FINANCIER-PHILANTHROPIST MICHAEL MILKEN REFLECTS ON RESTORING THE AMERICAN DREAM

Michael Milken Chairman The Milken Institute

October 8, 2014

Excerpts from Mr. Milken's Remarks

Basic beliefs: My mother and father went to college during the Depression, and they left three things with me from a very young age — and not just me, but an entire generation of baby boomers, those born after 1946: One, one person can make a difference, just one person; two, you have a responsibility to your community, your part of the community; and three, equal opportunity for all. If there was going to be a good life for me, my brother and sister, there had to be an equal opportunity for all Americans.

The American Dream: The American Dream is a dream of a land in which life should be better and richer and fuller for everyone, and an opportunity for each according to ability or achievement in... America.

On prosperity, assets, and capital: I went back to Berkeley and wrote down this formula, that prosperity, job creation was a function of access to capital — to human capital, the world's largest asset; social capital, the world's second-largest asset; and real assets, those things you talk about — factories, roads, and things like that. But prosperity, having people feel they had fulfilling lives and opportunities, was dependent also on equal opportunity as a civil right at that time — my own civil rights movement.

Challenges today: The challenges in America are as great today in many ways as they were back in the '60s. They start with financial literacy, with the fact that most Americans do not consider themselves to be financially literate. And 30 percent think it's acceptable to default on a mortgage today and 26 percent think it's OK not to pay your bills on time. And when you talk to executives in America, 70 percent of them could not even define the term "free cash flow."

Spending priorities: The middle class in America has altered their spending patterns where more than 50 percent of the money that the middle class spends is on housing and transportation and only 2 percent is on the tutoring and education of their children. And we're competing today with what's going to be the largest part of the world's economy: Asia. And for them in the middle class in Asia, the number-one expenditure is on food — food for their family — and, number two, on the tutoring and education of their children.

Golden Age: The final realization that I had is that more than 50 percent of all economic growth in the last 200 years can be traced either to medical research or health. And as we pursued, over the last 40 years, our research, we discovered it took 4 million years to extend life expectancy by 11 years. Four million years. And in the last 14 years on this planet, we've extended life expectancy by 39 years — an amazing feat — maybe the greatest feat that mankind has ever achieved. We've solved many life-threatening diseases, and we have solutions today for 500-600 life-threatening diseases out of, maybe, 7,000. We are entering this Golden Age — this

Golden Age of medicine with precision medicine and immunology and stem cells and the promise of this enormous investment that the American people have made.

Legacy: I already have my legacy. When you're a cancer patient and you're diagnosed, what do you think about? You think about, am I ever going to see my kids grow up? Am I ever going to see grandchildren, et cetera? So my legacy is alive and well. All my three children are married. And we now have eight grandchildren, one every year. And number nine is coming next year. So if they're good citizens of our country, I think that will be my greatest legacy.

DAVID RUBENSTEIN: Welcome, members and guests of The Economic Club of Washington, welcome to this luncheon in the Ballroom at The Ritz Carlton in Washington, DC. This is the third event of our 28th season. I am David Rubenstein, President of The Economic Club of Washington.

Our special guest today is the legendary financier and philanthropist, Mike Milken, and we're very pleased that he was able to come today. He is well-known in so many areas. I could give an introduction that would go on for the entire time. And I'm not going to do that, but just very briefly, Mike has revolutionized many different parts of our country. One is obviously in finance. One is in medical treatment and health. Another is in philanthropy. Another is in investing. I will just briefly tell you a little bit about each of these.

Mike is a native of Los Angeles. He went to college in Berkeley, graduated Phi Beta Kappa, then went to Wharton. At Wharton, where he graduated in 1970, he was the first person in the history of Wharton to get perfect grades in every course – graduated first in his class. He then joined a research firm that was one of the best, if not the best, research firms then in the United States called Drexel Harriman and Ripley, as a specialist in research. And then he did a number of things there for a number of years and ultimately moved back to Los Angeles.

In Los Angeles he reinvented, in effect, the high-yield bond. High-yield bonds had been trading vehicles to some extent, not really things that people used for financing vehicles, and Mike basically used and invented the concept of a high-yield bond as a financing device, and as a result of that he created a whole industry. That industry was essentially nonexistent. Today, roughly a trillion dollars of high-yield and leveraged loans are sold a year, and that's really because of the creativity that Mike brought to building this industry many, many years ago.

In building the industry, he backed a lot of very prominent people, people who were not that famous then but people who are now well known. So he provided high-yield financing to Steve Wynn, John Malone, Ted Turner, Ron Perelman, Sumner Redstone. These were not household names then, but Mike picked them and backed them. And in this area the Rales brothers received their initial financing from Mike and his team. So he created a lot of very wealthy individuals and a lot of very successful companies.

In recent years, Mike has devoted himself to investing, and he's become probably the largest single personal investor in the education space in the United States and perhaps the world, backing a lot of companies that do things to try to create better ways of educating children. He's

also been a very active philanthropist. In the medical area, Mike has revolutionized the way prostate treatment occurs, and he really, in effect, created the National Prostate Foundation and really has led to many, I'd say, creative developments in the way that prostate illness is detected and treatment occurs.

And in doing that, he recognized that the medical treatment system in the United States is not all that maybe it should be, and he created FasterCures, which is a nonprofit designed to make the Government of the United States and medical treatment more efficient in the way they get treatments to patients. And that has been a big success in terms of many different health care industries getting faster treatment from the Federal Government in terms of making regulations and other kinds of things, and drugs and other procedures available to the population.

He's also spent a lot of time in other areas of medical problems. One of them is cancer. And he's become one of the largest backers of cancer research in the United States and does many things to create better ways that people can understand the problems of and then treatment for cancer. Because of all of the kind of things I'm mentioning, not long ago *Fortune* magazine had a cover story that said: Mike Milken, the man who reinvented medicine. And he's done that as a non-medicine person, not trained in medicine, but he has done so much now that he knows as much about medicine and medical treatment as any doctor that you're going to run into.

He's also been very active in philanthropy in many different areas. I won't go through all of them, but he was one of the original 40 signers of the Giving Pledge, developed by Warren Buffett and Bill Gates, and he has been actively involved in so many areas, giving away large sums of his money and his family's money, and also not just giving away the money but actively staying involved in the causes.

Let me just mention one in the Washington area. Because of Mike's family's contribution and other work that Mike has done, the George Washington School of Public Health has been named now the Milken Institute School of Public Health. And it's really because of Mike Milken and his family's \$50 million contribution and \$30 million that Mike secured from Sumner Redstone.

And so the Dean of that school is here today [applause]. And the President of the University of George Washington is here as well, Steve Knapp. [Applause.] And as a result of what Mike will talk about later, when we get into the questions and answers, you'll see a lot of his philanthropic efforts are going to more and more focus in Washington, D.C.

So Mike is going to talk today about the American Dream, "Restoring the American Dream." And I think you'll find this a quite compelling presentation. And then we'll have a time for interview. But it's my pleasure to introduce Mike Milken. Thank you. [Applause.]

MICHAEL MILKEN: Thank you very much, David. And it's great to be here today. And I was reflecting on a book I read and looked at not too long ago called *The Shock of the Century*, by Paul Dickson. And in the book it stated: "For America to bounce back from the blow, it has to overcome wounded national pride."

In Washington, there's more concern than the city has known since Pearl Harbor. People are scared, and many panicked reactions. They're searching for someone to blame or something to blame. There's a sudden crisis of confidence, forcing the United States to change its priorities. This didn't relate to 9/11. And I was in Dallas yesterday, and it didn't relate to the first person on our soil who's passed away from Ebola. It related to something that changed my life dramatically, and it was 1957 in America and the Soviet Union sent up Sputnik.

I was in fifth grade, and our teachers told us, and the world told us in the middle of the Cold War, that if a satellite could circle the Earth, of course it could easily drop a nuclear bomb on our school. Those of us who were in school in the '50s fully remember the duck-and-cover drills. For me, it was an interesting period of time with my fifth grade teacher, Mrs. Friedman, who tried to convince me if a nuclear bomb hit Hesby Street Elementary School, I'd be safe under my desk – [laughter] – and I wouldn't be safe if I wasn't under my desk. It took quite a while, but we reached an agreement: She would not try to convince me and I wouldn't disrupt the class. [Laughter.]

I wrote a letter to the President of the United States, telling him I stood ready to lead our space program. I had never missed a math or a science problem in my life and I fully understood space travel from reading comic books and looking at the sky. [Laughter.] I unfortunately never received a response. [Laughter.] But this had an amazing effect on me and it had an amazing effect on our country.

The Soviet Union might have thought this was their finest hour, that the concept of communism was going to succeed. But really, it was the end of the Soviet Union. It woke up America. With an economy close to the size of New Jersey, they were limited on what they could do to provide for their citizens in the Soviet Union and invest. In waking up America, NASA was formed, DARPA was formed, and it became cool to be a physicist, a mathematician, an engineer, or a scientist.

And if you visited, in the 1980s and '90s, many of our country's greatest scientists that worked for our defense firms, and asked them why did they go into this field, one common answer was Sputnik. And so even though I wasn't picked to lead the program, I was determined to go to school in this area.

A couple years later, in 1962, the President of the United States said: We choose to go to the moon in this decade and do other things not because they're easy, but because they are hard, because the challenge is one we are willing to accept and one we are unwilling to postpone, and one in which we intend to win. And seven years later the Eagle had landed on the moon, and the success of that American Dream.

My mother and father went to college during the Depression, and they left three things with me from a very young age — and not just me, but an entire generation of baby boomers, those born after 1946: One, one person can make a difference, just one person; two, you have a responsibility to your community, your part of the community; and three, equal opportunity for all. If there was going to be a good life for me, my brother and sister, there had to be an equal opportunity for all Americans.

What is necessary? For me at a young age, equal opportunity, not based on where you were born, where you went to school, who your parents were, what your race, gender or religion is, and access to capital, a chance — a chance to fulfill those dreams. The first recorded reading of the American Dream and intending to find it, which I read later, was really James Adams' "The Epic of America," 1931: The American Dream is a dream of a land in which life should be better and richer and fuller for everyone, and an opportunity for each according to ability or achievement in 1931 in America.

And so I think about, every day, restoring the American Dream. These opportunities for all and our activities have really centered on financial markets, medical research, education, and public health. And just a couple weeks ago my wife Lori and I went back to Berkeley, which is celebrating the 50th year of the free speech movement. And we both went to school at Berkeley. We went to walk the campus, and of course I went to visit the restaurant that I proposed to her in, almost 50 years ago.

I went to Berkeley because it was the leading institution in the world in the sciences, with more Nobel Prize winners than anyone. And the free speech movement started shortly thereafter as the first year that the baby boomers went to college in America, 1964. But it wasn't Berkeley that changed my life again. It was Los Angeles and the Watts riots, 1965. It was the middle of the civil rights movement in America. It was the middle of the ramping up for the Vietnam War.

And I didn't have to go to Vietnam. Los Angeles was on fire — August 11th, 1965. And I met a young African-American man who told me he wasn't part of the American Dream. His father, no matter what his ability, would never have access to own his own business — and that he would not. And as we watched and looked at the building that he worked in that had been burned down, it seemed to me, at that time, that was a very irrational act for a young man with no savings, married, with a young child, and what he must have been thinking about, and others thinking about that night in the City of Dreams, Los Angeles, to reach out with results such as the Watts riots.

Martin Luther King, one of his many great speeches, truths that are self-evident: "I have a dream that one day the nation will rise up, live out the true meaning of its creed" — that creed from 1931 — we hold these truths to be self-evident, that all are created equal. And so I thought I knew everything. I was 19 years old at Berkeley. What more was there to learn? But I learned a lot that night, in those days of the Watts riots, and I made sure I was married on August 11th, three years later, so I would never forget.

And I went back to Berkeley and wrote down this formula, that prosperity, job creation was a function of access to capital — to human capital, the world's largest asset; social capital, the world's second-largest asset; and real assets, those things you talk about — factories, roads, and things like that. But prosperity, having people feel they had fulfilling lives and opportunities, was dependent also on equal opportunity as a civil right at that time – my own civil rights movement.

Reflecting 30 years later, 62 million jobs were created in the private sector by, quote, "noninvestment-grade companies" — minus 4 million by larger companies. And as David said, many people who are household names became household names in industries that required enormous capital because they had access to capital — and whether it was Craig McCaw in the cellular industry or Bill McGowan competing in telecommunications, or Steve Ross or Rupert Murdoch, et cetera.

But the individual that defined for me that my decision in 1965 to switch to being a business major was the right decision was Reg Lewis, an individual who became a symbol, a symbol for the rights of African-Americans to compete based on their ability with financing – Reg in the late 1980s. One person can make a difference. And the other thing that symbolized it for me was the Nobel Peace Prize given to an economist, that your work and finance and creation of incentives to allow people to have fulfilling lives. And in 2006, the first economist won not a Nobel Prize for the economy but won for peace.

The challenges in America are as great today in many ways as they were back in the '60s. They start with financial literacy, with the fact that most Americans do not consider themselves to be financially literate. And 30 percent think it's acceptable to default on mortgage today and 26 percent think it's OK not to pay your bills on time. And when you talk to executives in America, 70 percent of them could not even define the term "free cash flow."

And America's preoccupation at the federal level with housing and investment over the last 120 years that's gone down 60 years and gone up 60 years has led to government policies and incentives that have encouraged a misallocation of assets and resources to larger houses and cars with more horsepower instead of investments in education, medical research, energy, and retirement security. The Federal Government incentives in housing are more than all the Federal Government has invested in the FDA, the CDC, the National Institutes of Health, and education combined.

So it's only a logical outcome that the middle class in America has altered their spending patterns where more than 50 percent of the money that the middle class spends is on housing and transportation and only 2 percent is on the tutoring and education of their children. And we're competing today with what's going to be the largest part of the world's economy: Asia. And for them in the middle class in Asia, the number-one expenditure is on food — food for their family — and, number two, on the tutoring and education of their children.

And that is why, when I think about our life that started with the Watts riots and ended here with the creation of the Center for Financial Markets, and moving all of our financial activities and studies into Washington over the last few years from other parts of the world, is just the sheer importance of getting the American Dream in the right way for our people.

Medical research. As we reflected those days in Berkeley, what changed our views on medical research? In 1972, my mother was diagnosed with breast cancer, and in 1974, my father with melanoma. It was a period of time, in the mid-1970s, when my various theories on capital structure from Wharton and credit from Berkeley were proved out on the marketplace after a most difficult period in our country's history. It should have been a time for rejoicing, but it

shifted my attention, as my mother said, to what are real problems — things that cannot be solved with money is the definition of a problem.

I traveled the country, visiting medical centers and concluded within a couple of years that my father would not survive his melanoma. I made the decision then to move our family back to California, and ultimately, 1,200 people with us, so my children would know my father, who passed away about nine months after we returned.

Almost 20 years later, I was diagnosed with cancer and told I had 12 to 18 months to live. And I am definitely the happiest person just to be with you today, 21 years later, but I am just one of more than 12 million Americans living normal lives today who were diagnosed with cancer. And our efforts, when I think about my father, eventually led to faster cures, and our focus on our philanthropy advisory service and our efforts with what's available to us today—that we can actually cure you in your lifetime if we really focus and bring these together, and that the secret to accelerating medical research was building strong, disease-specific organizations that could team up with the National Institutes of Health and our training program at faster cures with more than 60 research programs. It is focused on strengthening them in order to accelerate solutions for life-threatening diseases. We spent less than 10 percent of our money on either prevention and wellness or research — the only long-term solutions. And why this wake-up call that I got in the early '70s, more than 40 years ago?

The final realization that I had is that more than 50 percent of all economic growth in the last 200 years can be traced either to medical research or health. And as we pursued, over the last 40 years, our research, we discovered it took 4 million years to extend life expectancy by 11 years. Four million years. And in the last 14 years on this planet, we've extended life expectancy by 39 years — an amazing feat — maybe the greatest feat that mankind has ever achieved. We've solved many life-threatening diseases, and we have solutions today for 500-600 life-threatening diseases out of, maybe, 7,000. We are entering this Golden Age — this Golden Age of medicine with precision medicine and immunology and stem cells and the promise of this enormous investment that the American people have made.

We're all aware of the unbelievable changes that technology has brought us, but when we look at the sequencing of the genome, it has even increased at a faster rate than data storage. Unfortunately, the United States has had many challenges. And after a period of growth in the last few years, we've actually seen a decrease in the investments in bioscience. And if you accept the fact that leaders in bioscience will be the leaders in the world, then it's a challenge as other countries into the world today — China, Germany, Japan, South Korea, and even the U.K. have chosen to dramatically increase their investments.

So how do we get into education? We moved all these people to California. We thought we took care of every need that they had. And then we discovered for them, the most important thing was, where were their children going to school? What was the quality of the schools? And we had focused on their religion, the environment, and other things, but had not spent enough time. And so we formed the Milken Family Foundation in the early 1980s to focus on education.

There's three ways to build human capital. One is education — lifelong education. Two

is immigration for a particular part of a country or a country, and three is health — extending the length and quality. Many Americans are not fully aware that besides private property rights and other things — and rule of law and democracy, — that America was really fueled over a century by having, primarily, the most talented women educate our country. And over an 80- or 90-year period, America added one year of formal schooling every decade. And so, by 1960, the United States was the most educated country in the world by more than two years.

Unfortunately, since 1960, we have not gained ground; other countries have now caught and passed us. The country was not prepared for the other civil rights movement — the emancipation of women in the latter part of the 1960s, that if you were talented and had an ability, that you weren't going to be buttonholed based on gender, just like race or religion, and opportunities opened to you. And so we went from the very top class in teaching to picking other members who didn't take up that opportunity.

The challenge in America today and education — and so many of you in this audience have worked in this area — is really this unbelievable move in the world -- not just America -- from where most of the jobs were unskilled — 80 percent unskilled or semi-skilled — to 65 percent today are skilled, or 85 percent require some skill. We have estimated, with others, there will be 123 million new jobs created, but only 50 million Americans today prepared for those jobs.

So the challenges remain. Restoring the American Dream, public health. This was a much later, and probably the last discovery for me. In 1993, when I was diagnosed with cancer, I began to think about, how was I going to survive? What had the 10 relatives that I lost not done that I could do? And we did the studies that showed that 70 percent of all health care costs were lifestyle. We put out cookbooks, did television shows showing you that being a vegetarian was cool, but we had very little effect. And today, almost 20 percent of all premature deaths are related to weight; even in the great state of California, we've become confused. [Laughter.] You know?

And our report in '07 showed a \$1 trillion cost to our country. So it was draining our money for research; it was draining our money for other social programs due to absentee and presenteeism, and we needed to figure out how we're going to change the course of history. Our experience had showed us that all roads lead to Washington — our celebration of science, the march with a half a million people here, increased medical research — and we partnered up with George Washington University and its great leadership of Steve Knapp and Dean Goldman, and we also fully recognized that within a five-block or six-block area, you had almost every organization, including the administrative office building, located that could deal with this issue that has a potential benefit of \$1 trillion for our economy, but huge benefits for our citizens today.

In closing, as we went home from our visit to Berkeley, we had taken a course related to society. And there's this quote from Margaret Mead that I'll never forget from my days at Berkeley: "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that does." And I'm honored to be here with David Rubenstein, who in many ways is that small group of one committed citizens who has restored much of what

Washington, D.C., is physically, mentally, and inspirationally. So thank you very much. [Applause.]

MR. RUBENSTEIN: So, Michael, when you talk to government people here, you meet with government officials all the time, do they really understand what you're talking about? I mean, how responsive are they?

MR. MILKEN: I think they do. I think it's a question of confidence. You know, we've worked very hard, under the leadership we have at the Center for Financial Markets, to try to convince the governments that they could get out of housing, but I don't know if they have the confidence to believe that the financial markets would fund housing if they stepped out. And so I think it's a question of confidence in that. So I think that is the challenge.

I think in medical research they've come a long way in understanding the importance of the investment, but then there's the political process itself that you understand better than I do.

MR. RUBENSTEIN: I don't know if I do, but let me ask you this. Today, if the best way to live a long life — would you say it's to have good genes, exercise, eat healthy? What do you do to stay healthy now? Do you meditate? Do you do yoga? Do you eat only vegetarian kinds of things? What do you do?

MR. MILKEN: Well, there's a study, a clinical trial, that began a little more than a month ago that really has you change your diet. It involves meditation, and it involves massage. The largest organ on your body is your skin, and that's the massage part. And they are out to show, one, you can your biome (ph), since 90 percent of your genes are bacteria, not human, and two, they're out to show potentially that you can change your genes and, three, that you can lengthen your telomere. So you can lengthen your life. Elizabeth Blackburn, who's a Nobel Prize winner at UCSF, wrote a report on this recently. So I think it's a combination of all of those, David.

MR. RUBENSTEIN: Right. So when you were told that you had prostate cancer, after all the work you had done on prostate-related things, what did you think? Were told you had how long to live?

MR. MILKEN: Well, it's interesting. We have been funding cancer research for 20 years — breast cancer, glioblastomas, et cetera. I knew nothing about prostate cancer. All I knew was I had a friend, Steve Ross, who passed away from prostate cancer in January, and I wanted to get checked. So I had to go up the curve. And what I was trying to think about, in order to survive, that none of my relatives had ever changed their diet, and so I stopped eating anything immediately except fresh fruit and vegetables for almost two years. So I changed my diet.

MR. RUBENSTEN: Was that exciting, to go to dinner every night, or — [laughter].

MR. MILKEN: Well, there's this place in Berkeley, David, called Top Dog, and it's like a shrine. It opened in the end of my sophomore year, and I never went to sleep at Berkeley again without going to Top Dog and getting a hot dog before I went to sleep. So I concluded that if it came down to extending your life versus a hot dog, I could give up a hot dog.

MR. RUBENSTEIN: Right. So today, how much time do you spend a day meditating?

MR. MILKEN: Oh, probably about a half hour a day. I have a short mantra and a long mantra. My short mantra is, when it's short, a half hour or less, and my long mantra is — when I go in an MRI, it lasts for an hour and a half, and I put myself out for an hour and a half. So I have a short and a long mantra.

MR. RUBENSTEIN: So for prostate cancer, for those who have prostates and might want to make sure they don't have cancer what is the best thing that they can do to try to prevent getting prostate cancer? And if they get prostate cancer, what should they do?

MR. MILKEN: Well, I think you could go to pcf.org, which is the Prostrate Cancer Foundation.org, and learn a lot.

We know, not just for prostate cancer, but eating vegetables, particularly broccoli and cauliflower and Brussels sprouts, they are like little Pac-men in your body absorbing carcinogens every day. And we know that reducing dairy has a positive effect. We know that eating cooked tomatoes has a positive effect. And besides early diagnosis, you would obviously rather not get something.

We're doing a study right now for China, because the incidence of hormone-driven cancers, not just prostate – breast, ovarian, and others – in eastern China, the developed cities, say, of Beijing and Shanghai and others, has doubled, tripled, quadrupled, and it has not changed in western China. So there is definitely a strong link to what you're eating.

MR. RUBENSTEIN: Right. What about exercise? I have an exercise style which I call exercise by osmosis. If you walk past an exercise machine, it should kind of help you [laughter], but I'm not sure doctors agree with that. Do you think you should exercise every day?

MR. MILKEN: They came out with this machine, you know, that gave you electric shocks while you slept. You got these little shocks and caused contractions. So instead of doing crunches, you slept. That didn't work, though, but – [laughter] –

MR. RUBENSTEIN: Right. But – so do you exercise?

MR. MILKEN: I do, and I think as you get older you have a tendency for weight to settle in your stomach, and if you –

MR. RUBENSTEIN: And other places, too, I noticed.

MR. MILKEN: – and if you think of that like fertilizer, that's an area you'd rather it not settle in.

But you know, these things are really not new. They're civilizations of 5,000 years. And I remember one of the studies we did is, what does a chimpanzee eat? And the closest animal to

a human was the chimpanzee, like 99 percent of our genes. And they ate 300 different things, and the average American was eating nine. So you have to ask yourself if you believe in Darwin's theories, why are all these things on the planet? What purpose did they serve? And we're finding more and more that they have active ingredients in many of these things.

MR. RUBENSTEIN: Now you've showed in your chart that we've extended average age much more than anybody ever thought probably possible a hundred years ago or 200 years ago. What was the principal reason that we've been able to extend life? Is it sanitation? Diet? Exercise? What would you say is the principal reason?

MR. MILKEN: I would say it's really public health — sanitation areas. But 1 in 5 Americans, David, died at the start of the 20th century by their fifth birthday. And the leading causes of death were tuberculosis, dysentery, things like that. And so penicillin and other things dealt with those issues. So the leading causes of death today are totally different than they were a century ago?

It's not just sanitation or these antibiotics, but I would say the investment in bioscience. One of the largest increases in life expectancy in the last 25 years is in heart and heart-related areas, due to statins and other things that have been created. And when you look, as one of the world's great investors, your firm, you know, if you knew that life expectancy in East Asia was going to increase by 70 percent, it would have been a fantastic place to invest. And so if life expectancy went from 43 or 45 today to the mid-70s, and the fastest-growing economies in the world, seven of the 10 are in sub-Sahara Africa.

So I don't think the world fully realizes what's going on in sub-Sahara Africa, and you only really need to know one fact. If you felt we could control HIV and AIDS, then you're going to have unbelievable growth in sub-Sahara Africa. Two-thirds of every single person on the planet who is living relatively normal lives today with HIV is in sub-Sahara Africa, and life expectancy in sub-Sahara Africa has increased 50 percent in one generation.

And so the link between medical research and the contributions that the National Institute of Health and other groups have made to the rest of the world is immeasurable. I've tried, unsuccessfully, for 20 years to try to convince the United States that our foreign policy should start with our developments that have increased the length and quality of life for people all over the planet, and you can see here in the Ebola challenge in front of us, how unbelievably important it is for the United States in that role.

MR. RUBENSTEIN: So the presumption is that the longer you live, it's better for everybody. But when you get to be a certain age and you have all kinds of infirmities and your mind is not working and your body isn't working, do you think we should extend life even beyond a hundred, 110, or do you think there's any natural limit that we should focus on?

MR. MILKEN: I think, David, there's a very important factor there, and you're talking about chronological, not biological. So if you were offering life insurance policies today, a 72-year-old man today, for a one-year term life policy, your probability of dying in the next year is the same as it was for a 55-year-old man in 1975. So as you think about your father or grandfather and I

think about them – we are in many ways different than they were, and now with stem cells we can have the potential to grow large parts of our body — our heart, our lung — and help give a rebirth.

So I think the first element is that it's not chronological age. You and I both know a number of people that are in their 80s and 90s and fully operational. And so I think the first element is really what is the quality of life, not just the length of life.

MR. RUBENSTEIN: Right. So you grew up in L.A., as I mentioned earlier, you went to Berkeley. It's a great school. You know, as you said, it had more Nobel Prize winners. But you obviously did very well. You graduated Phi Beta Kappa. At what point did you realize that you were a lot smarter than the average person? [Laughter.] In high school? In Berkeley? When did you realize that your brain really worked quicker than other people's? [Laughter.]

MR. MILKEN: I wouldn't say "smarter." I think the real ability is to look at diverse things that are happening and synthesize them to figure out how it affects — and I think one of the real challenges in colleges, graduate schools today is that we're so focused on learning facts or learning something that we can't assimilate that when this happens, it's going to have a dramatic effect on something else.

And I think the point I was trying to make on housing — when you subsidize housing and I loan you money at a lower rate than any AAA company can borrow, and you make it nonrecourse, you're going to incentivize people to take risk and to do things — they're going to become house-poor. And so you need to think about what are the repercussions.

In our work at the Center for Financial Markets — in the 1980s you had this issue of acid rain, and so I think trying to simulate the problems — OK, there's acid rain. Am I going to go in the laboratory myself and find a solution to suck acid rain out of the air? No. So our innovations team got together and, led by Dr. Richard Sandor, these SO2 credits were created. And so if you look at America in the mid- to late 1989s (sic), you had this terrible amount of SO2 emissions; you created a market where, if you could reduce your missions, you got credits — and if you couldn't do it, reduce your emissions, you had to buy them. And within less than 15 years almost the entire problem was gone. It wasn't science. It was financial incentives.

And so I think the real challenge is assimilating diverse facts and then — you know, you do that at your firm. What things are going on in the world? What should you do?

MR. RUBENSTEIN: Right. So you did that at Berkeley. You went to Wharton, and you have a lot of people from the East Coast — you presumably hadn't lived in the East Coast — you go there, and you say, OK, there's a lot of people from Harvard, Yale, Princeton, other famous Eastern Coast schools, and when you came out first in your class, with perfect A's, did you realize then that you might be smarter than other people? [Laughter.]

MR. MILKEN: You know, there's this phrase, the harder I work, the luckier I get. And I think attention to detail — not everyone has attention to detail. I remember in 1968, when I came East, I had this mission. I went to Wharton because I wanted to change the flow of money, and

there were just a few firms that decided who was going to get capital and who wasn't. So that's why I chose Wharton. But I think they were focused on different things. I had to give up pro football after a while.

MR. RUBENSTEIN: Why?

MR. MILKEN: I couldn't allocate any time to watching football.

MR. RUBENSTEIN: Oh, I thought you meant to be a pro football player. No, no — [laughter].

MR. MILKEN: [Laughs.] No, I gave that one up when in ninth grade a person that weighed 240 pounds could outrun me. So I concluded — [laughter] — that was not going to be my sport.

MR. RUBENSTEIN: Well, actually there are more Jewish NFL owners than Jewish NFL players. I think it'd be better to be an owner, but OK. [Laughter.]

So you moved back to Los Angeles and you set up what became the center of the financial world, more or less.

MR. MILKEN: Well, it was already set up in 1970.

MR. RUBENSTEIN: But you moved back.

MR. MILKEN: In New York. So we moved people back to L.A. I remember we had families that hadn't been out of New England in, you know, eight generations. We had people that had never left the five boroughs of New York. So it was a big thing for them.

MR. RUBENSTEIN: So when people started showing up for money and you could finance them, which of the people were you skeptical of? Did you know right away Steve Wynn, Rupert Murdoch, Sumner Redstone were good people to back, or can you tell us that you had any concerns about any of these people?

MR. MILKEN: I think it's easier, David, to identify those that you shouldn't finance.

MR. RUBENSTEIN: OK. Who did you not finance? [Laughter.]

MR. MILKEN: Well, there were — [chuckles] — there were people I'm good friends with, but it's better to be friends. And I'm sure you've seen our building in Los Angeles, we used to have six floors that are giving money away. Now we have four. And we have two floors of trying to make money, and then they have this suction cup, you know, that just brings it down to the other four floors.

But quite often we have people arrive on the floors that were for-profit floors, and we have to tell them they belong on the nonprofit floors.

MR. RUBENSTEIN: OK. [Laughter.]

MR. MILKEN: So they have an idea, but that idea does not have a chance of succeeding.

MR. RUBENSTEIN: All right, but could you have foreseen that Steve Wynn or – what did you see in Steve Wynn or Rupert Murdoch or – what did you actually see?

MR. MILKEN: Well, let's take Steve Wynn. It was 1978, and Steve had come to the office, and I had just turned the clocks back, because when we moved to Los Angeles between 4:00 in the morning and 4:00 in the afternoon, the clocks were on New York time. OK. Then right at 4:00 we turned them to Los Angeles time, so you can get your second wind. So you get that second wind.

And so Steve limped in. He had broken his leg in a skiing accident. And he walked in. I greeted him. He was coming to see me. He didn't know what I looked like. And I asked him, you know, you want something to drink? And he said yes. He thought, you know, I was the person waiting on him. And afterwards we sat down and talked.

And what did I see in Steve Wynn? I saw Walt Disney. I saw a person with a vision, call it — for adult, you know, theme parks. And you couldn't compete. The fact that Hilton or something was 10 times, 20 times bigger wasn't important. They could not compete with him and his vision.

And he identified going to Atlantic City. He was the second or third person, and he identified going to Macau. And his vision and his ability in architecture and how to build a room and how people move around and what people are interested in – and maybe his greatest skill of all is service. And I think: How do you motivate thousands of relatively low-paid employees to feel proud about what they do? So to me, he was Walt Disney.

Bill McGowan —I told my firm AT&T had like 1.3 million employees, and Bill, I think, at that time had 31, and I told him I didn't think they can compete. And then he said, well, that's correct. You know, MCI cannot compete. I said, no, I don't think 1.3 million is enough to compete against Bill McGowan. Maybe if they had 10 million they could compete, but not 1.3 million. And so I think it's the understanding.

I mean, when you think about Rupert Murdoch had a little newspaper in Adelaide, Australia. He's at school in London and his father dies, and the first thing when he goes back is people are trying to take his business that his father started from him. And his relentless movement around the world —you know, I consider him to be a great American in his support of our country.

MR. RUBENSTEIN: So you create lot of multimillionaires, billionaires, centi-billionaires, create a lot of very wealthy people. Do they ever call you to say thank you, or do you ever get that?

MR. MILKEN: We talk about a lot of things, you know, and I would say, David, one of the things that really bothered me in the '80s was the idea that everyone was interested in making money. And I think maybe over 3,000 people that I had financed, I only had one person ever tell me he was in it for the money.

MR. RUBENSTEIN: Who was that? [Laughter.]

MR. MILKEN: I can't — [laughs] — he has subsequently passed away.

MR. RUBENSTEIN: All right. OK.

MR. MILKEN: But most people — it's a byproduct of what they wanted to do. I mean, let's take a look at the individual that built the most valuable company in the world, Apple. He was a small shareholder. Could he have gotten more ownership? Could he have gotten a number of things? But it was like a child, it was his vision, it was his passion. And, for the most part, if you're trying to solve a problem of society, whether you're in the biotech industry or whether you're in the education industry, whatever it might be, or trying to create jobs for people in your community, it's that passion that eventually leads to it, and I think you've seen that.

MR. RUBENSTEIN: So let me talk about cancer for a moment. You have a program under which you go to every baseball stadium, I guess, for a two-week period of time. Can you describe what you do and why you do that?

MR. MILKEN: It's called the home run challenge, and so we're trying to think of awareness. Our frustration with our success in convincing people to change their diet et cetera, so we figured we'd go to baseball games around America — at 17 or 18 years — and, one year, we went to all 30 stadiums in 20 days. And we do, maybe, 100 radio shows, television shows, we bring people with us, they travel with us, Hall of Famers, et cetera.

And it's the greatest awareness program in the very simple thing of getting checked. Had I not had the blood test for the PSA because Steve Ross (ph) had passed away – I was 45 years old, my doctor told me, you know, you're too young, you know. I said, well, why don't you humor me? You know, I'm getting my cholesterol checked. And it came back that I had a PSA 28, 29, and he told me there was obviously a mistake. And that's actually the last time I ever spoke to that doctor. [Laughter.]

But, to create awareness, how do you convince men to get checked? You know, women – except for maybe prostate cancer and AIDS, women have driven almost all health care changes in this country. Men are either living or dying. They don't know they're living, so, how do we get them to get a simple blood test? And baseball — our partnership with Major League Baseball has done that.

MR. RUBENSTEIN: Serving healthier food at these baseball games?

MR. MILKEN: There's seven or eight stadiums you can go to — Philadelphia and you can get a veggie hamburger and different things there. Seattle has a few things. You know, we are a long

way from being successful, and that's why the School of Public Health in GW — I mean, when you look — do you every go to a state fair, David? Have you ever gone to a state fair?

MR. RUBENSTEIN: Not voluntarily. [Laughter.]

MR. MILKEN: OK. So I'm thinking, boy, we've put out all this information on nutrition, the First Lady has spoken about it at GW, so let's go to the California State Fair. So this is the California state fair. You know, I've always wondered, what do you do with bacon grease? OK. It's a big problem. It's one of the big problems in America: You cook bacon, what happens to bacon grease? Well, they came out with this new product that — bacon buttered fries, OK? So you fry the French fries in butter with bacon and you're not going to use vegetable oil, you recycle bacon grease.

So, then I said, OK, let's go to Minnesota. Minnesota's got to be healthy, they've got to be doing things that are exciting in Minnesota. And you get to Minnesota and you can get this little card: How to eat 6,400 calories in the next half hour. You know, in case — you go to this booth, you go to that booth, you go into that booth.

So then we said, OK, maybe Texas. It's fast-growing, it's going to be the second largest population. We go to Texas and everything was deep fried and the top 10 foods in the Texas State Fair last year were all deep fried. And the winning food was the entire Thanksgiving dinner in a ball. So you take your turkey, you take your vegetables, you take your stuffing, your cranberry sauce, you shove it all – you fry the whole thing in a ball and just – in a ball, you get – so – there –

MR. RUBENSTEIN: Fortunately, you're saying this after they've eaten, all right? OK.

MR. MILKEN: But I'm saying to you the need — the need for Americans to change.

MR. RUBENSTEIN: All right. Obviously, you're a person who has a great deal of energy and intellect. What motivates you at this point of your life to do all these things? What drives you to try to change people's habits and what would you like to see as your legacy for what you've done while you're on the face of the Earth?

MR. MILKEN: Well, let's ask that question. First, what drives me is what my parents instilled in me, those three things. And when I think of my parents' generation, that generation that's called the Greatest Generation and that lived through the Depression and fought in World War II — for the freedom for the world in many ways. I feel we and our generation, you and I, the baby boomer generation, have a responsibility to eliminate a lot of these life-threatening diseases. Our kids will have enough problems to deal with. I'm sure they'll think of a few new. But our science today allows us to do that if we move quickly.

I think equal opportunity for all, we're moving in that direction. I mean, when you and I were in school and they told us in the '60s that the CEO of General Motors or the CEO of Lockheed or the CEO of IBM was a woman, you know, it would have been quite unusual from that standpoint.

And I think, lastly, just the ability to speed things up. Whenever it was, a couple years ago, a year ago, a helicopter went down in Afghanistan, and I think 20 Navy SEALs were killed. I could not sleep that night. Our best and brightest, a high percentage of our Navy SEALs — what were we doing there? Why were we there? And why those individuals who have all changed the world.

And I think back to the 1980s of what I was doing, and we were into shale in the 1890s, hydroelectrics, other types of form of energy. The U.S. has spent, since 1976, \$8 trillion in the Persian Gulf — \$8 trillion. Imagine what you could have done in this country with \$8 trillion. And we might have been able to have that shale revolution and put these things to work, you know, in the 1980s. And how many Americans have lost their life, or people around the world? How much money has flowed to people that we might define as terrorists today if we really decided as a country that we're going to finish that job in energy in the 1980s and the price we've paid and the world's paid because we didn't? So I feel part of my effort here, David, is to really make sure that we drive things that we can do.

And lastly, a legacy — I think I already have my legacy, you know? When you're a cancer patient and you're diagnosed, what do you think about? You think about, am I ever going to see my kids grow up? Am I ever going to see grandchildren, et cetera? So my legacy is alive and well. All my three children are married. And we now have eight grandchildren, one every year. And number nine is coming next year. So if they're good citizens of our country, I think that will be my greatest legacy.

MR. RUBENSTEIN: Well, I want to thank you for what you've done for the country. You've done such an extraordinary amount of things in the philanthropic area that we're in your debt. So thank you very much, and keep it up.

Now, on behalf of members of The Economic Club of Washington, I want to present you with a gift, a replica of the first map of the District of Columbia.

MR. MILKEN: Thank you, David, and thank you for your leadership. [Applause.]

Michael Milken Chairman, The Milken Institute

Michael Milken has been at the forefront of a wide range of initiatives that have influenced public policy, accelerated medical research, advanced education reform, supported public health, and expanded access to capital. *Fortune* magazine called him "The Man Who Changed Medicine" for "shaking up the medical establishment and saving lives."

Mr. Milken formalized his previous philanthropy in 1982 by co-founding the Milken Family Foundation. In 1998 he led a March on Washington in support of increased funding of biomedical research. Congress later doubled the budget of the National Institutes of Health. When funding increases slowed in 2003, Mr. Milken founded *FasterCures*, which works to remove barriers to progress against all life-threatening diseases. Earlier this year, George

Washington University announced the newly named Milken Institute School of Public Health in recognition of a gift from the Institute. This is part of the Institute's increasing presence in Washington, which also includes the Center for Financial Markets.

The Milken Institute Global Conference brings 3,500 decision makers from 50 nations to Los Angeles each spring. The 18th annual Global Conference is April 26-29, 2015. See www.globalconference.org.

As a financier, Mr. Milken revolutionized capital markets by pricing and rewarding risk more efficiently. This democratized capital by expanding access to funding for more than 3,000 growing companies that created millions of jobs. A *Washington Post* column said he "helped create the conditions for America's explosion of wealth and creativity."

Mr. Milken graduated from the University of California at Berkeley with highest distinction and earned his MBA from the University of Pennsylvania's Wharton School. He and his wife, Lori, who recently celebrated their 46th anniversary, have three children and eight grandchildren. For more information, see www.mikemilken.com.