

nificantly, and several institutions were on their way to becoming world-class institutions. Most universities had signed onto the tenure-track system. The first master's and PhD students were returning from their studies to good facilities and substantial research support. Many expatriate Pakistanis returned from abroad with access to competitive salaries. About 95 percent of people sent abroad for training returned, an unusually

*Higher education in Pakistan has suffered from decades of neglect. It was among the world's laggards with only 2.6 percent of university-age students attending higher education in 2001.*

high result for a developing country in response to improved salaries and working conditions at universities as well as bonding and strict follow-up by the commission, Fulbright, and others. Student enrollment increases brought the total enrollment of college age students to 3.9 percent—well on the way to the target of 5 percent by 2010.

Research publications more than doubled between 2004 and 2006. Especially important was the emphasis on quality in all areas including recruitment, PhD training, tenure, publications—all requiring external examiners. While the percentage of PhD faculty has slipped slightly from 29 to 22 percent, largely because rising enrollments have taken place faster than increases in PhD training with higher standards, the extensive faculty development programs of the commission will soon result in the return of sufficient numbers of PhDs to more than reverse that trend. During this time the student/faculty ratio has improved from 1:21 to 1:19, and a number of universities have focused on upgrading the quality of their teaching programs. By 2008, a broad transformation of higher education had taken place.

#### POLITICAL AND ECONOMIC CRISES

In early 2008 the political and economic situation worsened. The Pakistan People's Party and the Muslim League coalition was shaky and the government unable to exert effective leadership because of disagreements about reinstating fired supreme court judges and dealing with President Musharraf. This led to the withdrawal of several ministers from government, including the minister of education, and their eventual withdrawal from the coalition. During this period the major crises worsened, complicated by growing insecurity. Inflation increased to 21.6 percent, the fuel import bill grew 66 percent, the cost of imported food doubled, and the trade deficit increased more than 50 percent. The election of President Asif Ali Zardari did little to reverse a growing sense of unease, frustration, and anger.

In July, the government reduced its quarterly payment to the Higher Education Commission by one-third and announced a decline in the recurring budget of 20 percent—a decrease of 13

percent from the previous year—and cut the development budget by 14 percent. These cuts would be problematic under normal circumstances. In a period of growth, when the commission has commitments to new faculty members, fellowships for more than 2,000 people working on PhD and master's degrees abroad, and the automatic effects of increased admissions, the economic crisis is potentially crippling to the transformation process.

#### CONCLUSION

Uncertainty about the budgetary situation, political instability, and the deteriorating security situation have created a loss of confidence in government and new questions about the future of higher education. These factors threaten to reverse the phenomenal progress in higher education, limit quality improvement, reverse the attractiveness of university positions, curtail enrollment increases, and undermine the prospects for national development. In addition, there is growing uncertainty about the future of the Higher Education Commission, including its administrative and financial autonomy. Thus, one of the few hopeful signs of progress in Pakistan appears to be in jeopardy. While there are many claimants on the national budget in this period of economic difficulty, the failure of higher education transformation would be a devastating reversal for Pakistan and make economic growth, social recovery, and political stability even more difficult than at the present time. ■

## Higher Education and the Wayward Labor Market

WIETSE DE VRIES, ALBERTO CABRERA, AND SHAQUANA ANDERSON

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Sometimes the labor market for university graduates seems unwilling to comply with predictions, most of all those launched by policymakers. In a recent alumni study by the Benemérita Universidad Autónoma de Puebla, in Mexico, traditional majors were found better suited to local labor

demands than novel options. Traditional majors showed higher levels of employment and job satisfaction. Alumni from these majors also indicated higher levels of congruence between work and education.

These findings run contrary to at least two decades of public policies—not only in Mexico, but throughout Latin America. Beginning in the 1990s, policymakers and institutional managers, inspired by reports from international organizations including the World Bank and the Organization for Economic Cooperation and Development, began diversifying major offerings based on the notion that traditional options were ill-suited for the demands of the new knowledge-based society. These policies were mostly based on predictions for future regional economies. Students were advised, encouraged, and sometimes pressed to avoid majors such as law, accountancy, administration, medicine, or civil engineering, and to opt for promising novel options like nanotechnology, tourism, environmental engineering, or design.

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However, these policies have been mostly based on assumptions on what could or should be happening in the regional economies. Alumni studies have been absent and information about labor markets is scarce. Now that these data start to be generated, the assumption about saturated majors is being increasingly questioned.

#### CHANGING SYSTEMS

Based on the new data, the logical conclusion indicates that course offerings should be adjusted. That trend, however, is not as simple as it looks. Two decades of policies based on the assumption of saturated majors have modified the systems of higher education throughout Latin America. In all countries, governments have created new majors or new institutions. In several cases, funding decisions have been made that foster new majors or punish universities for offering the traditional ones.

Furthermore, money has been allocated to novel programs, hiring qualified faculty, and buying equipment to create attractive options. In the Mexican case, the federal government even opted to establish completely new public sectors, such as over 80 technical universities or, recently, 10 intercultural universities. All these institutions were set up with the overt mission to offer alternatives to the saturated traditional options.

#### PUBLIC AND PRIVATE

At the same time, the introduction of enrollment caps for tra-

ditional majors in the public universities has led to a sometimes massive flight of students to the private sector. These universities readily offer the traditional options to applicants rejected by the public sector. Several of these private institutions charge high tuition fees for the traditional majors and can do so because students, in spite of governmental warnings that a traditional major can seriously damage one's future, have voted with their feet. As a result, in Mexico, law, accountancy, and administration still constitute 30 percent of national undergraduate enrollments, just as they did 10 years ago, but over 50 percent of students majoring in these options now attend private institutions.

#### REASONS FOR SUCCESS

The sustainability of demand for traditional majors in the Mexican labor market can be explained by a number of reasons. First, the labor market demand for college graduates of traditional majors has remained consistent. This is perhaps due to the possibility that several new niches predicted for the future knowledge-based society never materialized. Also, majors in the sciences or the humanities prepare for teaching or research, but research remains concentrated in a few public universities with little new job positions.

Additionally, several novel options appear to be too specialized, preparing graduates for very specific positions such as ecotourism. For these positions, college graduates largely need to compete with graduates from traditional majors whose qualifications and skill base might be more easily recognized by employers. Taken in total, traditional majors in Latin America seem to offer a broader and more flexible preparation, not unlike general education in the United States.

Based on the findings from our study, it would appear that policies and changes in system design over the last two decades have been poorly informed by data on the complex relationship between higher education and the labor market. Consequently, public institutions appear to be less likely to prepare their graduates to meet the real demands of the labor market, perhaps even less so than a decade ago. As such, governmental policies have been successful in diversifying the supply side of higher education, but remarkably ineffective in changing student preferences or the labor market for graduates. Our results suggest that students might have a better feel of what the market demands than policymakers do and that the simple introduction of new majors is unlikely to change the economy.

An extensive analysis can be found in: Cabrera, A., Wietse, de Vries, and Shaquana Anderson (2008). Job Satisfaction Among Mexican Alumni: A Case of Incongruence Between Hunch-Based Policies and Labor Market Demands, *Higher Education* (<https://commerce.metapress.com/content/01181ux724u715r1/resource-secured/?target=full-text.pdf&sid=eeduhi451cihtemtlonkez45&sh=www.springerlink.com>)