The Economic Club of New York

488th Meeting
111th Year

Ian Read
Chairman of the Board
and CEO, Pfizer

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Interviewer: Glenn Hutchins
Co-Founder, North Island

Introduction

Marie-Josee Kravis

Thank you and welcome to the 488th meeting of the Economic Club. I'm Marie Josee Kravis, I'm chair of the Economic Club and a Senior Fellow at the Hudson Institute. In its 111 years of history the Economic Club has hosted more than 1000 speakers from business, academia, government, and has really become the leading non-partisan platform for conversations and discussions of economic and political issues.

I want to especially recognize today our now 270 members of the Centennial Society, some of whom are in the audience. I want to thank you for your steadfast support of the Centennial Fund which assures the financial backbone of the Club remains strong.

I also want to welcome our 2018 fellows and remind everyone that applications can be made for the 2019 Economic Club fellows. If you have any young leaders that you'd like to recommend to participate in this program, please go on our website and recommend some leaders in which you believe.

It's really a pleasure today to welcome Ian Read, the Chairman of the Board and Chief Executive Officer of Pfizer. As you know the club has made a real effort to broaden its program and to include new topics such as technology, healthcare, and of course today the topic that we

discussed, includes both, the biomedical sciences, technology, and of course healthcare. Ian will discuss the pharmaceutical industry, but also issues relating to the future of healthcare in this country.

Ian Read has had a vast experience with Pfizer. He began in 1978 as an Operational Auditor. He worked in Latin America holding positions including Chief Financial Officer, Pfizer Mexico and Country Manager Brazil. He became President of Pfizer, International Pharmaceutical Groups with responsibility in Latin America and Canada. And then, added to that, Executive Vice President of Europe. And he was named then, Corporate Vice President in 2001, assuming responsibility for Canada in addition to Europe. And later became accountable for operations in both Africa and the Middle East region and Latin America. So he has had a very broad experience in many different areas of responsibility at Pfizer, but also in the international scale.

Ian is a Director of Kimberly Clarke. He also serves on the boards of Pharma, on the International Federation of Pharmaceutical Manufacturers and Associations, and the partnership of New York City. He received his BSC in Chemical Engineering from London University Imperial College. And earned his Charter Accounting Certificate from the Institute of Charter Accountants of England and Wales. Ian will make some brief remarks. And then, we will continue with a conversation. We have as our interviewer today, the Club Vice President and cofounder of both North Ireland and Silver Lake, Glenn Hutchins. So, I also want to thank Glenn for leading this conversation.

As a reminder, the conversation is on the record. We do have media in the room. I will first invite Ian to come to the podium and then Glenn will join us for the followup questions and conversation. Ian Read to you. And again, thank you for being with us. (Applause)

Ian Read
Chairman of the Board
and CEO, Pfizer

Well thank you Marie for your kind introduction and I want to give thanks to the Economic Club of New York for this opportunity. I'm delighted to be here. You know, as Marie said, 40 years in business, going on 41, and I have developed several strongly held beliefs. Today I want to talk about four of them.

One is, I believe that the right incentives are the most effective way to drive the right behaviors. I believe that all regulation has cost. Vastly underestimated. And regulation should provide the guide rails for incentives. They should not replace incentives to insure the right behaviors.

Patients deserve affordable access to medicines. And good insurance, increased accountability and rewarding well care rather than sick care is the way to fix our healthcare system in the United States.

So, let me start with the incentives. Now, market-based incentives drive increased investment. They encourage entrepreneurship and scientific risk taking. They create jobs and economic growth and in healthcare they lead to improved patient outcomes. Thanks in large part to the power of such incentives, in the U.S. as distinct from the rest of the world, the U.S. has led the way in terms of global science and technology.

This has enabled the bio-pharmaceutical industry to be consistently strong and contribute to the U.S. economy. It also allows a huge infrastructure below that of small biotech companies, entrepreneurs, venture capitalists, joint ventures, universities, to exist to create a huge ecosystem which is powering the innovation in the United States.

According to a study commissioned by the Pharmaceutical Research and Manufacturers of America, U.S. bio-pharmaceuticals industry overall impact on the U.S. economy was $1.3 trillion in 2015. Representing 4% of U.S. output. Unfortunately, what we have seen are science and technology leadership begin to erode. Specifically when you look at what is happening in China. Where they are producing vast numbers of life science graduates, providing huge incentives for scientists to go back, move back to China and they are beginning to challenge the United States in terms of patents issued.

I believe this is happening here because of number one, our regulatory environment which has become very, very difficult. And well intended policies that have stunted rather than enable

growth. Such things as legislation around safe harbor. Medicaid best price. The spread from concession repricing given by the industry to the VA and to Medicaid into commercial businesses, into states arguing that they should get the same price as VA in California. Which was clearly a concession by the industry to allow cheap access or cheaper access for our armed forces. Policies that favor hospital treatment rather than using the most effective treatment, which is early use of medicines.

So, I think this is why it is really critical that we address this and we advocate for pro-growth, pro-innovation incentives, as well as appropriate regulations to benefit both businesses and society at large. The examples are, increased funding for basic research. The U.S. is slipping behind on that. The amount of money we spend on basic research. Addressing the unfair free writing by foreign nations on the IP generated in the United States.

Increased funding for STEM-based education and training, and more importantly, or most importantly, restructuring incentives to reward well care rather than sick care. I will talk a little bit more about that later on.

Such policies, such incentives, I believe, will allow the U.S. multinationals and pharmaceuticals to continue to invest in innovation, in the beliefs that they will be rewarded and will insure that foreign countries pay their fair cost of innovation, and will also insure that we have the skilled workforce we need to continue to win in the United States.

It also motivates the rest of the system to achieve a goal of healthcare, not sick care. Medicines are the most effective way of controlling healthcare costs. Medication and personal behaviors. It's too late to shut the gate when somebody is a Type 2 diabetic and it's gone so far down the road that the only way is to have intensive healthcare and hospitalizations. That's why the costs are so huge.

Let's talk about regulation. Now regulation, you know, it has a cost. And I think our society today in the United States, has lost its way with regulation. We see regulation as the way of insuring perfection. And we see more and more regulation piled on to businesses. And we don't really address the cost. Take bio-pharmaceuticals for instance. You know, we are acutely aware that patients take on medicines because they trust in our clinical trial data. And they trust that our medicines will do what they say they will do. We don't actually sell pills. We sell information, credibility. We sell the fact that people believe we have done the trials properly, and our medicines will do what they are expected to do.

However, there needs to be a balance between insuring patient safety and creating criteria in process, and its so onerous that they significantly delay the delivery of new life-saving medicines. And this has become a problem in the United States.

If you go back, it takes us 10 to 15 years to bring a product to market. I would say that's clear evidence the balance is way out of whack. The cost of people waiting is not weighed in to the

cost of regulations. In December 2004 for example, Pfizer was required to submit about 198,000 pages, seven gigabytes of documentation to the FDA as part of an approval process for Tigersil an antibiotic. An important product. A major submission. In June 2017 we needed to submit 9 million pages, or 251 gigabytes of documentation, for a labeling change on an already marketed product called Celebrex. And this data came after the product had lost its exclusivity. That's a 45-fold increase. And this is repeated across many products.

If you take a slide I have here which I can't show you, but you can see from TigerSil of 7 gigabytes in 4, in 5 it became 21 gigabytes, in 11 for Zeltran it became 69 gigabytes, in September of 12 it became 100 gigabytes, and finally Celebrex with 251 gigabytes. This increase, this striving for perfection, this striving for absolute safety, has a cost. I don't think this data...this is additional documentation to make products safer. I think it's unclear.

Has it created greater good? I think that's unclear as well. I think we do not appreciate the significant added cost and time to market of innovations and lives that could have been saved, if more risk was allowed.

The frustrating irony is the pace of scientific advancement and our increased ability to demonstrate safety and efficacy are improving every day. Our ability to manage data, our ability to see real-world data, our ability to integrate data post-launch is far more advanced. So, our regulatory system is totally antiquated for what we need to do to bring drugs quickly to the

market.

I am encouraged by what Commission Gottlieb is doing. It's a beginning, its tentative, it requires a lot more support from Congress, to enable us to bring drugs faster to patients.

The third topic, explorable access. I want to discuss this and the current debate regarding the affordability of medicines. Most people will agree that medicines are essential to modern life. And they have greatly contributed to overall welfare of society. But bringing innovative medicines to market is a high-risk, high-capital endeavor. To discover and develop a new drug, the bio-pharmaceutical industry spends on average, six times more on R & D as a potential of sales, compared with other major businesses in the U.S. As a result, medicines are going to be expensive.

Individuals cannot afford modern medicines out-of-pocket. But the benefits to society are huge. It is just, how do we distribute those benefits, is the issue. So the challenge is balancing affordability for patients, with insuring the industries ability of appropriately recover its costs and make a return on its investment. I think to have a meaningful dialogue on this issue we need first to contemplate three fundamental questions.

Is society paying too much for bio-pharmaceutical innovation? Is the bio-pharmaceutical industry being overly or unfairly rewarded, which is sort of the other side of the coin, but not

exactly? And are patients paying too much for medicine. Let's just briefly discuss each question.

Is society paying too much? Of course I'm biased, but I do have facts on my side. I would argue it is not. Innovative medicines and vaccines help people live longer, healthier, more productive lives. If we just look at one particular instance, which is statins, I picked that out because we were a developer of an important statin. Healthcare studies have shown that from '87 to 2008 the use of statins generated nearly $1.3 trillion in economic value for the United States. These are published studies in important journals. $950 billion, three-quarters of that value, was retained by society. Only one-quarter of the value accrued to the industry through sales. So we retained, the industry retained 25% of the value, society retained 75%. And that is before you even take into account that statins are now generic. Their price has dropped 90%. They are now available to society for a lot lower price with the same great value.

Now this story can be repeated. It's been repeated in cancer treatments, precision cancer treatments, rheumatoid arthritis, hypertension, diabetes, GERD, every area you look at, there's been a huge societal benefit from our industry. For these benefits the U.S. spends 1.8% of our GDP on prescription drugs. That percentage is comparable to the other 23 OECD countries, slightly higher than the GDP, probably .4 higher. But significantly less than the 11% the U.S. spends on hospitals, and outpatient care. So, hospitals, outpatient, 12%, 11% of GDP, drugs 1.8% of GDP. That's the difference we are talking about.

The other question is, is the pharmaceutical industry being overly or unfairly rewarded. Clearly I see no evidence of that. That would be no surprise to you that I'm going to say that. Now, individual drugs are hugely profitable. Twelve years, capital risk, 10% chance of success, it'd better be. An individual drug better be hugely profitable to pay for the process that produces those drugs and has 90% failure along the way.

But, if you don't believe me, look at the marketplace. There are 25 major industrial sectors in the Bloomberg Index. We ranked 20th in terms of price earnings ratio as an industry. We ranked 10th in terms of return on equity and 13th in terms of return on capital and 9th in terms of assets. I see no evidence of an over-profitable, red-seeking pharmaceutical industry.

Are patients paying too much? Yes. Unfortunately, in many cases they are. Patient cost-sharing has grown dramatically since the implementation of the Affordable Care Act. Patients are paying far more out-of-pocket for medicines than they do for all other healthcare. Patients on average pay out-of-pocket 13% for their prescription drugs. They pay 3% for hospital care out-of-pocket. This seems the wrong way around. We want to keep people out of hospitals. We want to make them well, we want to give them help to change their behaviors and we want to give them access to medicines and keep them out of hospitals. But they are paying less to go to hospital than they are for their drugs.

So, how do we fix this? I think there are two issues. One, how do we immediately relieve some

of the burden of people at the point of access. The people who are paying for their drugs in pharmacies. The industry will take $100 for the selling price. Industry gets $.50 out of that $100. The other 50 stays with the distribution channels of insurance companies. Now, true, a lot of that, some of that, goes to lowering premiums. Lowering premiums for everybody. So the people who need the medicine most, who need the insurance are paying more than healthy people. So there's no sharing of risk. It's all being dumped on the poorest and the most needy of our society. That's one thing we have to change.

Secondly, we need a better insurance system. We need a better way of insuring people have access to medical insurance. We need to change this whole emphasis which has become balkanized between the pharmaceuticals, the PBMs, the hospitals, the physicians, we need to look at a way of insuring that there's a clear incentive and not regulation to fix this. You may be able to write 2000 pages of Affordable Care Act, it's not going to work. You have to change the incentives. We need to move the incentives to the providers, to the hospitals, we need to pay the hospitals who are the people who should be taking the risk, who hold the patients, who have the knowledge. We need to pay them for well care, pay them for reduction in cholesterol, reduction in diabetes, reduction in hospitalizations, reduction in infections in the hospitals. We need to move the incentives there and I believe that will create a sustainable healthcare system that is efficient.

We need to address change and incentives where insurance companies are not perversely

incentivated to avoid insuring people who are ill. Who don't take all drugs in one category, and put them all at a high co-pay and a high coinsurance because they don't want those patients. You understand, if you are an insurance company, you want to avoid people who are sick or likely to be sick. So you don't want to cover products that stop people smoking. You don't want smokers in your pool. You don't want people at high-risk in your pool so you tend to avoid them. This is not what we want from good insurance.

So, I think by shifting that risk to the providers and giving them a fair return on that risk, we can clear up a lot of these misaligned incentives in the system. So, this is this balance between incentives and regulation. 2000 pages of regulation, 3000 pages or just clear incentives that would allow the system to work efficiently.

In closing, you know, over time, thanks to these market-based incentives that have worked or were working in the United States, we have a vibrant industry. Huge gain for patients. Huge social gain, huge GDP, very positive. We have turned fatal illnesses like HIV into chronic conditions. Made huge advances on cancer. Cured hepatitis C, rheumatoid arthritis has become a disease you can live with. A lot of diseases of the immune system we are now beginning to tackle. So, we've helped prevent widespread childhood illnesses, rotavirus, chicken pox, pneumococcal disease. We have reduced mortality rates for cardiovascular and diabetes. We have revolutionized the care for some patients. And we have personalized therapies in cancer. This can continue if we get the incentives right. The next decade of medical discovery will prove

to be even more amazing as we go to target silver bullet therapies for cancer and autoimmune diseases.

I believe we will get this right. But right now, it's a serious societal debate about where do we go, and how we pay for innovation of pharmaceuticals. It's important that the United States continues to lead in science and technology medicine. And we need to get this discussion up front and stop the demagogue natural reaction to always point to the pharmaceutical industry and not really address the serious issue which is a matter of wrong incentives.

Thank you very much. With that, I think Glenn is coming up.

DISCUSSION

GLENN HUTCHINS: My name is Glenn Hutchins. I have the privilege of calling myself a friend of Ian. So Ian thank you very much. That was really interesting. Well done. Let's start with the whole issue of your opening comment. The whole set of issues you raised, we don't have a huge amount of time to get into those, but expand a little bit on your statement about advocating for pro-growth, pro-innovation policies benefitting both business and society. Can you give us some concrete examples of both what the problem is, and how that might work better.

IAN READ: Well in the regulatory sphere, with the FDA, there's this total focus on safety but not...but there's a mismatch between benefit and risk. The FDA is a great institution. I'm not criticizing that people that go there, they have a mission. But, they don't see it in terms of economics. So, every post-marketing study we do, every trial we do to satisfy their everlasting search for perfect safety takes away money from innovation.

There's no societal way of calculating that. You have an institution which is protected, whose only remit is not to be caught. Not to approve a drug that it turns out, unfortunately, to be less safe than they thought. And that's what their remit is when they do it, that leads to huge costs.

GLENN HUTCHINS: So, what would you do differently. What would you have them do differently.

IAN READ: Well I think you need to try and have a more explicit cost benefit. I think you need to have a...well we are going to approve this drug, but we want the company to do a post-marketing to satisfy this point on safety. Okay. What's the risk? What's the cost? Is it favorable? I think society needs to have an adult conversation about what risk we are willing to take in approval of medicines. I would give you an example, vaccines are very difficult to approve. Because you have a low incidence, high efficacy, low incidence, so you need huge clinical trials. Prevnar adult, we had to run 85,000 patients through a trial. Perhaps you could look at vaccines and say, well, if we've got safety data and we have in vitro indiction of efficacy, why don't we

write on a registry. Why don't we let the vaccine go into the population, monitor it's safety, and real time, see if it's preventing. So therefore I don't have to have 50,000 people in a trial to show that 10% are protected. Because all of the time that's being done, patients are dying, because the vaccine isn't there. And no one adds up those costs.

GLENN HUTCHINS: I was going to say, how do you capture those costs effectively?

IAN READ: Well, you need to calculate what is the expected efficacy of the product, what is the value of that versus waiting five or ten years more for an incremental data point.

GLENN HUTCHINS: So, what you're saying is, you can actually prove what you can't in many of the cases of cost benefit analysis, the counter factual because you can see the patients that are suffering as a consequence of not having the drug.

IAN READ: That's right. You go into what we call an enriched population. You go into people who actually have the condition, and you treat them, and therefore, even in vaccines, it's a particular example, but in general, look, it takes us, I don't think it's an easy answer. I'm not here to criticize the FDA. I think the FDA reflects what society has asked it to do.

GLENN HUTCHINS: I agree with you. I think you have a very measured response to this. You are not vilifying anybody. You are just saying, we ca do it better.

IAN READ: Right. So, for instance, we apply for an IND for a new medication. We have to send it down to the FDA with certain data. They look at it, they get back to us. Of course they want a change. That is why you were there. So, they send it back to us, another three or four months go by, we look at their changes, we will resubmit, another three or four months go by, and then we get the approval to start. And this happens in every stage of research. Every stage there is this delay. And delay costs lives.

GLENN HUTCHINS: So, that sounds like there's an administrative solution there, which is to sort of engineer a process better at the FDA, to make it more responsive.

IAN READ: Well, the FDA continually tries to do that. Every year, every five years, isn't it, we have a discussion with the FDA on the funding that we provide to them for the work they do on approving our drugs. And we continue to try and cite them or incentivate them to have better project management, to have consistency between their different divisions. The best divisions are in oncology because it's the fastest because the need is greatest and they move fast. Other divisions move very slowly. They have different opinions of what is needed by society. So, you need to have more transparency in what the FDA does. Or you need to find better incentives to insure that it can be done faster with appropriate risks.

GLENN HUTCHINS: So, the reason why I asked that particular question is I find myself

wondering, as you talk about this, whether there are things you'd want an FDA administrator or a motivated administration could do, as opposed to what requires fundamental legislation. How big a task is this, and are there solutions along the way?

IAN READ: I think it's nibbling around the edges without fundamental reform.

GLENN HUTCHINS: Fundamental reform means legislation.

IAN READ: Legislation.

GLENN HUTCHINS: And what would be in your idea case, what would be in that legislation?

IAN READ: Well you'd need to modernize the act that says you need two prospective randomized trials, which was 1956 standard of efficacy. You'd have to look at, do we allow registries, do we allow having cleared a certain bar of efficacy in vitro, and safety, do you allow registration trials and approval post-launch? I mean, these are the sort of things that would speed up medication. Now I'm not saying it's easy. I still think clearly society has a role. Society wants to feel that their medicines are going to be safe. But I would argue that Pfizer, more than anybody else is incentivized to make sure medicines are safe. We are a 260 billion cap company. We sell our medicines on our reputation. We have every incentive to make sure our medicines are safe.

GLENN HUTCHINS: So, if you are looking at the politics, obviously, you've had to become, these days CEO have become experts in politics, what's stopping it. This is not a comment on politics, it is a broad topic on politics.

IAN READ: What's stopping it is this fundamental divide in our society where certain parts of society want to be protected by a state, by a government organization. And there's this huge distrust of being in commerce.

GLENN HUTCHINS: And a huge risk aversion.

IAN READ: And huge risk aversion. No one wants to take accountability. So, it's our society drifting towards this no accountability, let somebody else take the risk. Because they can't measure the risk, they can't measure the cost of not having those medicines.

GLENN HUTCHINS: Interesting.

IAN READ: You can see it in self-driving cars.

GLENN HUTCHINS: Right. I find myself thinking, you should talk about this, whether there's a broad-based approach to regulation and enshrines a risk reward or cost benefit kind of analysis.

Is it broadly applicable, as opposed to just thinking about health?

IAN READ: I think you do. I think society needs to...and it comes into healthcare as well, when you say, you know, what can we do, the most powerful way of lowering healthcare costs is having individuals look after their health. Being conscious of the decisions they make. So, Pfizer as a large employer, tries to give incentives to our colleagues to not smoke, to exercise, to reduce their weight, to seek help if they have mental conditions.

GLENN HUTCHINS: No incentives for reducing your handicap.

IAN READ: None unfortunately. That's considered bad news as far as that goes. So we try and do that, but we are very limited. The present regulation, not by Congress, but by a body who is sent there to look at...to issue the regulations on what Congress has passed, says, that if you offer more than 15% of the value of the healthcare to your colleague, it's not permissible. You can't give them healthcare incentives greater than 15% because then they consider it coercion. I would like to be able to say to my colleagues, you know, the market-based costs of health insurance for you is...pick a number, $20,000 a year. But, if you'll do this, this and this, and have an outside party validate it, I'll cut it to $10,000.

GLENN HUTCHINS: And you couldn't do that?

IAN READ: I can't do it, it's illegal.

GLENN HUTCHINS: So, by the way, this is the issue you described earlier as incentives. You can change the incentives in the system and that translates back through....

IAN READ: Correct. I can't incentivate colleagues enough to change their fundamental lifestyles with $1,500, or $400 off their premiums.

GLENN HUTCHINS: So that gets us to the next topic we wanted to talk about which is you describe going from a healthcare system that's, what is volume-based reimbursement, to one which is value-based reimbursement. So, talk a little bit first before we get into that question, what do you mean by how it would work and what do you mean by, and how do you measure a kind of value in value-based.

IAN READ: Well today you are paid...in hospitals you are paid by everything they do. You are paid, every machine they use.

GLENN HUTCHINS: This is volume-based?

IAN READ: This is volume-based. They are paid on a code that is issued by the government. Huge regulation. It's audited, it's changed, thousands of people try to administrate this. Trying to

get the right coding and what the doctors do, what machines they use, and then you get paid by it. That's irrelevant. Who cares. Go in and say to a hospital system, because now they are integrating, they are becoming larger, they are owning populations. There's 95% of the people stay in their own, that captured pool of these integrated hospitals. So, assess the risk of their population and give them a per capita amount. I don't care what you do. Here's the per capita amount. Make sure it's going to be lower. Fix the healthcare of your population. I don't care what machines you use, how many MRI's you've got, but I will have quality indexes and if you can get healthcare down, you can get an improvement in healthcare which is, less people going to the hospital, less cost, less sickness, you are going to make more profit. Why do we need all of these regulations?

GLENN HUTCHINS: So, are you talking about, if you had to write the Affordable Care Act, otherwise known as ObamaCare, called Accountable Care Organizations, ACO's, how is that different than that concept?

IAN READ: Well I don't think the ACO's have that degree of freedom.

GLENN HUTCHINS: That is what I was wondering. Can we get back to the restrictions that are placed.

IAN READ: And they are competing against massive hospitals and insurers that don't want to

play that game.

GLENN HUTCHINS: But don't many of the hospitals have their own ACO's?

IAN READ: They are starting to. But they have to interact with Medicare, Medicaid, Medicare Advantage. They are not working in a system that totally liberates them to be able to move towards that. Now, society may be moving there, slowly. I think it's too slow. I think there are too many disincentives and insurance company doesn't hold you for long. Maybe it holds you for five years. They have really no incentive to pay for products for longer term. And it's going to become very acute when we go to gene therapy. Who's going to pay for gene therapy? I am going to go in and move one injection. I'm going to fix this patient for 15 years. A million dollars? I don't know what the price will be. I know what I spent on investment, I know the value of that medicine to society. That is what should dictate what I get for it. What's the value to society, not what I spent. But even if its on the value, the insurance companies will say, well, I'm not going to recuperate that value.

GLENN HUTCHINS: So where is the big impediment in the system? Do you think through a risk-based, population-based system, for the reimbursement for healthcare, you've got the providers of hospitals, you've got the doctors, you have the insurance companies. How do you organize that differently to accomplish that, and where is the opposition to that change?

IAN READ: Well the opposition comes from everybody who has got an entrenched interest, including the pharmaceutical industry, right. Everybody has an entrenched interest, everybody tries to use the regulations to protect their part of the system and this is why it becomes so difficult. My view is, you cut through all of that by the right incentives. I would just say, you know, my point of view is that you look at populations and you look at the providers and you say, look, you know, this is the health statistics in your area. This is the cost. We are going to pay you a fixed amount per patient based on insurance company calculations. We get paid a fee for that. But they are not being paid on taking risk. They are not taking the risk. It's the hospitals who will take the risk. And we get out of the business of micro managing healthcare and we pay the hospitals, and it's their problem. Because they have knowledge. They understand the whole healthcare continuum. It's up to them to react to those incentives to improve healthcare. Now, of course, you need guardrails. You need to protect patients from hospital systems that may be too rapacious. I believe there is a place for guardrails in that. But, in general, you don't need 4,000 pages of regulations.

GLENN HUTCHINS: So, as you were speaking today, the headline came across that the Justice Department had approved the CVS/Aetna deal. Are there changes of that sort, structural changes that are going on in the industry that move in this direction that can facilitate this from happening.

IAN READ: I haven't studied in detail. It is, what they call a vertical integration. I am extremely

suspicious of any system that leads to less choice. If it does, I don't know if it does, but if it leads to less choice, I think it leads to worse outcomes for patients. And that is fundamentally what will happen with our industry if society is not willing to pay for the innovation. If we can't collect from foreign countries like Germany, like U.K., like most of Europe, if we can't collect the fair value of our innovation from those parts of society, then the industry will consolidate and there will be less choice. You won't have the 5th statin being the best stain ever. You will have the first statin which was not a great product. And you will pay through the nose for it.

GLENN HUTCHINS: So you see the primary driver for this being pressure that takes us right to our next topic, which would be pricing. I'm sure you are not surprised we are going to talk about pricing today. But pressure to get costs down and one of the costs that will come down is sort of the cost of pharma represented by switch from brand to generic in the system, and that means less choice for consumers. Is that how to think that value chain gets down to companies like Pfizer?

IAN READ: Yes. I mean, our point of view is, 90% of the pharmaceutical volume is already generic. That's a huge number.

GLENN HUTCHINS: Is that by dollar?

IAN READ: No, by units. Clearly for dollar it is different because the price equation. But you

have to look at our situation. We don't have a business ten years out if we don't invent new drugs. That are proven to deliver more value than the generics. Now the question is, who judges value. Right. The value, first of all, what's the value to the patient. What's the value to society? What's the productivity of patient's? None of this value is calculated. The whole myopic focus is on, I have to spend less on pharmaceuticals. I am going to spend a lot more on hospitalizations. I am going to spend a lot more on sick care. But I've saved money on that specific issue. And you know, it is very easy to finger point at our industry, politicians like to do it, because you get these situations where a cancer treatment is $10,000 a month. Or a rare disease requires $300,000 a year. Well these are small populations that are taking huge risk and huge capital to come up with these solutions. And it's a societal question. You know, society needs to decide are they going to provide the resources through a pooling of insurance risk or a pooling of incentives at the hospital level or not. And you know, getting better products for less money, we could do that if we have a faster regulatory system. Every month of delay in our pipeline costs us $300 million. If we have a lot faster regulatory system, if society is willing to bear more risk, then we could move drugs faster. What will make them cheaper is more competition. More drugs competing for the same patients.

GLENN HUTCHINS: So your view is that's a win/win.

IAN READ: It's a win/win.

GLENN HUTCHINS: Get price out of the system, we competition up as a country.

IAN READ: Right.

GLENN HUTCHINS: So let's go from value to price. This is not an expert audience in the room. So, can you frame the price of pharmaceuticals debate, define both sides and help us understand what's in the debate, what's at debate?

IAN READ: Well there are two different sort of parts of the argument. The, what I would call the tactical part is, that we have this convoluted system which grew out of a law case back in the 60's. Where we went to a rebate system. And this rebate system initially was successful in....

GLENN HUTCHINS: Rebates from whom to whom?

IAN READ: From the pharmaceuticals to the payers. And these rebates were to force down prices by insuring that pharmaceutical companies were competitive with each other to get greater volume. That worked for a long time. Until we got to a situation where we have PBM's were introduced into the system. They are Pharmacy Benefit Managers. Who basically part of their remuneration comes from how big the discount is. We took focus off the list price and focused it on how big the rebate is. The PBM's were not really incentivated on list price, they were incentivated on how much of the rebate they could capture and their contracts are written with a

proviso as to how much rebate, not net cost, how much rebate they generate. So, now it becomes a game of, okay, Fischer Price will give me a bigger rebate. Or even worse, you have a dominant, dominant is a bad word, you have a major product in a category and it's giving away, selling $6 billion a year and giving away $2.5 billion in rebates. To the system, goes through the PBM's, through the insurers, it's integrate in the whole system. And a competitor comes in, better, newer, but doesn't have any rebates. If rebates he could offer to the system that are $100 million.

GLENN HUTCHINS: Why is that? Why can't he?

IAN READ: Because they don't have the volume. And this is a chicken and an egg. So the only way he can get his volume is if the doctors use it. But the doctors can't use it because it's not on formulary. Because the insurance companies, the PBM's say, well I'm not getting any rebates from this, so I'm not putting it on formulary. There's this whole system...

GLENN HUTCHINS: So, it's rebate dollars, not rebate percentages that drive the system. So, these drugs are disadvantaged by....

IAN READ: Rebate dollars, the volume of rebate dollars. You know, we have this particular situation with our biosimilar. My point of view is, when your patents expire, it's expired. Now I'm going to defend my patent for as long as I can. But when it's expired, it's gone. Biosimilars

are the large molecule equivalent of generics, small molecules. That's a bit more complicated than small molecules. It's a living process. It's not so easy to insure that the products are the same. But biosimilars are considered equivalent. They haven't been given the word substitutable, but they are considered equivalent. They are given the same label.

We have a situation where we have launched a product for rheumatoid arthritis as a biosimilar. And it's 30 or 40% cheaper than the originator. But the insurance companies and the hospitals won't use it. Why? Because they assign contracts that say they can only the biosimilar if the original has failed. Another words, you can only use an exact copy if the original has failed. Why would you use the exact copy.

GLENN HUTCHINS: Who is that contract with? Are they with the PBM's?

IAN READ: Those contracts are written with the PBM's, and the hospitals and the payers.

GLENN HUTCHINS: It's a huge impediment.

IAN READ: It's a huge impediment to the flow of new innovation. But to be truthful, the industry has in the past been advantaged by this. Everybody is guilty here. What I am saying is, we need to change that. The time has come to say, enough of this. Because it was okay when the rebates were 10 or 15% but now they are 50%.

GLENN HUTCHINS: But the other side of the pricing debate, so everybody personalizes healthcare. I'm the father of a child with an allergy. We have EpiPens all around our house. We can afford the price, but the price is now five times what it was not long ago.

IAN READ: Failure, a regulatory failure.

GLENN HUTCHINS: That's another part of the pricing issue.

IAN READ: EpiPen is a market failure.

GLENN HUTCHINS: There are other examples.

IAN READ: There are lots of examples. All of these examples you see that come out in the press and the products costing $10,000 here and $10 in Europe, are these...

GLENN HUTCHINS: Are these vast pricing...

IAN READ: Are these results or exclusivity given by regulations. The EpiPen is a great product. The active ingredient in the pen has been patent expired for a long time.

GLENN HUTCHINS: It's one of the few pharmaceuticals you buy that you don't want to use.

IAN READ: Well most, you really don't want to use. But you have to use.

GLENN HUTCHINS: No, but you buy it, not to use it.

IAN READ: But anyway, the point is here, the reason why it was protected was because to be AB rated by substitutable in our system it has to be exactly the same as the original. But the device has a patent. So, if somebody comes in with a different device and has a different instruction leaflet, it's not AB rated. This is just regulations. This is FDA. This could be fixed like that.

GLENN HUTCHINS: So why isn't it fixed?

IAN READ: People don't want fundamental reform in the regulations. There's a huge industry around maintaining these regulations. But there are all these products that are orphan products, that are being used in Europe for nothing. The FDA just has to say, we'll allow importation. They don't like that because you have a bad distribution system. They just have to say, we'll give a license in the U.S. based on the data generated in Europe. But they don't. So you have to generate the data in the U.S. and then it becomes a huge barrier. So, all the FDA has to say is, we'll use European data and we'll authorize the use for these medicines in the U.S. and all of that would disappear.

GLENN HUTCHINS: So you mentioned importation as an issue. The current administration is focusing on drug prices, there is some notion that they are going to do something about it next year. They are also talking about....

IAN READ: Well they would if they get the incentives right.

GLENN HUTCHINS: So let's talk about that. And they also talk about importing cheaper drugs from Canada. Reflect on those dynamics.

IAN READ: Well there's two problems with that. Number one, Canada does not guarantee the quality of drugs that are train shipped through it's border. So, you are not buying drugs that are available for Canadians. You are buying drugs that have landed in a warehouse, a duty-free warehouse in Canada, and then are re-shipped out of Canada to the U.S.

GLENN HUTCHINS: So they would be manufactured in the same place, so places like Ireland or other places?

IAN READ: No, they would be manufactured in China, India, Peru.

GLENN HUTCHINS: So they would come from second and third tier manufacturers.

IAN READ: Anywhere. You have a whole problem of the safety in supply chain. And then secondly, from an economics, as we are here at an economic club, you are importing the industrial strategy of the poorest nations. By allowing importation of products, that are patent protected in the U.S., you are allowing, you are saying your industrial policies to set your investment at the lowest level of developing nations. It's absurd.

GLENN HUTCHINS: Interesting. Keep going.

IAN READ: Right? Now, you can import products from Canada. I am not saying that all of it will transshipped. But if you are trying to import products from Canada, what do you think the Canadian government is going to do? It's not going to see all of the products sucked out of Canada. And we really can't change our supply or probably wouldn't be economically prudent for us to change our supply policies. We will supply Canada for Canadians. Our deal with the....

GLENN HUTCHINS: When you say, we, Pfizer would....

IAN READ: The industry would supply Canada for Canada's use at Canadian prices. The question is, we come to that dilemma, why is it that Canadians buy cheaper than the United States? Well Canadians get their medications three years later than the U.S. They don't have investment, they don't have economy, they don't have the GDP contribution, and they are

monopsony purchases. You only have one buyer.

GLENN HUTCHINS: Monopsony, that's a good word for the Economic Club. Well done.

IAN READ: Monopsony purchasers.

GLENN HUTCHINS: Joe, do you know what monopsony means? Sorry, don't worry.

IAN READ: Monopsony purchasers. So, monopoly is the other side of that. So, here's the situation. We go to, we, Pfizer, the industry, goes to Germany or U.K. or look at Denmark, look at Canada, look at the Netherlands, any of these developed countries that are extremely wealthy, but they have no pharmaceutical industry. They have no interest in paying for pharmaceuticals. There is no industry to support. They just want a free ride on the development in the United States. And there's only one purchaser in that country. So, you go to them and they say, well, you know, I know you're getting $100 in the U.S., we will offer you $10. And so, three years later when they haven't got the product, they eventually offer us $40. If we are lucky. And I may say no. I'm not selling it for $40, because it's worth $100. They say, well you may not, but Novartis, or GSK, or your competitors, I am just picking...I don't mean to name them, I am just picking competitors, have a lookalike product. It's three years later, but it looks much like yours and they are going to give us a deal. So either give us, accept the $40 or have nothing. Now if I accept nothing, I have to increase my prices in the United States to pay for the innovation. So, we are forced to acquiesce to what we consider prices below the value of the medication. They

are confiscating our intellectual property. Is that clear?

GLENN HUTCHINS: I think so.

IAN READ: I explained it another way to somebody.

GLENN HUTCHINS: No, I understand. We are basically out of time here on this, and there is so much more we could talk about. But you have just announced recently your retirement from Pfizer as CEO. But you spent your entire career there, right.

IAN READ: I did, my entire industrial career.

GLENN HUTCHINS: Then as CEO I have some numbers here. Total shareholder return of 250%. Outdoing the S&P 500 by 180 percentage points, 180 basis points during that time period, or percentage points. $120 billion of direct capital return to shareholders. 70% increase in dividends. But also, since 2010 you've donated more than 580 million doses of Zithromax to treat infectious blindness in the world. So, as you look back on your career and think forward, what advice would you give the CEO of the future. Not just CEO of Pfizer, I think he might be here, but CEO's operating in this marketplace today. What have you learned and what would you share with them?

IAN READ: You know, I believe what you need to do, I am talking about running a company, the first thing you need to do is get the culture right. If you get the culture right, you have everybody in the company working to the same purpose, the same objectives. Culture is so underestimated. It's so funny, when I talk to analysts in the U.S., they don't want to even hear about it. But if I go abroad, all they want to talk about is the culture. It's strange. But the culture fundamentally defines how you harness all of the energy in the company. And after culture, you know, it's integrity. It's integrity, which is part of culture. It's focused on patients. And we really have this expression at Pfizer, patients are weighed. So, there is a sense of urgency in everything we do; in our laboratories, in our trials. The way we spend our money. And so I'm proudest of the culture, and what we do per se which is focused on healthcare.

GLENN HUTCHINS: So, if you prefer the millennials, there's a lot of discussion now around young business people about finding ways in all businesses to do both well and good. And Pfizer has been uniquely situated to do that. What kind of advice would you give to young people who are thinking about that kind of ambition for their business careers?

IAN READ: Well I would postulate that in most businesses, focus on doing well and automatically you are doing good. I don't see that there is a division. I think if you have a purpose in your company, and your purpose is aligned with society's purpose. Which most purpose statements are, because you are there to meet patients, or you are there to meet the consumer's needs. Do that really well and you will do good. We had a discussion, I am going to

take a bit more time. You know, we are seeing a lot more involvement of CEO's in social issues. I decided, to call an ethicist and my leadership team had a day off and we went and talked to this guy about what should our response be to these social issues, as a company. And we debated and we talked about it. And we came up with three or four principles. The first one is, when there is a social issue we look at it and we say, does it interfere with our purpose, i.e. inability for talented individuals to give these, as to come to the United States. Yeah. It interferes with our purpose. Because we need the brightest and the best to do the research. So we will be vocal on that. If it doesn't pass the purpose test, then we say, okay, does it impede our ability to do our business in the sense of can we still hire the best and the brightest. Will our potential actual population of colleagues or future colleagues not want to come to Pfizer because we haven't taken a stand on this issue? Then we decide whether to take a stand. And those are the real two biggest areas we look at. And if they don't meet those two, we don't say anything. We don't think it's part of our purpose or part of the remit of...there's no CEO driven social agenda. It's driven by that logical thought process.

GLENN HUTCHINS: Very interesting. Ian, congratulations on all you have accomplished, and thank you for coming today.

IAN READ: Thank you very much. Thank you for inviting me.

MARIE-JOSEE KRAVIS: Thank you both, Ian and Glenn. Ian you have always been known for

your candor, but thank you today for sharing some very concrete recommendations, suggestions, action points, and for, of course, informing us in more depth about the issues facing the pharma industry. I will just remind people attending here today that as much as we point the finger at the pharma industry for healthcare costs in this country, the cost of pharmaceuticals represent about 12% of spending on healthcare. In the case of cancer, it's about 14%. As much as, it is an important issue and Ian has given us a roadmap of addressing some of these issues, we still have to continue this discussion about healthcare costs in this country and we intend to do so at the club. We will change gears though tomorrow. We will have Reid Hoffman who is the founder of Linkedin and a very active VC investor in Palo Alto and throughout the country. He will be in conversation with Eric Schmidt the former Executive Chairman of Google and Alphabet and now still a member of the board of Alphabet. That should be an interesting discussion at the Hilton. Then, next week Barry Diller will be in conversation with Andrew Ross Sorkin. We will have Randall Quarles of the Federal Reserve and then Friday, Mark Carney, the Governor of the Bank of England. I think it's a very exciting week ahead and I hope you will join us. Thank you and enjoy lunch. (Applause)