Transcript of Dr. Lawrence H. Summers Speech at the Brookings Institute's "Changing Markets: The Future of U.S. Energy Security and Oil Export Policy" Conference

September 9th, 2014

Larry Summers: Strobe, thank you for those very, very kind words. I'm reminded of what Lyndon Johnson used to say when he was introduced very nicely. I wish my parents would have been here for that. My father would have appreciated it and my mother would have believed it. You have failed me in only one regard, one you know from the world of politics and that is in the management of expectations. It would be very difficult for me to live up to those kind words.

Strobe and I have known each other well now for 21 and 1/2 years, since the beginning of the Clinton administration when he, a polished member of the foreign policy establishment charged with leading the Clinton Administration's efforts with respect to Russia and the former Soviet Union encountered me, possibly a diamond but surely in the rough, attempting to deal with that set of problems. We have not always agreed but I at least have always learned an enormous amount from my conversations and dialog with Strobe. As someone who has followed Brookings now for the better part of 35 years very closely think that it is in a Renaissance era under his leadership for which Brookings, and I think the world, should be very grateful.

It is said that only very hard public policy problems reach the desk of the President of the United States because if the problem was easy it would not reach the desk of the President of the United States. That is, I think, a good generalization but it is I believe wrong in the case of the problem and the issue that is our focus this afternoon. I believe that the question of whether the United States should have a substantially more permissive policy with respect to the export of crude oil and with respect to the export of natural gas is easy. The answer is affirmative. The merits are as clear as the merits with respect to any significant public policy issue that I have ever encountered and it is an important test of the efficacy and functioning of our democracy whether within the next nine months we will get to that correct solution. What I want to do in my remarks today is to explain why I think that.

The first question you always have to ask in proposing change in an important public policy is, "Well it got put there for a reason, maybe it's a good reason, and so it should stay." Some presumption naturally attaches to the status quo and you have to have compelling reasons to overcome that presumption. What are the roots of the ban on crude oil exports and do they have relevance today?

The reason we have a ban on crude oil exports in the United States is that in the 1970s when the price of oil spiked due to the formation and effective implementation of the OPEC cartel, we found ourselves dangerously vulnerable and much more importantly we responded to that vulnerability rightly or wrongly with a system of price controls on oil and a system in particular of price controls on old oil.

Now, if you are one country in a free world and you wish to control the price of a quantity you have no choice but to associate that control with an export ban because if you don't everything you produce will be exported. So we put this in place, this export regime, in place for a good reason. That good reason was that we had price controls. Price controls might or might not havehave been a good idea. I doubt they were a good idea but it's not relevant for the purpose of this argument. What is relevant is that those price controls were eliminated 34 years ago.

Now, for most of those 34 years, did this ban matter? No. We were a large-scale importer of all kinds of crude oil. It would have been goofy for us to have exported the oil. The ship would have come to our port, and then the ship would've left our port. It wouldn't have made any sense. So, this restriction was like the PGA Tour passing a restriction that said that Larry Summers was ineligible to play. It didn't really matter given the realities of the situation. The feared outcome would not materialize even in the absence of the restriction. So, we have, for the first time, a situation today that we have not had in at least two generations, namely that the market is sending signals that it is desirable on free market grounds to export U.S. oil.

So, the first thing to say is there's nothing in the history of the establishment of the policy that creates any reason for believing that it is functional on a continuing basis today.

The second thing to say, by way of a priori argument, if you like, before I get to the specifics, is that the United States is part of a global system that has a strong presumption against policies of this sort. United States and every President of the United States since the Second World War has professed our allegiance to the concept of free trade. The part of the concept of free trade that gets the most discussion is, of course, the avoidance of the restriction of imports. But the logic of free trade applies equally in opposition to the restriction of exports, and in particular, condemned on free trade grounds is the idea that exports should be restricted so as to give a competitive advantage to domestic producers. This is not just some hypothetical economic theory stuff. On dozens if not hundreds of occasions the United States at the World Bank and at the IMF has voted in favor of programs that included conditionality where the conditionality stopped export controls with respect to raw materials that were motivated by helping domestic producers.

Just to make that more concrete, some country in Africa had lumber and in order to help them develop a domestic furniture industry they limited the export of lumber so that there would be low cost wood available to their furniture industry so that they could develop one. What was the position of the United States? Against free trade, inappropriate, must be removed as a condition for IMF and World Bank support. It's not a position we've taken once, it's not a position we've taken five times, it's a position we've taken dozens to hundreds of times as part of a general commitment to an open world economy. We have a long history of believing that export restrictions are not an appropriate policy tool.

Third prefatory observation - what are the arguments that are made in favor of maintaining these restrictions? There are two that are made primarily. The first is, "Well, if we keep our oil here won't we have lower priced oil and won't that mean that American motorists will have a lower price of gasoline and won't that be good?" The answer is no. It would be good if we had a lower price of gasoline. The answer however is that permitting the export of oil will actually reduce the price of gasoline.

Why? To understand it you have to recognize one little bit of complexity, the kind the panel after me will get to in great detail, and that is that all oil is not the same. Oil in one place has a value different than oil in a different place because of transportation costs and there are different kinds of oil. Oil that is made into gasoline is oil that at the margin is imported from the rest of the world. It is tied to the price of Brent oil, the world benchmark price for oil.

Marginal U.S. production doesn't go to Brent. It can't be exported. Marginal production in the United States goes to West Texas. There's a lot of oil in West Texas and there's not so many places you can get it to from West Texas and so the amount varies but the price of oil in West Texas is $5-10 less than the price of oil in Brent.

What would happen if you allowed oil to be exported? If you allowed oil to be exported people would ship it from West Texas to Brent or to someplace that would otherwise receive it from Brent. They would make a profit. There would be a larger supply of Brent oil. The same demand and a larger supply means a lower price and so in fact the price of gasoline would be lower. How much lower? There have been three large scale econometric evaluations that I'm aware of - one that you're going to hear about this afternoon, one that was done under the auspices of the American Petroleum Institute, and one that was done under the auspices of Dan Yergin and his IHS organization. They all agree that the price of gasoline will be lower. They differ on the amounts with a range of estimates from about two cents a gallon to about twelve cents a gallon. But the crucial point is that the price of gasoline will be lower and will not be higher and so if you want to help American consumers consume gasoline at lower costs or for that matter American heating oil consumers in New England consume heating oil at lower cost, you want there to be more oil exports.

The second argument that's made is an argument, and it's made also with respect to natural gas exports, is that if we have more exports then we'll produce more oil and if we produce more oil then that will be bad because it will have various adverse environmental consequences - either that the process of production and transportation will lead to difficulties or that when it is ultimately burned that will lead to difficulties. Here there's both a theoretical and an empirical response. The theoretical response, which doesn't go quite as far back as Adam Smith but almost in economics, is the principle that you should always use the most targeted policy instrument possible. So if you are concerned that fracking does damage to the ground water then you should regulate fracking appropriately and having regulated fracking appropriately you should then let the market operate.

If you are concerned that the production of oil generally does harm in some way then you should put a tax on the production of oil. There is no environmental argument for a policy that distinguishes between oil produced in the United States for domestic consumption and oil produced in the United States for foreign consumption. There is no argument for similar distinctions on the basis of natural gas. So I am not taking a position one way or the other on how extensively fracking should or should not be regulated and I recognize that the answer to that question will influence how much oil or natural gas the United States is able to export. But the environmental consideration does not constitute an argument for the regulation of oil, does not constitute an argument for a prohibition or a limitation on the exports of oil or natural gas.

Indeed, the empirical force of this point is highlighted by the practice of what somebody called in conversation with me, and maybe it's a common term, "spitting refineries". We permit and have permitted forever the export of refined products. We don't permit the export of crude oil. Well, as you can imagine, what constitutes refined versus crude oil is a question with considerable nuance that has enriched quite a number of law firms over time.

It is estimated that several hundred million dollars are being spent each year on these so called "spit refineries". The term "spit refineries" refer to the fact that basically what's happening is you're getting a bunch of crude oil, somebody's spitting in it and calling that refining the oil, and the oil is basically the same as it was before but because it's been processed by this several hundred million dollar thing that has considerable environmental impacts, therefore it is eligible for export to some other place where it is refined again. So we are engaged in pseudo-refinement activity in order to arbitrage these restrictions which should at least be suggestive of their absurdity.

So far, I have made the argument that one, there is nothing in the history of these policies that provides any warrant for their continued existence. Two, they go against longstanding U.S. principles constantly insisted on with respect to other countries. And three, that the purported advantages of these policies are either, in fact, disadvantages in the case of price or are inappropriately applied in the case of purported environmental benefits. If this were a trial perhaps it would be time to call for summary judgement on these policies. But the real case for change lies in three other areas - economic growth, environmental impact, and geopolitical results. Let me talk a little bit about each of them and then offer a couple of concluding remarks.

Again, the various econometric studies are all over the map on the question of just how large the impact is of increasing exports. What is agreed by all is that U.S. petroleum production and U.S. natural gas production will substantially increase over the foreseeable horizon of the next 10 to 15 years, that the extra investment that will result will be a significant spur to economic growth, that the process will generate substantial employment opportunities, and that those employment opportunities will be disproportionately for the group, less educated men who work with their muscles as well as their mind, that is most threatened in the American economy. There is I believe no disagreement on any of that nor is there any disagreement that the higher domestic price that will result from permitting the export of oil will lead to more drilling. Nor is there any disagreement that the availability of export as an option will create substantial need for the creation of infrastructure which will itself be a substantial employment generator.

Optimists think that this could mean as much as one percent more GDP by the end of this decade. Those who are less optimistic think that it is several tenths of a percent. Optimists think that it could be as much as half a percent on the unemployment rate. Pessimists think that it could be a couple tenths of a percent on the unemployment rate. I don't think anybody can know precisely the answer. What they can know is that we are a growth starved nation that it is now five years since all the TARP money was repaid. It is now five years since every dollar, since credit spreads were basically normalized. And during that five year period the United States has established GDP growth of no more than two percent and that's with the tailwind of falling unemployment that has fallen from about ten to about six percent suggesting that in normal times without the tailwind of falling unemployment since it can't fall forever, the underlying growth rate might be less than two percent.

In such circumstances I would suggest that we need all of the economic growth that we can get. The estimates that I have just quoted have assumed normal economic conditions. If, and it is only a hypothesis, the situation of secular stagnation that I have written about in a different context applies and if the economy is in a long-run sense demand constrained then the impact on output will be substantially greater. In essence the question is when you hire more workers to work on exporting oil are you hiring workers who otherwise would have been unemployed or are you hiring workers who otherwise would have been in some other job? In normal times you would tend to be mostly hiring people who would have been in some other job. But to the extent that we have a demand constrained economy, you may mostly be hiring unemployed people, in which case the impact will be substantially larger.

How large is what I'm talking about? To generate half a percent more GDP with fiscal policy would require spending an extra $60 or $70 billion a year. That's a substantial fiscal program. It's one that's not likely to pass. It's one that would have substantial debt consequences if it did and it's available to us as a free lunch.

There are other economic benefits as well. I haven't added in the extra spending that would result from the lower price of gasoline, relief to consumers budgets. Nor have I factored in the fact that a reduced trade deficit will mean a stronger dollar, will mean lower priced imports which operates to make America richer.

There is no serious argument that the average income of middle income families will not be higher in the United States if oil exports are permitted than if oil exports continue to be banned. No serious argument at all.

Second set of considerations go to the environment. I want to be absolutely clear at the outset in discussing environmental issues. Whether as Strobe said global climate change is the most important long run problem in the world or whether it is one of the two or three most important problems along with the risk of nuclear conflict and pandemic is a question that I think reasonable people can debate and I'm probably not as certain as Strobe that it's the single most important problem. That it is a profoundly important problem and a moral responsibility for our generation is I believe beyond question. I do not suppose and no one should suppose that the increased export of natural gas, which would confer significant environmental benefits by replacing coal exports, constitutes a large part of an American, let alone a global solution, to climate change. We will not solve climate change without moving in an economic and efficient way beyond fossil fuels and whether we move beyond fossil fuels will not be affected one way or the other by our oil export policy or our natural gas export policy.

What is true, however, is that more extensive and more widespread use of natural gas in replacing coal, assuming that the production of natural gas is carefully regulated so there are not excessive leaks of methane associated with its production, will reduce emissions in the near to medium term.

The United States has a record today in terms of carbon emissions that is substantially better than anyone would have imagined plausible a decade ago. That is for two reasons. One is that the GDP is substantially lower than anyone would have imagined plausible a decade ago. That is not a happy reason. The other is that we have had expanded use of natural gas on a scale that would have been unimaginable a decade ago. There is enough natural gas to last the United States for several centuries on the basis of what we now know. If there's going to be a planet for us to enjoy we will not be using fossil fuels on a large scale one century from now.

So the question is whether we are going to organize our public policies in a way that enables that natural gas to be shared with the rest of the world so that it can do there what it has done here, permit the displacement of coal, or whether we seek to hoard that natural gas here and allow coal exports to continue on a substantial scale and allow the new tobacco, which is coal, to take over a growing fraction of markets in the developing world.

I cannot see a rational argument for the latter course. No one should suppose that export policy represents environmental salvation but it will represent environmental improvement and that is sufficient case for it to move forward.

Third, think about Saudi Arabia. Saudi Arabia doesn't have that many people. Saudi Arabia doesn't have that much of what we conventionally think of as soft power assets. Saudi Arabia does not have vast prowess with technology. Saudi Arabia has been an extraordinarily influential country in the world over the last 40 years. That is for one reason. That is because of its production and export of oil.

It either has happened or will happen within the next 18 months. That American production of oil, will exceed, Saudi, production, of oil. Do we want, the world's largest, and most vital democracy, largest in an economic sense, and most vital democracy, to be able to have the kind of influence, when it is also the world's largest oil producer that comes from being able to sell oil, freely on the world market? Or do we wish, to deny ourselves that, on some a priori ground? The question it seems to me, answers itself. Do we want others to depend on us, and have all the consequences that come with that dependence which includes a certain amount of influence on our part, or do we wish them to depend on, the Middle-East? Do we wish the roots, through which oil travels to be dominantly those of the contested seas of the Pacific? Or of those more proximate, to us? Seems to me that question, answers itself, as well.

Strobe knows vastly more than I will ever know, about Russia and, the former Soviet Union. But I know, enough to know, that, when, most of the places, to the west, to the immediate west of the Soviet Union, are dependent to keep warm in the winter, on Russia that that creates, a vulnerability, that is not on net constructive, in the world of today, in light of recent developments. If, the United States was in a position to be a major supplier, of natural gas, that would affect, in a very important way, this dynamic. If we wish to have more power and influence in the world, in support of our security interests, and in support of our values. If we wish to have an influence that we pay for with neither blood nor taxes I do not see a more constructive approach than permitting the export of fossil fuels.

One last remark on this and then a concluding remark. Many of you will be listening to this and thinking, "Well, yeah, this must be right but god before they can export oil, before they can export natural gas, to Europe the terminals will have to get build, factories will have to get built, and tankers will have to get constructed and its all years from now and the geopolitical crisis is now." That's true but I'd say two things. One is there's a geopolitical crisis now. There might be a geopolitical crisis in a few years and it's probably good to prepare for the possibility that there will be one. But there's a second point that maybe comes more out of analytical economics that I would emphasize and that is that the price of oil today has a lot to do with the expected price of oil tomorrow. The price of natural gas today has a lot to do with the expected price of natural gas.

Think about it. If you have some of it under the ground, the price were $40 this year and you thought it was going to be $70 next year, you probably wouldn't produce your oil, would you? If the price of oil was $80 today and you thought it was going to be $50 tomorrow you'd probably produce as much as you could this year. So the expectation that things will be done that reduce the future price has the effect of reducing the current price as well. Actions that carry the prospect of change several years from now will be reflected in markets very quickly in the form of lower prices.

I would suggest to you that the principle that we shouldn't have prohibitions without a reason is a reason to permit oil exports. The economic growth consequences is a reason to permit oil exports. The environmental calculus, all things considered, points towards permitting oil exports. The geopolitics of how should the world's largest oil producer behave speaks in favor of permitting oil exports. All four things together speak overwhelmingly in favor of permitting oil exports.

This does not require a new law. Probably the best way for it to happen would be to repeal the old law that prohibits oil exports and for the government to move to a presumption of permission as long as environmental reviews are completed with respect to natural gas export terminals. But if it cannot happen that way, there's absolutely explicit language in the existing statute that says that if the President of the United States judges that it is in the national interest, not that there is an overwhelming security imperative, not that there's some kind of desperate emergency, just that it is in the national interest to permit exports, he has that authority. The President has spoken often of his commitment to act where Congress will not and his determination to use executive authority to the fullest extent. If necessary, it should be used to remove restrictions on the export of oil.

There may be policies in different spheres that would have larger net benefits than repeal of the oil export ban. I know of none that have as high a ratio of benefits to costs because there are essentially no costs as this step. I hope that it will be undertaken as rapidly as possible and I hope that the research to be presented later in this program will contribute to making that case both in Washington and to a broader public. Thank you very much.

Charles Ebinger: All I can say is I wish we had written our report with the clarity that he spoke about the issue because I think almost every issue he touched upon are ones that we feel very strongly are indeed supported by our analytical analysis that you will hear about in a few minutes.

We have time for a few questions for Dr. Summers. So I won't interject given the time constraints any of my own but will go directly to the floor if anyone has a question they'd like to ask. Yes. We have some roving mics I think somewhere. One's coming to you.

Question: Thank you, Dr. Summers. You said that price controls have not been active about the exports of oil since 1980 or so and given the amount of time that we've had very staunchly free trade presidents, why is it 2014 and we're still talking about this? What are the political and if any economical obstacles?

Dr. Summers: It's because until very recently the restrictions have been a nullity. Nobody's wanted to export oil. It's been completely non-economic to export oil. If you had oil it would be better to ship it to some place in the United States than it would be to ship it to some other place. If you looked at the spread of oil, if you look at the spread that I described, between Texas oil and Brent oil, in general, Texas oil has been more expensive than Brent oil so there's been no reason to export it. That was sort of my point about my wisecrack about the PGA's restriction on Larry Summers playing golf on the tour would only start to become an issue that anybody would discuss when Larry started shooting in the 60s rather than the 90s.

Now so to speak, Larry is shooting in the 60s in the sense that economic actors given a free choice would choose to export oil and this is the first time that's been the case. That's why it's now a live issue.

Charles Ebinger: Can we please have people identify themselves before they ask their question? One right here... I guess we have two near each other.

Question: Hello, Dr. Summers. Thank you for your remarks. I thought you were very, very clear. It's great how you can give a presentation without looking at any notes. My name is Steve Meyer. I'm an independent consultant in the energy industry and I support your theses. However, I'd like you to explain how you would address those people that are concerned that a lower oil price will destabilize the Middle East with all the Middle East economies based upon maybe $100 a barrel of oil.

Larry Summers: First, as recently as ten years ago, twelve years ago, the price of oil was $30-40 and I'm not aware that the Middle East was conspicuously more unstable at that time. If anything, the current era of higher oil prices has gone along with a less stable Middle East. So I guess the question we have to ask ourselves going down that route is it's estimated that ISIS and other terrorist groups receive $2 million a day in black market oil. If that fell by five percent would it be a better world or a worse world? I think it would be a better world. A five percent reduction in the price of oil would take some number in the $10 billion range away from Iran. Would that be a better world or a worse world? I think it would be a better world.

So I think that all of the evidence is that the huge flows of oil dollars have been more of a contributor to instability than that they have been a contributor to stability. So I think if I had been getting signs that there was a little bit of restlessness and it would be good for me to finish my remarks. I would in the geopolitical section have actually remarked and presented some calculations suggesting how much less money would flow to Iran, how much less money would flow to Russia, and I would think that countries that we are sanctioning, we would generally prefer for the workings of the market to be generating less money for them than more money. So I think of that as yet an additional geopolitical virtue rather than a cost of the course that I'm recommending.

In any event, Tom Friedman described this, wrote about this, on the same side of the argument that I was and suggested that it be $25 or $30. It's not right. The numbers are in the five. You could argue for three dollars. You could argue for ten dollars. I don't think you could argue for thirty cents and I don't think you can argue for $30 as the impact of permitting oil exports. So call it five to ten dollars. That is well within the range of annual fluctuation in the price of oil so it's hard to believe that's a reason why we should maintain the ban.

Charles Ebinger: We have two up here if we could bring the mic up to these two gentlemen.

Dr. Summers: Why don't you both ask your question and then I'll respond to them.

Question: Thank you for coming today, Dr. Summers. I really appreciate your elaboration...

Charles Ebinger: Can you identify yourself please?

Question: My name is Rex Wimpen. with Northern Resource here in Washington, D.C. My question is since you ended on the note that there should be no prohibition without a reason I was hoping you might explain the geopolitical ramifications of continuing to prohibit the extension of the Keystone XL pipeline versus the U.S. and China and U.S. and Canadian relations. Thank you.

Dr. Summers: Didn't I step far enough in it today already? My hope would be that we'll get to a better place than where we are now with respect to the question of pipelines in general and the Keystone pipeline in particular. If you think about it, we're in the 21st century and shipping oil on trains is an early 20th century technology. The use of trains rather than pipelines to ship oil is good for Warren Buffet because he owns railroad companies but I'm not aware that he's one of the more needy members of our society. So I would hope that we would be able to work through the various environmental issues more expeditiously than we have. I am very much aware of the toll that the Keystone issue has taken on relations with a crucial U.S. ally. But it's a complicated issue and in all honesty my impression from talking to people who are much more knowledgeable than I is that because of a variety of developments in the evolution of the oil market the Keystone pipeline per se is probably less centrally important to the way the energy markets will evolve than might have appeared likely two or three years ago.

So I think that focusing everything on that totem is probably not the right way to think about the problem. But I think that if you ask the question in almost any area of infrastructure, and certainly with respect to pipelines, what is the risk that on the current path the United States will build too much. What is the risk on the current path that the United States will build too little? The overwhelmingly preponderant risk is the latter.

Charles Ebinger: We have time just for one more question.

Question: I'm Jim Lucier with Capital Alpha Partners. I'd like to thank you for a brilliant, clear, compelling, masterful presentation. I really don't have a profound question.

Dr. Summers: I guess that means you agreed with the policy conclusion?

Question: Well, no, I do agree with the presentation. I just wanted to make sure that I didn't mishear part of it. Did you mention at the beginning that you thought there might be a policy change or a movement towards a policy change in six to nine months and if so, is there a macroeconomic factor behind that or even is there some macroeconomic factor we should be looking at over the next few years as the policy develops?

Dr. Summers: I was very careful to keep my remarks normative and not predictive so I did not make any prediction as to what the administration would do. I hope I was relatively clear on what I thought the administration should do.

Look, I think that the more we are a demand constrained, I think this is the right thing to do almost no matter what happens to the macroeconomic picture. I think this is the right thing to do almost no matter what happens geopolitically. The margin by which it is the right thing is greater the softer the economy is because when you permit free trade you draw resources into their most highly valued market use and that's a good thing to do. But if the people you draw in and the capital you draw in to oil is coming from doing something else, then if the market is sending it into oil that's good, that's better, but if it's sitting unemployed then it's overwhelmingly better. So the softer the economy is the greater is the imperative of this change. But on any plausible economic path this is the right thing to do that will improve economic welfare in the United States.

In all honestly, I don't understand the opposition. With respect to most areas of public policy, I think we should either have a carbon tax or some form of cap and trade. But I don't have any difficulty understanding why somebody might disagree with me and how they would understand the world which would cause them to disagree with me. I have certain views on financial regulation. I have no difficulty understanding why somebody else would have a view that was different from mine. They have a different understanding of how the world works or they have a different set of values.

This issue is quite extraordinary in my experience because I don't understand what are the values that you could have that I don't have that would cause you to want to maintain the restriction nor do I understand what your theory of how the world works is that would cause you to have a different view. Economists have a concept called Pareto optimality and Pareto comparison. Pareto is the guy who invented it. That's why it's called that. Basically what it says is if I took a dollar from everybody on this side of the room and I gave $1,000 to everybody on this side of the room that would be a good thing to do but it wouldn't be a Pareto improvement because the people in this half of the room would be worse off. A Pareto improvement is when some people are better off and no one is worse off. Usually in public policy you don't have... usually it's like a textbook thing because usually anything you do that's important there's some winners and there's some losers and they fight it out.

Here, I don't really understand exactly who the losers are who are very important. There's one group that are losers here and that is if you are in the business of refining the oil that is sitting in Texas right now you are getting an extremely cheap input because the people who have it can't sell it abroad. You're getting a really cheap input and you're selling it into a market where the market price is set on the big world market by the Brent price.

People who own oil refineries in the Wouthwest of the United States and who don't also own crude oil are worse off. But how that group could be. And you see that by the way when the Commerce department made a small change in the rules a month ago, a couple of months ago, the price a couple of refineries plummeted. So there is a very small group but how that group could be strong enough to stand against the various interests that I described is really a mystery to me.

Charles Ebinger: I'm afraid we're going to have to cut off there to get the rest of our program in. I want you all to join me in thanking Dr. Summers for a very provocative presentation. Thank you, sir."