education is an important pillar of development strategies emphasizing the construction of democratic knowledge societies. The World Bank can play a central role in the process in a number of ways. Under the right circumstances, the Bank may play a catalytic role by facilitating policy dialogue on tertiary education reforms. This can be accomplished through information sharing and analytical work in support of national dialogue and vision formulation efforts.

Three vital lessons that have been learned from past and current tertiary education reform projects are that comprehensive reforms are more effective, sensitivity to stakeholders and the local political economy of reforms is vital, and integration of positive incentives for change can be pivotal. Based on these lessons, World Bank support to client countries should be appropriate to a country's specific circumstances, predicated on strategic planning at national and institutional levels, focused on promoting autonomy and accountability, geared toward enhancing institutional capacity, sequenced with a time horizon consistent with the long-term nature of capacity enhancement efforts, and sensitive to local political considerations.

While most strategic options outlined above are relevant to middle-income countries, important distinctions are warranted for transition countries, low-income nations and small countries. The leading options for improving tertiary education in the transition countries of Eastern Europe and Central Asia include introducing more-flexible and less-specialized curricula, promoting shorter-term programs, creating a more adaptable regulatory framework, and establishing systems of public funding that encourage institutions to respond to market demands for quality and diversity.

A tertiary education development strategy for lowincome countries would include three priorities: building capacity for managing and improving the basic and secondary education system, including the training and retraining of school teachers and principals; expanding the production of qualified professionals and technicians through a cost-effective combination of public and private nonuniversity institutions; and making targeted investments in strategic fields of advanced training and research in chosen areas of comparative advantage.

Priorities to address the tertiary education needs of small states are subregional partnerships with

neighboring small states to establish a networked university, strategically focused tertiary education institutions that address a limited number of the nation's critical human skill requirements, negotiated franchise partnerships between the national government and external providers of tertiary education, and government-negotiated provision of distance education by a recognized international provider.

Globalization and the growth of borderless education raise important issues that affect tertiary education in all countries but are often beyond the control of any one national government. Among those challenges are the new forms of brain drain resulting in a loss of local capacity in fields critical to development, the absence of a proper international accreditation framework, the absence of legislation for foreign tertiary education providers, the lack of intellectual property regulations governing distance education programs, and barriers of access to information and communications technologies. The World Bank will work with its partners in the international community to promote an enabling framework for these global public goods, which are crucial for the future of tertiary education.

# Means Testing in Developing Countries

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Many underfunded institutions of higher education in developing nations are considering the imposition or the increase of tuition fees. To prevent the exclusion of academically qualified, low-income students, various student financial aid schemes that target assistance on low-income students are being contemplated. Other nations interested in improving social equity and fairness have established financial aid programs for students who would not otherwise have access to higher education. These programs require means testing to determine which students should receive aid.

#### "Family" Responsibility?

The decision to distribute aid to students based on means testing first requires determining whose means are to