Graham, thank you very much for that generous introduction. You were kind enough to mention that I had had a chance to be active in a number of different spheres of American life.

When I started in Washington, friends would sometimes ask me, Larry, what's the difference between being a Treasury official and being a professor at Harvard? And I would say, well, there are a number of them, but here are the two that first come to mind.

As a professor at Harvard, the single worst thing you could do was to sign your name to something you had not written. On the other hand, as a Treasury official, it was a mark of effectiveness to do that as frequently as possible.

Then I would say that as a young economist doing research, if I worked really hard on a problem, and I really gave the problem my all and I just couldn't find a solution to the problem, what I did was I worked on a different problem. We didn't have that luxury in government.

Then I came back from the Treasury to serve as the president of Harvard, and people would ask me, well, what's the difference between Washington and Harvard? For a while, I gave an answer that, in retrospect, seems rather naive. I would say, well, in Washington there's always the opposition, and the opposition is always rooting for failure, and at the university everybody's on the same side. I've probably been led to revise that answer a little bit as things have unfolded.

I want to just say today that in many ways, and to an extent that I think is not always appreciated, the success of nations and the success of societies depend on the quality, the attitude, and what happens in their leading universities. Historically, a third of American presidents or more come from the Ivy League. Two-thirds of our Supreme Court comes from leading research universities, and more than a quarter of the Senate. One could extrapolate these figures across a broad range of society, of groups.

A large portion of our economic progress emanates from the scientific developments that take place within our universities. No small part of the way we are seen abroad reflects what takes place when people visit our universities, and how its products are seen abroad, and, in important ways, our universities are carriers and transmitters of very fundamental values.

So we all have a very, very great stake in their success, and no small part of America's strength over the last half century is attributable to the great success of our universities. While there are some important respects in which I will suggest there are ways in which they could profitably evolve, it would be difficult to think of another sector where America's lead relative to other nations is as great and has stayed as great as in higher education at universities.
I want to comment briefly on four large questions of universities' role and then conclude with an observation or two on their governance.

The first is equal opportunity. One of the large and, I think, less remarked concerns about the evolution of the United States is the tendency for equal opportunity to be diminishing, not increasing. What everyone now knows and recognizes is that, driven by a variety of market forces, the extent of inequality is significantly greater than it was a quarter century ago.

As inequality has increased, the correlation of the life prospects of parents and children has surely not diminished and, by some estimates, has risen in the last 25 years. So there is no question that the difference in the life prospects of a high-income parent and a low-income parent is greater today than it ever has been and that it is rising.

Universities have something to do with that. One looks at America's leading universities. Only 10 percent of their students come from families in the lower half of the income distribution. Eighty percent under-representation, something that dwarfs the under-representation of any minority group, and it is driven by quite fundamental things.

Meritocracy is a wonderful concept but a more problematic concept when merit can be purchased. The least diverse classes in all of America are in the SAT prep courses that unambiguously and clearly contribute to raising SAT scores. It is wonderful to hire, to admit, and to take students who are interesting. But I was very struck, as I sat in and watched our admissions committee—and it wouldn't be very different at any other great university—discuss an applicant who was clearly a very able, very capable student, but what was most distinctive about this student was that he had learned Mandarin as a 12th-grader. It was great that he had learned Mandarin, and he had shown extraordinary diligence in working with his Mandarin tutor three times a week, every week, for four years through high school. It was a tribute to his great diligence that he had done that, but I asked myself, what fraction of American families, no matter who their child was, could have provided that Mandarin tutor? Or who could have provided instruction that brought one to the cutting edge in squash or fencing, or any of a number of other areas of expertise that are hugely valued in American universities?

The first great question—it's one where I think we did something important by creating this universal availability for families with income under $60,000, but what will happen will depend on many more institutions than Harvard, will depend on what institutions that don't have the kind of resources Harvard has will do, and will depend on a deeper question about how we choose the elite we are going to admit—is whether we are creators of equal opportunity or whether we are purveyors and continuers of a system that promotes unequal opportunity.

Every major university president in the United States denounced the GI Bill when it was proposed after the Second World War, and I am not altogether certain that we are doing a great deal better today, relative to what is possible, on an issue that is central to the legitimacy of our system.

Science. Science, technology, and their application are going to shape the next half century. All is not entirely well in the United States. A third of high school biology teachers profess not to believe in Darwin, and they are encouraged by the president of the United States in the belief that evolution is merely one of several conflicting theories that can validly be taught.

At a moment of promise that is unparalleled, the NIH budget, in nominal dollars, decreased last year for the first time since 1970. We are losing researchers around the world because of our national attitude towards stem cells. How universities drive forward the kind of progress that we have seen in science, historically, will be
crucial to our standing as a country at a time when the number of engineering graduates from India or China is a significant multiple of the number of graduates in the United States.

A committee of the Harvard faculty has proposed that the science requirements at Harvard at this moment be converted into a requirement that can be satisfied by taking courses in social policy and science and the policy implications of scientific developments. I yield to no one in my belief that those are important subjects, but I cannot believe that it is sending the right signal to make such a change with respect to science.

I said it in my inaugural address at Harvard, and I think I made a certain amount of progress, but it is still true today, that in any leading university community in America, if you do not know the names of and something about five plays by Shakespeare, you would never ever admit it because it would be a great embarrassment.

If you do not know the difference between a gene and a chromosome or the meaning of exponential growth, you smile and you explain that that's a technical subject on which you rely on other people. And there's a real question: how long are those healthy attitudes?

The modern university is going to be torn apart, if it does reinvent itself around these issues. To recruit a first-rate chemist today requires a university to write a check for $5 million to outfit his laboratory. The price of scholars in many other fields is more than an order of magnitude lower, and if one looks across leading universities, the share of the faculty that is in science has not increased and, in some cases like Harvard's, has decreased over the last 15 years.

Once again, the choices that universities make and how they deploy their resources will be of profound importance to the future of our country. We do not live at a moment when, as all of you here know much, much better than I, America is thought to be especially understanding of the world or thought to be especially well understood by the rest of the world. Here, too, what happens in universities has profound implications.

I like to tell the story, because it's a positive one, of an indirect, long causal chain of success. You'll recall the incident, perhaps two years ago, when a Russian submarine was caught at the bottom of the ocean, caught up in some set of wires, and the crew was running out of air. Eventually, a rescue took place with ten hours to spare after a week-long effort. The reason that rescue took place was that a Russian admiral had met an American admiral in an exchange program at the Kennedy School to promote joint contacts and joint education, and he therefore felt able to make a call to an American official, which he never would have felt able to do if he hadn't forged a personal connection.

There are plenty of examples of that kind, and so the way in which universities do or do not promote contacts will be terribly important. Here, too, there's much to worry about. We are only barely recovering now from the damage that was done by the restrictions on immigration that were imposed after September 11th.

I think of the brilliant physicist here who had done what was going to be his first piece of research which was going to be a significant article that he was going to have published as a graduate student. The research was 70 percent completed when this young man's father died. He went back to China for the funeral. He was unable to get a reentry visa for nine months. Priority on the scientific article was going to be lost if they didn't publish the article. They couldn't very well publish the article without him, and so the article was published without him, they couldn't put his name on the article since he couldn't really work on it. It went forward, and that young man's career will be okay, but I daresay a fair number of people in China, who were thinking about whether they wanted to study at Yale or Oxford, at Stanford or
in Australia, were led to think differently because of that experience.

How universities choose to recruit and are permitted to recruit foreign students, what attitude we transmit with respect to the importance of studying abroad, shapes Americans attitudes towards the world and the world's attitude towards America.

A half dozen years ago, the only two other universities in the United States that had as small a fraction of their students studying abroad as Harvard and Yale were West Point and Annapolis. That is fortunately on the way to changing. We're now well on the way to the point where, in a couple of years, every Harvard student will have had some kind of meaningful international experience in the summer or during a semester during their time at Harvard.

But here, too, the choices that universities make will be terribly important. So also will be the choices universities make with respect to the ways in which they study the rest of the world and the values that they transmit as they study the rest of the world.

I am struck, as I've examined and thought about the study of the rest of the world in universities, that the promotion of international understanding is a profoundly important thing, but that understanding has two senses in which comprehension is only one of the two senses of understanding, and that, for too long in many parts of the world, the study of other parts of the world and the United States is given over to those who have a very high degree of sympathy for the perspectives that come from other parts of the world, and a very great commitment to the belief that there is continuity in that in which they have expertise.

With almost no exceptions, no academic Soviet apologists foresaw anything related to what happened in 1989. No expert on the Japanese economy foresaw anything like the Japanese implosion of the 1990s. And the experts on the Middle East were less than entirely prescient with respect to everything that has taken place in the last decade. Just what can be done, I think, is a very hard question, but how universities address the rest of the world will be of great importance.

A fourth area, and a much more amorphous one that is difficult to define, is the question of values that are transmitted. Maybe the best way to make the point, because I think it is a very important point about values in a society, is to describe an experience I had. I'm probably being unfair to someone in telling this story, but I had the opportunity to attend commencement at another university, and its president was giving a commencement speech of a kind that university presidents give. The president explained that this university is great, and we have representatives of every perspective, and we have vigorous arguments, and we debate every perspective on each issue, and it's a great strength of our community that that's what we do. The speech continued, and, as a result of that, then the question is, how do you fill it in? There are two different ways of filling it in, and I think it's actually important which one you choose.

One way of filling it in is we come closer to finding the truth. We come to a sharper and clearer understanding. That's one way in which that sentence can continue.

The other way in which that sentence can continue is we emerge with a greater appreciation of each other's perspective and more understanding of each other's point of view. Those are actually very different views about the world.

The values that are transmitted by our leading academic communities are very much the first set of values. At a time of very substantial struggle in the world, it is a question of what values we should send as we educate, as to whether all books, all ideas, all perspectives are created equal and to be valued equally. So these questions of values are also profoundly important. These are all areas where there is work that universities can do, but what universities are able to achieve will depend very much on
decisions that are made in the broader society.

But they will also depend on how universities govern themselves, and how they call on themselves to be the best. We have a variety of mechanisms in society for ensuring that institutions are as effective, as capable as they possibly can be. In the private sector, the two most important such mechanisms are competition and pressure from those who own the institution. In the university sector, neither is terribly effective. On the one hand, we do compete vigorously with one another for students and for faculty. On the other hand, it's the nature of competition in universities that it operates only with very great lags. Think about what competition would be like in the hotel industry if the main reason people chose a given hotel was because of the other people they would meet in the lobby. It would be very hard to start a new hotel that was better and that drew people away even if yours was the best hotel. Why do people come to any great university? Why do they come to Harvard? Certainly not because of the weather, probably not even because of the buildings. They come because of the other students who are going to be there, because of the other faculty who are going to be there, because of the students who they expect will come next year, and so forth.

And so competition acts only with very great lags as a spur to excellence, and in those universities that are blessed with every substantial resources, and where external forces are not allowed or do not choose to operate strongly, there's relatively little pressure coming from the equivalent of the capital market for strong performance. Institutions in which all the key employees have lifetime contracts, in which the key employees have a median age of 59, as is the case of the tenured faculty at Harvard, and it's not very different at other leading universities, are not institutions that are capable or likely to change in the ways in which they allocate resources, or in their prevailing habits of mind, very quickly.

In a world that is changing very rapidly, in a world where the excellence of universities is going to be central to national success, that too, I think, needs to be a real cause of concern. Thank you very much.

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