my institution will offer or even whether it (and the kind of learning experience it tries to provide) will survive. What view do my faculty take on this? Nearly every survey shows that academic staff are generally hostile to these forces. Already many of them feel alienated from what they see as increased bureaucratization and a reduced academic control as a result of state initiatives. Some of these perspectives but by no means all of them are justified.

Similarly, institutional heads are fond of complaining about the accountability "burden." But every independent study has

Increasing amounts of institutional resources are going into areas like marketing, enrollments, and fundraising that would previously have been used for teaching and research.

shown that the direct costs are at least tiny in relation to the overall level of public and private expenditure now committed to higher education.

What worries me far more is the increasing volume of student complaints and appeals, the declining level of trust between institutions and students, the increased levels of cheating, the increasing characterization of higher education as a private rather than a public good, and the view that ultimately it is the customer who should determine the appropriateness of program and research outcomes. In my view this growing marketization represents a much greater threat to the academic enterprise than any number of government initiatives. I hope I am wrong.

Flying Brains: A Challenge Facing Iran Today

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Today, Iran suffers a major loss of intellectuals, scientists, medical doctors, and academic elites. According to the International Monetary fund (IMF), which surveyed 91 countries, Iran has the highest rate of brain drain in the world: every year, 150,000 educated Iranians leave their home country to pursue better opportunities abroad. Iranian experts put the economic loss of brain drain at some \$50 billion a year or higher, making the exodus of an inventor or scientist comparable in local terms to the eradication of 10 oil wells.

The desire among Iran's elites to seek higher education degrees abroad goes back to the early 19th century, but the phenomenon of brain drain is a contemporary one. The main purpose of leaving the home country in those days was to attend foreign universities in Europe, especially in France and Germany, to acquire expertise in the fields of engineering, medicine, and military sciences that would be applied at home. Even then, fascination with Western culture or intermarriage motivated some Iranian students to remain abroad, but the majority of students—especially those on government scholarships, which often stipulated that the expertise acquired abroad be applied at home—returned to Iran after their studies ended.

UNEMPLOYMENT/UNDEREMPLOYMENT

Numerous factors contribute to the current unprecedented outflow of human capital from Iran. According to economists, Iran needs to create more than a million jobs a year just to keep pace with its growing population. In reality, only about 300,000 new jobs are added each year, creating high unemployment rates among educated youth (one out of 10 unemployed youth hold a university degree).

Official statistics have set the rate of unemployment at 15 percent. Only 75,000 of the 270,000 university graduates who enter the labor market each year will find jobs, creating a situation in which university graduates must line up with the rest of the population in search of sources of income. The jobs that they find often have little to do with their studies and special-

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ization. Many young educated Iranians have left or are actively seeking employment in the countries of the UAE, India, Turkey, and Australia—or anywhere they can obtain a visa.

Universities' Intellectual Atmosphere

In addition to economic hardships, the intellectual atmosphere at universities does not encourage qualified academics to remain. Scholars and scientists feel excluded from decision making their expertise qualifies them for and believe their work is unappreciated. An Education Ministry official states that a large number of university scholars who go abroad on sabbaticals contact their home institutions requesting unpaid leave: a tacit way of acknowledging they intend to stay abroad. Officials attribute this to lack of resources, including insufficient research facilities and laboratories, a lack of new books and access to education Web sites as well as low salaries.

CONCOURS

An often unacknowledged factor in brain drain is the rigorous

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examination required for a student to gain a place at a national university. This exam, known as the Concours is so competitive that students often spend a full year preparing for it. In Iran, culturally and historically, admission to universities especially prestigious ones has been viewed as a means of social mobility, enabling an individual to secure an elevated status through the acquisition of a well-respected profession such as medicine or engineering. The Concours is so rigorous and the seats available at universities so limited that normally only 10 percent of applicants gain admission. Although in recent years the establishment of a number of new higher education institutions, especially the creation of Azad University (a semiprivate, open university), has been instrumental in accommodating the ever-increasing demand for higher education in Iran. Still, many students failing the Concours opt to leave the coun-

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try to attend foreign colleges and universities. According to studies, a majority of these students do not return home.

Despite the popularity of United States as a studying-abroad destination, due to lack of diplomatic relations between the United States and Iran and the fact that Iranian students are obliged to travel to a third country to obtain US visas, many students have opted to go to Canada, Australia, the United Kingdom, and other European countries. These latter countries have more relaxed and flexible visa requirements for Iranian students.

THE ATTRACTIVENESS OF OPPORTUNITIES

Many highly talented scholars and scientists in Iran who overcome these enormous obstacles to professional achievement are lured abroad by prestigious universities around the world—especially US colleges and universities—to conduct research, teach, or continue their studies. The superior monetary compensation and access to research facilities offered by foreign institutions are great incentives for Iranian scholars and researchers to take their work abroad.

Beyond these material considerations, studies on brain drain in Iran indicate that societal restrictions also play a role in the flight of intellectuals. Such problems have driven educated Iranians to seek more congenial environments for research and work outside the country.

REFORM POLICY OPTIONS

Experts are unanimous in their recognition of the dire need for "principled planning" to dissuade elites from leaving the country. They propose policies and practices that will offer elites a more substantial role in running the country, greater individual and social freedom, improved job security, and better compensation.

Another proposed reform would be to make use of the knowledge and expertise of Iranian specialists no matter where they are in the world by extending invitations to them to participate in workshops, seminars, and conferences in Iran. By extending opportunities to return home on a short-term basis for the exchange of knowledge and expertise, the government would make the brain drain participants aware of the country's urgent need for their services.

More hopefully, the return of expatriate scientists, medical doctors, and educators to the country has increased in recent years as they accept invitations to return home on short visits to participate in conferences, exchange scholarly work with their counterparts, and serve as guest teachers in universities. The enthusiasm for such invitations suggests that the Iranian government should take a more active role in attracting expatriates by formulating a viable policy to facilitate scholarly exchange between Iranians living abroad and at home.

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