Economic Growth and Higher Education Policies in Brazil: A Link?

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Brazil is one of the new “emerging economies.” It is flexing its muscles to become a leading international player, and thus, it needs good university institutions capable to produce the scientists and engineers needed to keep the momentum. Therefore, clear policies are required, to improve the standards of universities and the quality of higher education institutions, based on a clear identification of priorities. However, contrary to the assumptions and expectations of external observers, Brazil does not have such a strategy.

Brazil experienced cycles of rapid economic growth in the 1930s, after World War II, in the 1970s, and again after 2002. Each of these cycles can be explained by favorable external conditions—the revenues created by the agricultural and mining sectors, the influx of international investments, and the use of such resources to finance a growing public sector, the steady transfer of the population from the countryside to the urban centers, and generating a growing internal consumption market. These developments were also preceded by internal reorganizations of the economy, controlling inflation and increasing the governments’ ability to raise taxes, as it
happened in the late 1960s and more recently in the 1990s. In none of these cycles is a causal link found between investments in education, science, and technology and economic growth. On the contrary, the causality seems to be the opposite. With more resources, governments became more generous and willing to respond to the demands of an emerging middle class for more benefits, including free access to education. Thus, the existing network of federal universities was created during the period of economic expansion after the Second World War; and the current network of graduate education, research, and technology was set up in the late 1970s, when the “economic miracle” of the previous years was about to implode.

The economic boom of the last 10 years was mostly fueled by the macroeconomic stability achieved in the late 1990s, the favorable winds of international trade blowing from China, and the ability of a small sector of the economy—mostly the agrobusiness and mining companies. With economic stabilization, high interest rates, and an overvalued currency—the country became attractive to foreign investments, generating more jobs and employment for the middle classes.

**The Expansion of Public Expenditure and Education**

With the economy growing at the steady rate of 4 to 5 percent a year, public expenditures increased to almost 40 percent of the gross domestic product, most of it spent on social security, the payment of civil servants, and the service of the public debt. The federal government benefited from the growing tax base, to distribute some benefits to the poor, with the conditional cash transfer programs and increases in the value of the minimum wage; to the civil servants, increasing their numbers, raising
salaries and social benefits; to the rich, providing cheap subsidies and generous contracts for public works and services; and to political allies, through widespread patronage and tolerance to corruption. For the middle class, one benefit was to provide growing access to free higher education in public and private institutions and affirmative action, to respond to the demands of organized social movements.

None of these options required a national policy for good-quality higher education and effective and economically relevant science and technology. Brazil spends today about 5 percent of gross domestic product on education, mostly through states and municipalities for basic and secondary schools. In spite of recent investments in public universities, the provisions cover about 25 percent of the enrollment. While some institutions and professional schools are of good quality, most of them are not; and there is no mechanism to stimulate quality. The assessments carried on by the government only affect poorly rated private institutes in medicine and law, largely in response to the pressures from the professional corporations. Graduate education and research continue to expand, mostly in the State of São Paulo, in selected federal universities and in a network of federal research institutes. It is by far the largest research and development and graduate education establishment in Latin America. But research is mostly academic, with little factors in terms of patents and applied technology, and is poorly connected with the country’s economic and social needs.

There are some counterexamples: Embraer, Brazil’s successful airplane company, grew out of the Aeronautical Institute of Technology (ITA)—a technological institute and engineering school established by the Air Force; and at least part of the achievements in agriculture is explained by new varieties developed by Embrapa,
Brazil’s agricultural research agency. The National Service for Industrial Training (SENAI), a vocation-training agency run by the Federation of Industries, has a history of success in the qualification of specialized workers for the industrial sector. All, tellingly, are outside the realm of the Ministry of Education and the Ministry of Science and Technology.

In short, as the Brazilian society modernized and its economy grew, higher education institutions also expanded in size and some of them even in quality; they were and are still part of the same wave. Clearly, higher education could not have grown without economic development, but the reverse (so far at least) is not true, although it may become so in the future.

**The Future**

This situation may be transforming. As the economy becomes more complex and sophisticated, it requires a more skilled population and more relevant research. There are signs that this is already happening, with new companies complaining for the lack of qualified engineers and mid-level technicians; and multinational corporations importing qualified manpower from abroad. To respond to this situation, higher education in Brazil will have to change its priorities from uncontrolled growth and access to quality and relevance—not an easy transition.