

2. Education and Development: The role of higher education

Lawrence Summers
Harvard University

This chapter provides an American perspective on issues affecting higher education in China. It discusses how the work of universities is so important to the development of nations, and reflects on the success of the US system and what lessons can be taken from this system for higher education in other parts of the world.

Discussions of higher education and development took an odd turn about a generation ago from which we are only now recovering. It came to be a fashionable idea that emphasis should be placed on primary and secondary services, rather than on tertiary services. The argument was made that from an equity point of view, it was more important to teach more people to read than to teach a small cadre the liberal arts. The argument was made from the point of view of mass economic development. Strengthening primary and secondary schools for the many was more important than strengthening universities for the few. The argument was made that in a fundamental sense, there was something unegalitarian about support for universities, especially since the majority of students entering the system were the children of what quite likely had been privileged families. None of the arguments is entirely without merit, and to suggest that higher education should be emphasised at the expense of primary and secondary education is not the point. It does seem that the lessons of recent economic history point in a very compelling way towards the importance of strong universities—and universities that receive substantial public support.

This is not a new idea. Economic historians who have studied the growth of Europe assign a very significant role to what took place in universities. In the United States, the land-grant colleges established during the Lincoln administration—with the objective of spreading education and in particular promoting research into more productive agriculture and the dissemination of agricultural technologies—are generally regarded as having made an important contribution to US economic success.

Most evidence would suggest that the current world economy is going to be a knowledge economy to a much greater extent than any we have seen to date. As the agricultural revolution gave way to the Industrial Revolution, increasingly the Industrial Revolution is giving way to a kind of information

revolution. Alan Greenspan made that point in a very powerful way by noting that even as the value of the US gross product had increased, its total mass had quite substantially decreased. We are replacing semi-conductive steel with semiconductors; we are replacing manufactured products with services. All you have to do is look at the results of the market to see the impact of knowledge. Salary differentials between those with high-school degrees and no high-school degree, those with college degrees and no college degree, graduate degrees and college degrees, those with training at first-rate institutions versus those with training at second-rate institutions—all of these economic differentials have widened very substantially, and that suggests the high importance of the increase in the supply of highly skilled workers.

Bill Clinton was fond of remarking that you could not have employees without having employers. Or, as he sometimes put it, he hoped that there would be many more millionaires in the United States at the end of his term than there were at the beginning. He expressed that hope because he recognised that people who started successful businesses, who built successful institutions, generated enormous externalities by employing large numbers of people. If there is going to be that leading edge in any country, it is going to depend critically on that country's system of higher education, because in today's economy, the majority of such people are going to be those who have received sophisticated education at the undergraduate level and perhaps even the graduate level.

The case in countries such as the United States or those in Europe is that a large fraction of the benefits of higher education derive from enabling entrepreneurs to push the frontier of science with commercial application. In emerging markets, the largest fraction of the benefit will probably derive from facilitating the adoption and dissemination of new technologies. In either event, successful practically oriented institutions of education are crucial to the success of any country competing in today's global economy.

There are other reasons why strong institutions of higher education are important to the work of nations. Strong institutions of higher education that promote access, that enable access without regard to financial circumstances or the ability to pay, that provide large numbers of spaces for those who are most able, regardless of their connections or their family's wealth, are also important guarantors of the kind of social mobility that promotes a healthy society.

These are only some of the reasons why the work of universities is very important in any society. One of the major differences between the economy of today and the industrial economy of a generation ago is that a contemporary economy has to be based much more on the authority of ideas and much less on the idea of authority. The most successful organisations today are not those based on strong hierarchical commanding control; they are based on organisations

and companies that reorganise themselves every six months or every two years. They are based on organisations whose strategy can be altered, whose traditional dogma can be questioned by any part of the organisation, by anyone who has something to contribute. It is this kind of culture that universities, at their best, are very good at fostering.

As President of Harvard University, I taught a freshman seminar and one of the topics we covered was capital flows and capital flows to emerging markets—an issue I would be very much engaged in at the US Treasury. And it was with great pleasure that I remember the meaning of the seminar, at which a freshman who had been at Harvard for six weeks and who was asked to summarise that week's readings said very calmly that he had read Professor Summer's lecture and he had found it very interesting, although the data, in his view, did not come close to proving the conclusions. And I thought, what a remarkable and positive thing that a seventeen-year-old who had been at Harvard for all of six weeks felt entirely free saying that the President did not really know what he was talking about on an issue for which he had led policy for his country. To be sure, I did not agree with the student and I made clear why I did not agree, but I thought that kind of open dialogue, which is encouraged in universities, is something that does not get fostered in many institutions and it is something that universities are very, very good at doing. New knowledge pushing back the frontiers of science with commercial application, providing equal opportunity, modelling the kinds of open organisations and the kinds of open structures that promote creativity and entrepreneurship—these are the great contributions that universities make to societies.

Universities make another contribution. To be sure it is not a contribution they have always made. They prompt reflection by society on what their deepest values are, what their true nature is, ways in which they can be better. The United States and Europe are very different places because of the events of the 1960s. In the United States there would be a very different attitude towards women and race if the changes in university policy that were very much at the vanguard of questions of inclusion had not taken place. It might be an exaggeration to say that what is good for a country is good for its universities and what is good for its universities is good for the country, but when one looks at different emerging markets, one has the sense that looking back one or two generations at which countries have succeeded and which have not, the ones that have been most successful will tend to be the countries that were most successful in fostering terrific educational experiences for the people in their late teens and early twenties who in 25 or 30 years are going to be their nation's leaders in every sphere. That is why the development of educational institutions is so important.

When looking at the data of the top-ranking universities in the world, it is clear that US universities are a very substantial fraction of the top group—whether that is the top five, the top 10, the top 25, the top 50 or the top 100. There are few other sectors where that would be the case. It certainly would not be the case in almost any area of manufacturing activity today. It would be the case in very few service-sector activities. It is worth considering what it is about the US system that contributes to that great strength. This can be summarised in three primary factors.

First, the US university system is intensely competitive. Universities compete for the best students; they compete for the best faculty; they compete to have the highest rankings whenever anyone constructs a system of rankings. That competition can sometimes be destructive but in the fullness of it, the fact of brutal competition for the best students and the best faculty forces a discipline and excellence that are present in US universities and are sometimes less present in others. As such, the capacity to maintain a competitive environment and what the competitive environment depends on is the availability of choice—the fact that professors are free to move from one university to another without regard to any kind of national plan, the fact that students have multiple options and that the best students are able to choose the universities that they wish to go to. This competition among universities, as among businesses, is a very powerful spur to quality. Too often countries beyond the United States have a carefully planned and managed system that does not provide those kinds of incentives for competition and therefore miss a drive for excellence of the kind that has proven so powerful in the United States.

A second strength of the US university system—though it is one on which improvements are certainly possible—is a governance model that maintains dynamism. A university is a very difficult kind of institution to govern, because many of the most important judgments—judgments about what is going to be taught in a physics class or a history class or a literature class, judgments about who is the best scholar to hire—are judgments that really are best made by experts in those fields and not by general leaders. Yet, at the same time, when judgments are made by the incumbents in a field, you tend, as in any area of human activity, to get self-perpetuation. So the challenge is to find a governance model that draws on local expertise, draws on experts, but at the same time ensures accountability for excellence. University governance models go wrong in two ways. In some cases in the United States, and certainly in many cases abroad, universities are governed too much like any other part of the public sector. There are elaborate bureaucratic rules governing promotion, compensation and decision making that preclude the kind of dynamism, flexibility and rapid movement to opportunity that success and knowledge-based activities require. If universities cannot be run like departments of motor

vehicles, it is also true that it is very dangerous when universities are run by their staff. In too many places, university presidents are chosen or renewed on the basis of votes of faculty, students and staff. In such a context—which would be unthinkable in a modern corporation—it is very difficult for a leader to make difficult choices, to shut down mediocre activities or to reallocate resources from lower-productivity activities to higher-productivity activities. The challenge is to find leadership that is empowered vis-a-vis those who work in the institution but at the same time understand that empowerment is a very different thing to the ability to dictate precisely what is going to happen. Private universities in the United States with trustees—often trustees who are involved in providing substantial resources to the university—strike this compromise as well as it has been struck. It is a constant battle, however, and one that requires constant vigilance, but it is a critical issue that must be monitored.

A third strength of the US system is its substantial reliance on the private sector. Great institutions such as Harvard, the University of Chicago and Stanford University are not public institutions. They certainly do receive support for research and for financial aid for students from the government. But the lion's share of their resources comes from loyal alumni—from people who have been highly successful and have chosen to allocate resources to support their activities. That mixture of the public and the private sector is often a source of tension in the United States, but it is also a great spur to innovation. It is hoped that around the world over the next generation we will see the John Harvards, the Lyman Stanfords, the Andrew Carnegies and the John. D. Rockefellers who will step forward and provide the leadership for creating academic institutions that will be a source of national strength for many years into the future.