tions cannot be ruled out. The next two decades would lay the foundations, on which higher education would evolve in the developing world for the many decades to come after.

Massification and the Global Knowledge Economy: The Continuing Contradiction

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Two of the challenges of the past half century will continue to be among the key drivers of higher education realities, for the coming several decades—providing greater access to tertiary education and sustaining research centers that will contribute and disseminate the knowledge essential to modern societies. These two key forces are contradictory and pull academe in different directions.

Global enrollments now stand at more than 150 million, having doubled in just a few decades, and it is likely that there will be another 100 million added by 2020. A significant part of that growth will be in just two countries— China and India. Providing postsecondary education to larger segments of the population is not only necessary, as increasingly sophisticated economies demand higher levels of training, but as key to social mobility and more attractive employment.

Massification has placed great stress on government finances and has led to a rapidly growing private higher education sector. Shortages of qualified academic staff and newer, underresourced institutions often accompany this rapid expansion; as a consequence, overall quality has declined, in some countries dramatically. Yet, many millions have now obtained academic qualifications and in general achieved better lives as a result.

At the same time, the global knowledge economy requires more sophisticated and top-quality higher education to educate graduates who are capable of participating in the globalized 21st century economy. Universities must support research in the pursuit of new scientific endeavors, as well as serve as repositories of knowledge in all disciplines. Research universities, the engines of the global knowledge economy, are complex institutions, and are the foci of international networks. Although powerful, they are also fragile institutions, requiring autonomy, shared governance, and academic freedom. These universities are expensive and complex. They are, with few exceptions, public institutions requiring unqualified state support; these are the worldclass universities that dominate the rankings. Yet, it is often difficult for governments to understand these expensive yet necessary universities.

There is a seeming dichotomy between the necessity of providing postsecondary education for large numbers of students and, at the same time, supporting elite research universities. Yet, both are necessary parts of a differentiated academic system, and both serve important functions in the global knowledge economy—one to provide the increasingly sophisticated needs of the economy, as well as the general knowledge to function as effective citizens, and the other to educate the most able students, to provide both basic and applied research. Both are absolutely essential to a successful national economy, as well.

Supporting these two-core objectives is a necessity for the coming decades. Yet, there are signs in many countries, mass "demand absorbing" higher education is proving too heavy a burden for governments. Also, a growing private sector, often for-profit, tends to fill the gap, often providing lower-quality education. At the same time, expensive and largely public research universities are confronting alarming budget cuts. A key challenge is to ensure that both key aspects of higher education are appropriately supported.

The Crisis of the Public Mission in Higher Education

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The major challenge for higher education worldwide is to strengthen and revitalize its commitment to the public mission, as a response to the overall-per-student decline in public funding, the shifting rationale, strategies, and instruments that governments subsidize and regulate higher education, and to cope with changes in student demand and in the society at large.

State ownership and funding of public institutions are often and erroneously identified with a public mission in countries where these institutions enjoy considerable prestige, autonomy, and political clout in shaping public policy. Administrators, faculty, and students are often critical of the undesirable consequences of the rapidly expanding private sector for the public mission of higher education, but public institutions seldom become accountable to the fulfillment of their own public mission. Nonstate institutions require state recognition and legitimacy to operate, enjoy rights and privileges granted by public authority, and benefit from direct and indirect subsidies. The proliferation of new, profitdriven institutions responding to student demand, often with public support, does pose a major challenge to quality assurance in defense of the rights of students. A revisiting of the public mission is in order for all institutional segments and for the higher education system as a whole.

The definition of a public mission for higher education is subject to national and local politics and often becomes a very contentious issue, exacerbated when government support declines. The worldwide increase in income and wealth inequalities has highlighted the tension around fairness and equity in access to higher education, an important dimension of its pubic mission. The failure of massification to significantly reduce the gap between income groups among nations, where mass access is a recent phenomenon, is well documented. In many middle-income countries governments are allocating a disproportionate share of scarce resources to support public institutions with higher per-student costs, a strategy often justified in terms of the limited capacity of the private sector, in the production of basic research and advanced training. Fulfillment of the public mission requires greater transparency in the use of public funds, to make sure that benefits are not disproportionally enjoyed by better-off students and that higher education in all its functions serves the society at large.

There is also a universal dimension to the public mission of higher education, one that transcends the national, regional, and local settings but needs to be protected and nurtured by institutions and governments alike. Knowledge production, a centerpiece of that dimension, takes place on a global scale and crosses political boundaries, increasingly so thanks to the technological revolution in communications. Higher education institutions are key agents in the global production of knowledge, through basic scientific and humanistic research, and thus they are accountable to an evolving set of norms and values that drive and regulate knowledge production, its public, and increasingly collaborative nature. Although internationalization has become a buzzword among higher education institutions, its publicmission dimension-the safeguard and promotion of collaborative, reciprocal, and respectful relations in knowledge production and distribution across national boundariesneeds to be recognized more explicitly and implemented more carefully by institutions and public agencies.

Equity Remains a Most-Important Challenge, Facing Global Higher Education

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The intersection of technology and higher education has been driving the headlines on "the future" of higher education, for the better part of the past two decades. Indeed, since the industrial revolution, popular culture has often equated technology with the future. But, education—for all its adaptations to the world around it—is a human endeavor, and supporting and promoting the "humanity" of higher education will remain the key challenge for higher education stakeholders in perpetuity.

What is the humanity of higher education? Stakeholders including future, current, and former students; families; academic and administrative staff; employers; policymakers? In fact, higher education reaches into the lives of every person on earth—through research, technology, teacher training, and others. But, the ability to directly contribute to and benefit from higher education remains largely limited to the global elite. Equitable access to the full benefits of higher education will, therefore, remain the single, mostimportant challenge facing global higher education for the foreseeable future.

Supporting the equity of opportunity to seek the benefits, afforded by tertiary education, is economically and socially important in light of the documented evidence on the public and private benefits of attaining a college degree. Individual, private benefits include improved health outcomes, increased earning potential and even greater life satisfaction and expectancy, while the public, societal benefits include lower unemployment rates, increased tax revenues, greater civic and volunteer participation, and lessened dependency on social services. Furthermore, expanded access to tertiary education among members of disadvantaged communities extends these public benefits into communities, most in need of supportive interventions.

In spite of expanded access worldwide, however, higher education—especially the most prestigious university sector—generally remains inaccessible, with the majority of enrolled students coming from wealthier segments of society. Although relatively few countries and institutions systematically collect data on the socioeconomic origin of students, where national statistics and household survey data are available, the pattern of inequality is clear. In Chile,